CONSERVATORS' MEETING
to be held on
Monday 12 December 2022 at 4.30pm
in the Wimbledon Common Golf Club, Camp Road
SW19 4UW

AGENDA

PART A(1) PUBLIC

12.22.1	**Confirmation of Attendance and Apologies for Absence**	
12.22.2	**Declarations of Personal or Prejudicial Interests in Respect of Items to be Considered in this Part of the Meeting**	
12.22.3	**WPCC Board Meetings**	
	i. Resolutions of the Part A(1) Board Meeting of 10 October 2022 There were no Resolutions taken at this part of the meeting	
	ii. Minutes of the Part A(1) Board Meeting of 10 October 2022	Page 1
12.22.4	**Matters Arising**	Page 8
12.22.5	**WPCC Forum/Group Meetings**	
	i. Draft Minutes of the Wildlife & Conservation Forum meeting held on 15 November 2022	Page 9
12.22.6	**Approval of the Levy for 2023/24**	Page 12
12.22.7	**Conservation Update**	Page 15
12.22.8	**Land Management Plan**	Page 20
12.22.9	**Chief Executive's Report – Non-Confidential Items**	Page 325
12.22.10	**Fundraising Update**	Page 329
12.22.11	**Update on the Friends of Wimbledon and Putney Commons**	Verbal
12.22.12	**Public Questions on Matters Considered in Part A(1) of this Meeting**	

PART A(2) CONFIDENTIAL

In accordance with the Resolution from the Board meeting held on 12 July 2021, this part of the meeting is considered confidential and therefore closed to members of the public.

12.22.13 Declarations of Interest

12.22.14 WPCC Board Meetings

i. Resolutions of the Board Meeting of 10 October 2022
ii. Minutes of the Board Meeting of 10 October 2022
iii. Resolutions of the Board Meeting held on 17 October 2022
Minutes of the Board meeting held on 17 October 2022

12.22.15 Matters Arising

12.22.16 Board Procedures

12.22.17 Committee Business

12.22.18 Constitutional Matters

12.22.19 Campaigning and Political Activity

12.22.20 Stag Lane

12.22.21 Leases

12.22.22 Masterplan and Levy Consultation draft report

12.22.23 Chief Executive's Report – Confidential Items

12.22.24 Management Reports and Accounts:

a) September 2022
b) October 2022

12.22.25 Annual Review of the Risk Register

12.22.26 Business Plan Update

12.22.27 Draft Minutes/Notes

To receive

i. Draft Minutes of the Finance and Investment Committee held on:
   a. 1 November 2022
   b. 8 November 2022

ii. Draft Minutes of the Audit and Risk Committee held on 18 October 2022
iii. Draft minutes of the Friends Committee held on 26 October 2022
iv. Draft minutes of the Constitution Committee meeting held on 28 November 2022
v. Draft notes of the General Open Meeting held on 1 November 2022

12.22.28 Items for Inclusion in a Media Release by the Board

Draft Public Minutes of the Conservators' Meeting held on Monday 10 October 2022 at 4.30pm at the Wimbledon Common Golf Club, Camp Road, London SW19 4UW

Conservators: Mrs Diane Neil Mills, Chairman (DNM)
Mr Oliver Bennett (OB)
Mrs Sue Bucknall (SB)
Mr David Hince (DH)
Mr Peter Hirsch (PDH)
Mr Michael Johnston (MJ)
Mr Peter Shortt(PS)
Mr Nigel Ware (NW)

Officers: Mr Steve Bound, Chief Executive (CE)
Maggie May, Fundraising Manager (FM)
Peter Haldane, Conservation and Engagement Officer (C&EO)
Angela Evans-Hill, EA to Chief Executive/Communications Officer (EA to CE/CO)

Members of the public: Two members of the public attended.

ITEM		ACTIONS
	The Chairman welcomed the new Ministry of Defence appointed Conservator, Mr Peter Shortt. Mr Shortt took up his appointment on 1 September 2022. The Chairman also welcomed two members of the public to the meeting.	
10.22.1	**Confirmation of Attendance and Apologies for Absence** Apologies were received from: Paula Graystone, Deputy Clerk and Ranger.	
10.22.2	**Declarations of Personal or Prejudicial Interests in Respect of Items to be Considered in this Part of the Meeting** The Chairman declared she was a member of the Thames Hare and Hounds. It was agreed that this did not preclude her from participating in any part of the meeting.	
10.22.3	**WPCC Board Meetings** The Minutes of the Part A(1) Board Meeting of 11 July 2022 were approved. There were no resolutions taken at this meeting.	

10.22.4	**Matters Arising** There were no matters arising.	
10.22.5	**WPCC Forum/Group Meetings** i. Wildlife and Conservation Forum meeting held on 26 July 2022 The Board received and noted the draft notes of the Wildlife and Conservation Forum meeting held on 26 July 2022.	
10.22.6	**Conservation Update** The Board received and noted the Conservation and Engagement Officer's (C&EO) Conservation Update. The Chairman congratulated the C&EO and the team for the achievement of Gold Awards for both Putney Lower Common and Wimbledon Common in the 2022 London in Bloom awards, and also for Wimbledon Common winning the Common of the Year award. She commented that despite the fact that this was not (by any means) the first time that WPCC had received these awards, it did not diminish the important of these prestigious distinctions. The C&EO thanked the Chairman and commented that the competition was marked on many different levels including welfare of users, maintenance and sustainability, conservation and community involvement. The award was very much a testament to the ongoing commitment of all those who help to look after the Commons. He reported on the following: **Grassland Management** – There were three areas of the Commons managed as meadow where the grass is cut and then collected. In 2022 this had been increased by another five areas, two on Putney Lower Common, Putney Heath Fairground Site, Wilberforce Field (opposite the Study) and an area opposite West Place. The bulk of the work was carried out by contractors, with some of the smaller areas managed by staff. **Heathland** – Volunteers had been working throughout the year to remove scrub from the heathland and recent focus had been along Centre Path and Green Ride, Hookhamslade Pond, and the main Putney Heath near Ladies Mile. Work would start shortly on heather cutting in areas where the heather has become leggy and is degenerating. **Invasive Species –** Over the past few months, work along the Commons' two sections of the Beverley Brook on Wimbledon Common and Putney Lower Common has included volunteer litter picking	

	events, Himalayan balsam removal and the treatment of Japanese knotweed. Tree of Heaven at Putney Lower Common had been cut back along the Cemetery Wall and the stumps will also be removed. Two trees remained but these should be removed by the end of the year. OB asked why the remaining 6 hectares of grassland where not being managed as meadow. The CE&O commented that this was mainly due to the cost. SB asked how many volunteers the CE&O currently had. He commented that it was around 100 at the moment. Many of the younger litter-pickers were doing the work for their Duke of Edinburgh awards and, over recent years, there had been over 170 doing this. In response to a question from MJ, he commented that it was thought that the air ambulance landing on the Plain had disturbed the Skylarks enough to stop them nesting. He confirmed that volunteers under 16 were required to be supervised by a parent or guardian.	
10.22.7	**Land Management Plan** The CE&O gave a verbal update on the progress of the Land Management Plan. The Board had previously seen the Introductory Section to the Land Management Plan which included an introduction to the Commons, landscape, biological information - flora and fauna etc. Since then he had been mainly working on the 15 main objectives including the main habitat areas of heathland, grassland, rivers and ponds, bogs, golf course etc. His aim was for the Land Management Plan to be accessible to anyone and therefore each section included an introduction to the specific area, significance of the site, historical context, cultural and aesthetic context and an ecological description. The current condition of the site was also included as well as the current management actions and an outline of the management programme for the future as well as monitoring. Whilst there was a lot of historical information immediately available for the Commons, a lot of research was required for some areas, such as Putney Lower Common. NW asked when the draft plan would be available. It was scheduled to come to the December Board meeting but the CE&O advised that it was unlikely that the first draft would be available before Spring 2023. It was agreed that what was prepared would go to the Wildlife and Conservation Forum at their 15 November 2022 meeting and would then come to the Board in December 2022.	CE&O

	Management Walks – The CE commented that it had been hoped to organise a series of walks to allow the CE&O to explain the objectives for each of the habitats to help the Board have a better understanding of the Plan. It was hoped to reschedule the postponed September walk in the next few weeks and this would also hopefully include the members of the Wildlife and Conservation Forum. OB mentioned that the Wildlife and Conservation Forum was holding a walk on Thursday 13 October 2022 around the Common's ponds and Conservators were welcome to attend. The walk would help demonstrate the amount of work required to produce the Land Management Plan. He also commented that the completed Land Management Plan would not be a definitive document and could include recommendations for work to be better able to assess a site's condition.	AE-H organise walk
10.22.8	**Chief Executive's Report – Non-Confidential Items** The Board received and noted the Chief Executive's public report. **Masterplan and Levy Consultation** The CE reported that Resources for Change began the Phase 1 Consultation on both the Masterplan and the levy on 23 September 2022. The consultation would consist of: • Four days of face-to-face interviews with users of the Commons, obtaining their views on the Masterplan and the levy. Two of these had already been held. • An online survey, using Survey Monkey. • A public meeting, to be held on 1 November 2022, to discuss the Masterplan and the levy with members of the local community (which will be attended by Resources for Change). The CE reported that the Masterplan had been discussed at the recent Stakeholder Forum meeting. The members of the Forum were very supportive of the Masterplan and the proposals for future works. They were also supportive of the proposed changes to the levy, although questioned if, given the current financial climate, it was the right thing to do. It was suggested that if the increase was expressed as an actual sum of money rather than a percentage increase, it would give a better perspective. The Chairman commented that it was hoped to have the report summarising the feedback from the consultation, produced by Resources for Change, before Christmas 2022. **Bridges** MM reported that two bridges across the Beverley Brook had been restored. The first, at the Richardson Evens Memorial Playing Fields had been replaced with a wider and stronger bridge. The funds for this had been raised by the Thames Hare and Hounds. The Conservators were grateful to all the donors who had made the work possible. A	

	grand opening and thank you event for supporters was planned for Saturday 3 December (details TBC) to which the donors and Conservators were invited. The work to restore the bridge at Putney Lower Common was also completed in September and a formal opening was planned for Thursday 20 October 2022. The Chairman commented that the REMPF bridge in particular was an excellent example of collaborative working with local organisations and thanked MM for all her work. **Installation of Car Park Donation Machine** The CE reported that the new contactless card machine had now been installed in the Windmill Car Park and went live on 3 August 2022. Just over £1,100 had been donated to date, some three times more than might have been expected from the old coin machine. **Other Fundraising Matters** MM reported that an application had been made to Natural England's 'Nature for Climate: Peatland Grant Scheme' which provides funding to restore peatlands in England. WPCC had been awarded a grant of up to £48,832 to deliver a feasibility study for restoring Farm Bog and three other locations where peat had either been identified or historic maps suggested that the habitat was previously a bog. In response to a question, MM confirmed that the grant covered the full cost of the project. An application had been submitted to the South Western Railway Fund for grants for footpath improvements, particularly shared cycleways. The cost for works to five of the main paths was in the region of £120,000. The plan was to raise 80 percent of this cost via major grants, many of which request additional funds raised as 'matched funds'. The target for matched funds is 20 percent. This would be achieved by relaunching the Access for All appeal which had been so successful in raising funds for the restoration of the Inner Windmill Road. MM would start promoting this on her return from annual leave. In response to a question from OB, MM confirmed that all the funds raised from this appeal would be restricted to the five main paths that had been identified by Officers as being a priority for repair. OB commented that this section had not been covered in the Land Management Plan yet and there were some paths where consideration would need to be given to how they fitted in with their surrounding environment. The CE commented that the application to SWR had focused around the fund's theme and therefore prioritised shared use cycle paths. OB asked to be sent a list of the paths that were being prioritised.	CE&O/FM

	Events **21 July 2022 - House of Commons Reception** – The final formal event of the 150th Anniversary celebrations was successfully held on 21 July 2022. OB commented that he had spoken to several attendees and they had never visited the Commons and he suggested perhaps ticket sales be more targeted for future events. The Chairman confirmed that Friends of Wimbledon and Putney Commons had been offered tickets ahead of the general public and the majority of tickets had been sold to Friends. **11 September 2022 – Open Day –** The decision was taken to cancel the annual Commons Open Day following the death of Her Majesty Queen Elizabeth II. The event would not be rescheduled for this year. Staff had considered whether the Open Day in 2023 could be combined with a celebration event for the King's Coronation but this would depend on what date was set for that. The Conservators considered that it might be more appropriate to keep the two events separate. **10 December 2022 - Carols at the Windmill –** The annual Carols at the Windmill event would take place at 4pm on Saturday 10 December 2022. This year the location would revert to the Windmill forecourt.	
10.22.9	**Update on the Friends of Wimbledon and Putney Commons** SB gave a verbal report. She explained, for the benefit of PS, that the Friends of Wimbledon and Putney Commons had been set up for the purpose of collective celebration and fundraising. All the 150th Anniversary events had been completed: Afternoon Tea at the AELTC, Games Day and the Reception at the House of Commons. The Friends also assisted with the events to commemorate the Queen's Jubilee and a Vigil following the death of the Queen. A lot of goodwill had been generated and also funds raised through memberships and donations, and the Friends had been able to contribute to both bridge projects as well as add to the general funds. The 150th Anniversary Picture Competition had been very successful and a small event, to which all entrants had been invited, was held to display the 12 winning photos. The "People's Choice" was also launched to allow the general public to choose an overall winner. This would be announced later in October. Over £230 was raised in donations on the evening, 10 of the 12 pictures had been sold raising some £400 and Wimbledon Homes had donated £500. A calendar had been produced from the winning images and was on sale in the Ranger's Office for £6 or £10 for two.	

	Membership currently stood at 575 (equating to approximately 950 people) and events for 2023 were currently being planned. DH congratulated SB on introducing the local business, Cappagh, to the Commons; they had been generous with both physical and financial assistance. The Chairman thanked SB for all her efforts over the year. MM was asked to look into why some people had not received a confirmation e-mail when using the new tap to donate machine.	
10.22.10	**General Open Meeting Agenda** The Board noted the draft Agenda for the General Open Meeting on 1 November 2022 at the London Scottish Golf Club. The meeting would provide an opportunity for the Conservators to explain about the Masterplan and levy consultations and to encourage the public to take part in the online survey. Resources for Change would also be asked if they would wish to take the opportunity to carry out face to face surveys following the meeting.	
10.22.11	**Meeting Calendar 2023** The Board noted and approved the calendar of meeting dates for 2023 subject to a change to the September 2023 Finance and Investment Committee meeting. Electronic invitations would be sent out in due course.	
10.22.12	**Public Questions on Matters Considered in Part A(1) of this Meeting** There were no questions from the public. One of the Windmill Trustees was present and commented that the Windmill had now reopened and both visitor numbers and donations were back to pre-Covid levels.	

Committee(s):	Date(s):	Item no.
Wimbledon and Putney Commons Conservators Meeting	December 2022	12.22.4
Subject: Matters Arising from the Board meeting of 10 October 2022		**Private**
Report of: Chief Executive of Wimbledon and Putney Commons		**For Decision and Information**

Item	Action	Update
10.22.7 Land Management Plan	Circulate/discuss documents prepared so far at the Wildlife and Conservation Forum on 15 November 2022 meeting at the Board on 10 December 2022. Organise Management Walk - AEH	Done – See item 12.22.7 Done – held on 29 November
10.22.8 CE Report Fundraising update	OB asked to be sent a list of the paths that were being prioritised – CE&O/FM	This has been sent to all of the Conservators

Wimbledon and Putney Commons Conservators

Wildlife & Conservation Forum

Held in the Information Centre

Tuesday 15 November 2022

Attendees:

Conservators: Oliver Bennett (OB)
Michael Johnston (MJ)

By Invitation (Volunteers): Les Evans-Hill (LEH)
Adrian Podmore (AP)
Simon Riley (SR)

Officers: Steve Bound (SB)
Peter Haldane (PH)

1. Apologies were received from Andrew Harding and Angela Evans-Hill (AEH).

Note that it was thought appropriate for the list of invitees to be "tidied" up with the following to be included: Maggie May (Commons' fundraiser), Sue Bucknall (Conservator), Christine Schams, Ros Taylor (previous chair of this Forum) and Nick Drew (see below). It was also decided that the creation of the Associate Membership was impractical and should be dropped.

2. There were no declarations of any conflict of interest.

3. Minutes from previous meeting were approved. In terms of action points

a) Peter has sent the recent Common Lizard records to SR

b) SR has previously mentioned the possibility of a butterfly leaflet for the Commons. The provision of information/leaflets has been considered by and now budgeted for by the Conservators so watch this space

c) Queensmere restoration project – update - consultants are currently costing

d) Land Management Plan (LMP) – this is in preparation by PH. PH has already circulated chapters on Ponds, Woodlands, Rivers and Putney Lower Common to members of the Forum for comment. Further chapters to follow (including an Introduction, Grassland, Heathland, Climate Change and Golf Course)

e) OB to invite Nick Drew to be a member – DONE (Nick has recently accepted)

4. Matters arising – to be considered in AOB

5. Update on Pond Walk held on 13 October 2022. The walk was interesting and informative and helped PH develop the Pond chapter of the LMP – see above. Particular consideration was given to further temporary fencing to reduce the impact of dogs on the ponds.

6. Conservation Land Management in period. PH reported that there have been 4 major areas of work – scrub clearance to restore heathland areas in various areas, heather (*Calluna vulgaris*) cutting (to promote age diversity/structure) and seeding (to expand heather cover including an areas north of the A3 where there has been historically been some heather), grassland maintenance (removal of encroaching trees from a small meadow area located along the southern end of the Centre Path) and woodland work (continuation of the holly thinning project concentrating on areas adjacent to the upper section of Lower Gravelly Ride)

7. LMP – see also agenda item 3d). This is a significant exercise. PH will wait for all comments before considering each chapter again. Thought was given as to how the LMP might be presented to the Conservators as it will need their sign-off. It was concluded that some kind of executive summary would be useful with maybe bullet points for each chapter.

8. **Review of monitoring - Update from recorders.**

a) Notable bird records include two Dartford Warblers (assumed wintering) and a healthy Autumn passage of Stonechat. In terms of moths Olive Crescent and Sallow Clearwing were also recorded.

b) SR also shared some statistical analysis which seems to suggest that recent apparent declines in some grassland butterflies on the Commons (notably Meadow Brown, Small Heath and Common Blue) were consistent with trends for Surrey as a whole. There has been concern that local factors might have been responsible despite management of the grassland areas being broadly the same over the past decade.

c) Note that two annual reports have historically been published. One a comprehensive consideration of all matters ecological, including observations on recording, land management, weather/climate, recreational pressure etc. This document memorialized data for the future, allowing more informed land management decision making. The second is a relatively brief summary of bird sightings, with additional information on butterfly and dragonfly records for the year.
ACTION POINT OB to consider content and form of reports for 2022.

9. Winter Talk 2023 – ideas are in progress with AEH.

10. Open Forum

a) The Conservators have been awarded a £48,000 grant to consider the feasibility of peatland wetland restoration work on the Commons. OB to circulate briefing document for comment. DONE

b) SR offered to help manage the meetings and take minutes.
ACTION POINT SR to discuss further with AEH.

11. Next meeting 10 January 2023.

Committee(s):	Date(s):	Item no.
Wimbledon and Putney Commons Conservators Board	12 December 2022	12.22.6
Subject: Levy for 2023/24		**Public**
Report of: Chief Executive		**For Decision**

NOT FOR PUBLICATION

Summary

This paper sets out the RPI figure for September 2022 and the impact that has on the total levy to be set for 2023/24.

Resolution

The Board RESOLVES:

a. That given the policy agreed by the Board at its meeting on 14 December 2020 to set WPCC's levy at the maximum sum available for a further five year period from 2022/23 to 2026/27 and having noted:
   (i) the increases experienced in WPCC's rising capital and operational costs as a result of the recent increases in inflation and the impact of such increases on WPCC's operational budget; and
   (ii) the protection afforded by the benefits and reduction schemes operated by the three local authorities that collect the levy on behalf of WPCC for the purposes of both council tax and WPCC's levy, particularly for those most in need;

   to set the levy for 2023/24 at the maximum allowed, which is £1,490,566 representing an increase of 12.6377% from the 2022/23 figure, which reflects the RPI figure for the year to September 2022;

b. To prepare a written explanation of the need for the increase the levy to be published through WPCC's normal communications channels.

The Wimbledon and Putney Commons (Special Levies) Regulations 1990, as amended, established a formula that determines the maximum levy that WPCC may issue each financial year based on a fixed quantum in 1990, increased each year by the Retail Prices Index (RPI). Under the legislation, each financial year, the Conservators have the power to issue a levy at the level deemed necessary to fulfil their statutory duties provided it does not exceed this maximum level.

At the Board meeting held on 14 December 2020, the Board resolved the following:

> *Given the continued pressure on operational budgets, the policy of setting the levy at the maximum sum available, will continue for a further five-year period 2022/23 to 2026/27, to be reviewed if changes to the levy base are secured.*

The RPI figure for the year to September 2022 is 12.6377%. This increases the maximum levy from £1,323,328 in 2022/23 to £1,490,566 in 2023/24, generating an additional £167,238 to support the work of the charity.

Despite the decision by the Board in December 2020 to set the levy at the maximum level permitted for the following five year period, given the recent significant increase in RPI, members of the Finance and Investment Committee (FIC) at their meeting of 8 November 2022 felt that it was important to review the decision. Consideration was given to the current rise in the cost of living and the impact on residents, particularly those who were struggling financially. However, the Committee members were conscious that WPCC was operating a deficit budget in 2022/23 and this was unlikely to change in 2023/24 particularly given the increasing inflationary pressures. The proposal to rebase the levy, which was going through the first phase of a consultation process, reflected the Conservators' duty under statute to protect and preserve the Commons but a recognition that continuing budget deficits were not sustainable.

In addition to the pressures on the operating budget, the Committee was also aware of the essential capital works on the horizon, which would involve significant unbudgeted expenditure, most notably replacement of the boilers in the REMPF pavilion and fire safety works at both REMPF and the Ranger's Office (the Chief Executive has subsequently estimated these works are likely to cost WPCC in the region of £150,000). Consideration was also given to WPCC's responsibilities as an employer and the impact that inflation was having on its employees' cost of living.

The Committee also noted the reassurance that they had received from the local authorities that collected the levy on behalf of WPCC (ie, the 'billing authorities') that the benefits and reductions to which residents were entitled for the purposes of council tax also applied to the levy. In light of this, and given the considerations noted above, the Committee's view was that it would be neither prudent nor in the best interests of the charity to propose an increase in the levy that was below the maximum permitted under the 1990 Regulations.

The Council Tax Base (CTB) for each of the three billing authorities that collect the levy is not normally known until at least mid-January each year and until WPCC has this information, it is not possible to calculate the levy on a per household basis. Under the Regulations, WPCC must notify the three local councils (Wandsworth, Merton and Kingston) of the proposed levy before the 15 February in the preceding financial year. It has however been custom and practice to notify the three councils by mid-January at the very latest of the new levy, providing them with sufficient time to consider and prepare their council tax statements.

If the Board wished, due to the exceptionally high increase in RPI, to reconsider the resolution taken on 14 December 2020, to allow the increase in the levy to be set below the maximum permitted, this would be subject to section 44 of the Commissioners Clauses Act 1847, which is as follows:

> **44. No resolution of commissioners to be revoked at a subsequent meeting unless under certain circumstances.**

No resolution at any meeting of the commissioners shall be revoked or altered at any subsequent meeting, unless notice of the intention to propose such revocation or alteration be given by the clerk to each of the commissioners seven days at least before holding the meeting, nor unless such revocation or alteration be determined upon by majority consisting of two-thirds of the commissioners present at such subsequent meeting, if the number of commissioners present at such subsequent meeting be not greater than the number present when such resolution was come to, or by a majority, if the number of commissioners present at such subsequent meeting be greater than the number present at such former meeting.

Conservation Report 12 December 2022

Heathland Management: (scrub bashing)

Since July 2022, multiple areas of heathland have been cut back on both Wimbledon Common and Putney Heath. These include the following areas:

- Heathland close to the small meadow along the southern section of Centre Path (adjacent to Memorial Ride).
- Heathland located close to the junction of Green Ride and Memorial Ride
- Heathland located between Roehampton Ride and Ladies Mile
- Heathland located between Ladies Mile and Jubilee Path
- Heathland to the immediate north of Inner Park Ride.

The largest of these jobs has included the thinning of large trees near Green Ride/Memorial Ride and the clearance of scrub on the area of heathland between Roehampton Ride and Ladies Mile.

Scrub bashing on heathland close to Roehampton Ride

Heather cutting:

- This work was carried out on an area of heathland located between Ladies Mile and Roehampton Ride.
- Cut heather with seed was used to spread over a small heathland scrape that has recently been created north of the A3 and just south of the Roehampton War Memorial.
- This site for the heathland scrape was selected as it was the last known area where heather had been found north of the A3. Despite annual cut and collect work taking place on this area of ground, unfortunately heather had not naturally regenerated and therefore a small scrape was the next preferred option. Temporary fencing will be used to protect this area from trampling.

Heather cutting on heathland adjacent to Inner Park Ride

Grassland work

- Invasive trees have been cleared around the edge of the small meadow that is located along the southern end of Centre Path.
- This work has been carried out as a joint effort by volunteers and the WPCC Maintenance Team and the completion of this task has helped to connect the meadow with the nearby heathland.

Centre Path Meadow: a joint effort by volunteers and WPCC staff has ensured that two large areas of meadow have been reclaimed from the encroachment of woodland.

Woodland work

- Holly thinning contractors arrived on the Commons on 4 November 2022 to begin work on thinning holly from 6 hectares of the Commons woodland.
- By 18 November, approximately 1.3 hectares of woodland had been thinned by the team from woodland located adjacent to the upper section of Lower Gravelly Ride.
- On 21 November, work began on another area of woodland that is located just below Paradise Fairway. This work will continue until the middle of February 2023.

Woodland located below Paradise Fairway prior to holly thinning

Woodland located below Paradise Fairway during holly thinning

Committee(s):	Date(s):	Item no.
Board of Conservators	12 December 2022	12.22.08

Subject: Wimbledon and Putney Common Land Management Plan	Public
Report of: Conservation and Engagement Officer	**For Decision and Information**

SUMMARY

The Conservators are asked to provide comments and feedback on the sections of the Land Management Plan currently drafted and appended to this report.

As noted within the introductory section of the Wimbledon and Putney Commons Land Management Plan (LMP), the aim of this document is to provide a pro-active framework which highlights the special qualities of the Commons, the importance of its landscape and to identify those areas of the site which are vulnerable or require additional protection.

Taking into account relevant international, national, regional and local policies, the Commons' LMP has been designed for anyone who has an interest in learning more about the site or may like to take an active role in helping to look after the Commons in the future.

Covering a period of five years, the Commons' LMP will remain an active document which is periodically reviewed and revised in light of any new and innovative ideas that may arise in the future which could be of benefit to managing the Commons.

While extremely ambitious in its design, in summary, over the duration of the Wimbledon and Putney Commons LMP, the main aims and ambitions for the Commons will include the following objectives:

- Achieve a greater understanding of the natural and semi-natural habitats that are found on the Commons and the surrounding area.
- Protect, restore and create important wildlife habitats on the Commons.
- Improve the ecological condition, resilience and diversity of important wildlife habitats on the Commons.
- Halt the decline of native wildlife species on the Commons.
- Control and where possible, eradicate invasive non-native species from the Commons.
- Conserve and improve water resources on the Commons.
- Manage the resilience of the Commons to the impacts of climate change.
- Reduce litter and the harmful effects of environmental pollution.
- Help visitors to discover and value the wildlife, landscape and history of the Commons.
- Achieve a better connection of habitat networks with areas of surrounding land.

Earlier in June 2022, a first draft of the first section of the LMP was submitted to the Wimbledon and Putney Board of Conservators.

In brief, this section covered the following areas of interest:

- Introduction to the document
- Introduction and a brief history of the Commons
- Environmental information
- Landscape information
- Biological information (flora and fauna)
- Information relating to people, stakeholders, access and recreation
- Education and raising public awareness

There is still some information that is required to complete section one of the LMP and those people who have agreed to look at specific sections of the report have been reminded that the information will be required as soon as possible.

These areas include:

- Hydrology (this will be produced by Penny Anderson Associates via their Peatland Restoration Feasibility Study)
- Climate
- Flora
- Health and Safety provisions on the Commons
- Tree safety
- Education

Following the near completion of the first draft of Section 1, the next area of the LMP that has been covered has been the section entitled Landscape Management, Objectives and Work Programmes.

In the initial drafting of the objectives for this section of the LMP, 15 objectives were listed. At the current time, a first draft of eight of these objectives have been completed and submitted to members of the Wildlife and Conservation Forum (W&CF) for their consideration and comment.

These objectives have included:

- Heathland Management (PH)
- Grassland Management (PH)
- Woodland Management (PH)
- Pond Management (PH
- River Management (PH)
- Putney Lower Common Management (PH)
- Wimbledon Common Golf Course Management (PH) this has been shared with Ian Jennings (Head Greenskeeper, WCGC)

In addition to these objectives, currently in progress are also the management of the Roehampton Hills (and Acropolis) and Management of the REMPF.

To help complete the Commons' LMP as quickly as possible, it may be worth reviewing some of the other objectives that were included in the initial list to see whether these areas can be combined with other sections of the report or removed from the final list of objectives.

Examples would be to:

- Include the management of veteran and notable trees with the woodland management objective.
- Combine the subjects of improvement to access with managing visitor pressure and safeguarding tranquillity.

For each of the completed management objectives, the method that has been used to describe how each habitat or area of ground will be managed has been to divide the information into six sections.

These sections include:

1. Discussion
2. Significance (historic, cultural/aesthetic and ecological)
3. Condition
4. Management
5. Vision
6. Monitoring

For each of the management objectives, a great deal of research has been carried out to provide a thorough and comprehensive account of exactly what is involved in managing each area of the Commons. When all the objectives have been completed as a first draft, the next stage will be to review all of the comments and suggestions that have been provided by members of the Commons Wildlife and Conservation Forum. Where suitable, all efforts will be made to include as many of the suggestions as possible.

In addition to completing the evaluation section of the LMP, the main body of work that will follow the completion of the various management objectives will include the following information:

Habitat Management Plans for: bats, badgers, hedgehogs and stag beetles. The information will be as brief and as general as possible, but mention does need to be made for these key species.

Potential introductions and re-introductions (brief information covering the following subjects)

- Livestock grazing
- Water vole
- Grass snake/adder
- Great crested newt
- Black poplar
- Elm trees
- Orchards

It is obviously hoped by all concerned that the Commons' Land Management Plan is completed as soon as possible. To date, work on this project has highlighted that in so many areas of the Commons land management, there has been a distinct lack of readily available information from which to source relevant data. As a result, this has involved countless hours of researching material from a wide range of sources including magazine and newspaper articles, books, the internet, multiple management plans from other sites around the UK and the Conservators' Minute books.

Reports that are available such as the Commons' 2016 NVC study and a small number of other surveys that have been made on the Commons (for example hedgehog surveys and a

bat survey) have proved invaluable, but the availability of reports such as these has been very limited.

With most of the Commons' significant habitats and areas of land use already completed in a first draft form, without undue disruption, I will aim to complete the LMP by the end of the financial year. As the Commons' LMP is an active document that will doubtless continue to grow over the coming years, there will inevitably be additional information and areas of interest that could be added that will further assist in the management of the Commons. The aim of the next few months should however be to produce a completed document from which recommendations may be carried out as soon as possible.

Wimbledon and Putney Commons Land Management Plan 2022 to 2032
(Draft 1 – Conservators Copy)

Contents Page:

Part 1:

- Fauna – Invertebrates (Lepidoptera) **(L-EH)**
- Fauna - Dragonflies and Damselfies **(Simon Riley)**
- Invasive non-native species **(PH)**

1.9 – People, Stakeholders, Access & Recreation (refer to Barker Langham)

- Paths & access **(PH)**
- Signage & Interpretation **(PH)**
- Provision of bins, litter picking and the control of fly-tipping on the Commons **(PH)**
- Provision of benches and public seating on the Commons **(PH)**
- Car Parking on the Commons **(PH)**
- Health, recreation & well-being on the Commons **(PH)**
- Health & Safety Provisions on the Commons **(J. Rowland)**
- Tree Safety (J. Rowland)
- Bye-law enforcement **(Richard Thompson: Senior Keeper)**
- Volunteers **(PH)**

1.10 – Education & raising public awareness - comms (Discussion with Angela and Ros Taylor is willing to help).

Part 2: Evaluation

Part 3: -Landscape Management, Objectives & Work Programmes - what we want to achieve (objectives) and what operations are necessary to achieve this.

Objective 1 – Heathland Management (PH)

Objective 2 – Grassland Management (PH)

Objective 3 - Woodland Management (PH)

Objective 4 – Pond Management (PH)

Objective 5 – River Management (Beverley Brook) **PH**

Objective 6 - Management of veteran and notable trees (PH)

Objective 7 - Valley mires & Bog Management - Oliver Bennett

Objective 8 – Putney Lower Common (PH)

Objective 9 – Management of the REMPF (Discussion with WPCC staff)

Objective 10 – The Wimbledon Common Golf Course (PH)

Objective 11 – Management of non-native invasive flora and fauna (PH)

Objective 12 - Improvement to access (Discussion with WPCC staff)

Objective 13 – Planning for climate change (PH/sustainable Merton)

Objective 14 – Safeguarding Tranquility & managing visitor pressure. (Discussion with WPCC staff)

Objective 15 – Artificial Hills and the Acropolis (PH)

Part 4: Wildlife management and potential species re-introductions

4.1 – Birdlife: (Adrian Podmore/L-EH)

- Woodland birds
- Ground nesting birds
- Habitat plan for Swallows, Swifts, House sparrows…

4.2 – Invertebrates:

- Stag beetle habitat plan (PH)
- Butterflies **(L-EH)**
- Dragonflies **– (Simon Riley)**

4.3 – Reptiles: (PH)

- Establishment of Slow worms (PH)
- Grass snakes (PH)

4.4 – Aquatic: (???)

4.5 – Mammals:

- Habitat plan for bats **(PH)**
- Habitat plan for water voles
- Habitat plan for Badgers **(James Copeland & PH)**
- Habitat plan for Hedgehogs **(PH/SW15 Hedgehogs)**

4.6 – Non-native fauna

- Terrapins
- Muntjac

4.7 – Potential re-introductions – flora & fauna

- Cattle and grazing
- Water vole (London Biodiversity recommendation)
- Grass snake/Adder (London Biodiversity recommendation)
- Mistletoe (London Biodiversity recommendation)
- Elm tree (DED resistant) (London Biodiversity recommendation)
- Reed beds (London Biodiversity recommendation)
- Black poplar (London Biodiversity recommendation)
- Orchards – Adrian Podmore

PART 1:

1.1 Introduction

Wimbledon and Putney Commons are comprised of approximately 1140 acres (461 hectares) of countryside, with Putney Lower Common separated from the main body of the Commons by a distance of one and a half miles. Together, the Commons are made up of a mixture of woodland, heathland, grassland habitats, wetland sites, amenity areas and the built environment. During the long history of the Commons, the land which they have covered has served a wide variety of purposes which have included military, sporting, farming and other civilian activities.

In 1912, Walter Johnson wrote his classic book entitled, *Wimbledon Common; it's Geology, Antiquities and Natural History.* Within these pages, the following passage appeared which, for many years, has been used to describe the special qualities which the Commons hold for so many people.

"He does not know Wimbledon Common who is not familiar with its labyrinths of leafy glades, it's tangled thickets of wild red rose, bramble and honey-suckle; who has not often traversed it turfy plateau and has the perfumes of odiferous herbs borne in upon his senses; who has not pondered over its rusty pebble, and wondered whence they came; tried to acquaint himself with what may be gleaned of local history;…and rambled through the bird paradise of Beverley Vale"…"Judged broadly, the Wimbledon flora and fauna must be ranked very high for a suburban area"… "Sundry petitions must now be made. First of all, *to the Conservators of the Commons, to whom we really owe very much, one may appeal for the preservation of the heath in its wild state…one prays earnestly that the Common not be 'vulgarised' …by making this lovely spot ordinary – a kind of level, well-ordered suburban park, … for this windswept Common is not ordinary; for it stands alone, and is therefore priceless".*

(Insert: photograph of the Commons)

Unfortunately, over the years, there have been many activities which have resulted in a great deal of disturbance and often damage to the natural aspect of the Commons. Activities such as the use of large areas of the Commons by the National Rifle Association (1860 – 1889), the presence of the military on the Commons during both World Wars and the road improvement scheme on the A3 and Roehampton Lane during the late 1960's have all left their mark on the landscape of the Commons. In the case of the road improvement scheme along the A3 and Roehampton Lane, while compensatory land was gained by the Conservators on Putney Lower Common as a result of losing land to road widening, other familiar areas of the Commons have either been lost or changed forever.

(Insert: photograph of Kingsmere prior to the creation of the A3 in the late 1960's)

While these and many other events have gradually receded into history and the natural beauty of the Commons remains, in the Forward notes of *Wimbledon Common & Putney Heath, A Natural History (2000),* renowned botanist, environmentalist and broadcaster, David Bellamy highlighted what he considered to

be an increasing set of pressures which continue to threaten the future prosperity of areas such as the Commons. Described as a growing conflict between 'Mother Nature' and the urban temperament, Bellamy suggested that:

"nitrogen from grid locked exhausts, doggie doos and other wastes, are enriching the soils and helping to speed the growth of trees, which are no longer held in check by browsing animals and heathland fires". Without proper management the whole of this common land will turn itself into a forest; a wonderful resource but the not the landscape now enjoyed by the post Womble generation".

Bellamy continued:

"Jealously guarded by at least a million pairs of eyes and trodden by an army of feet shod in a diverse array of footwear, it should be the safest bit of urban green-scape in the world. But what if management threatened someone's favourite glade of invading birch, or suggested fire, or the introduction of grazing animals or fencing or relocation of paths at irregular intervals, or the eradication of invading plants and animals? What about the reintroduction of the red squirrel, brown hare, water vole and beaver? Shock! Horror!, the altercation of divided opinions, urban rage. It will happen unless everyone who lives around or loves the freedom of these now sacred spaces (the smell of their rain washed living soils, the buzz of their insects and the changing patterns and colours of the seasons of the natural world) take the trouble to learn the true facts of the life of this, their common heritage".

By learning about the true value of the Commons, Bellamy concluded that with *"the full understanding of everything the Commons contain, love it not to death, but back into the haphazard patchwork of biodiverse working order as it was in the days of my youth".*

Since the publication of *Wimbledon Common and Putney Heath, A Natural History in 2000,* a great deal has been achieved to protect and enhance the Commons' natural and semi-natural environments. Important habitats such as heathland, acid grassland and woodland are now managed under the guidance of various management agreements with Natural England and the Forestry Commission. Large projects such as the restoration of the Beverley Brook on Wimbledon Common have been undertaken with partners including the Environment Agency, The South-East Rivers Trust and Merton Council and over the past few years, the Commons' volunteer programme has literally grown from strength to strength.

(Insert: photograph of volunteers on the Commons)

In recognition of the very high standards in which the Commons are managed, since 2017, both Wimbledon Common and Putney Lower Common have been presented over consecutive years with Gold Awards at the annual London in Bloom prize giving event. In 2018, 2019 and 2021, Wimbledon Common also received the coveted London Common of the year award, which, once again, is a clear indication that the Commons are being very well looked after.

Gold Award

An exceptionally high standard demonstrated throughout. A consistent approach, which demonstrates both best practice and sustainable effort. Meets all of the judging criteria and objectives of London In Bloom and scores very highly in each section of the judge's criteria. Outstanding – 170-200 points (85% - 100%)

There is however still a great deal more that we would like to achieve in conserving and enhancing the Commons for both wildlife and future generations of visitors to enjoy. During the various lockdowns which accompanied the Covid-19 pandemic in 2020 and 2021, the Commons provided a valuable lifeline for thousands of visitors, providing space to exercise, play and unwind. Although we have no idea of how many people visited the Commons during this period, unfortunately, the damage that was incurred to the landscape through heavy and sustained levels of footfall was all too clear to see.

(Insert: photograph of damaged ground opposite the London Scottish Golf Club House)

While the Commons, unquestionably, provide a vital service to the wider community, perhaps one of the most notable results to arise from this period of time was the need to acknowledge, once again, the fragility of the landscape, wildlife, and many of the precious habitats which are found on the Commons today. Fortunately, following the easing of social distancing measures during spring 2021, staff, volunteers and nature have all worked incredibly hard to repair much of the damage that had occurred on the Commons as a result of COVID-19. Given the Commons location in the heart of south-west London, there are however still many pressures and threats to the area's continued well-being that need to be addressed.

In January 2018, the UK government published "A Green Future: Our 25 Year Plan to Improve the Environment. At the heart of this ambitious plan are the goals of working towards the provision of *'cleaner air and water, plants and animals that are thriving and a cleaner, greener country for us all'.* (UK Gov:2021)

According to the plan:

"By using land more sustainably and creating new habitats for wildlife, including by planting more trees, we can arrest the decline in native species and improve our biodiversity. By tackling the scourge of waste plastic we can make our oceans cleaner and healthier. Connecting more people with the environment will promote greater well-being. And by making the most of emerging technologies, we can build a cleaner, greener country and reap the economic rewards of the clean growth revolution".

With this ambition in mind, perhaps, the now well used adage to "Think globally, act locally" has never been more apt in guiding the management of so many facets of

our everyday lives. Providing one of the largest natural green spaces in London, Wimbledon and Putney Commons are well placed to help make an incredible difference to people's lives and to deliver many of the aims that have been set out in the UK government's 2018 paper. By taking a holistic approach to the management of the Commons which includes the combined value of their landscape, biodiversity, history and culture, important changes can be made to improve the health and visitor attraction of the Commons while still conserving the special qualities of the site.

(Insert: photograph of Wimbledon Windmill)

Attracting a truly diverse audience, determining what the special qualities of the Commons are, is a very subjective exercise but in general, the New Forest Management Plan (2010 to 2015) provides a very good template in which to follow:

"The special qualities of the New Forest are those qualities that define it, make it unique and immediately recognisable and, when taken together, distinguish it from all other parts of the country. Although particular features that we value about the New Forest today may alter over time, conserving the essence of the place, and ensuring its uniqueness can be experienced by future generations, is the central priority for the National Park and is at the heart of this Management Plan".

In June 2017, the Wimbledon and Putney Commons Conservators produced "A Strategy for Wimbledon and Putney Commons". The vision of this strategy was that:

"*Wimbledon and Putney Commons will be recognised as an exceptional and welcoming natural place for visitors where wildlife thrives."*

Its mission statement read:

"As stewards of the Commons and through our independent governance structure, we will safeguard their natural aspect and condition so they are safe, available, welcoming and accessible to all."

WPCC Mission Statement:

This will require WPCC to:

Conserve, enhance and protect the Commons natural aspect and wildlife for present and future generations to enjoy;

Demonstrate sound governance and financial discipline by constantly reviewing operational procedures and all aspects of management;

Seek to balance the enjoyment of the majority of users who come for informal activity and appreciation of the Commons quiet natural aspect with the needs of groups who undertake formal and/or more rigorous recreational activities;

Improve understanding and identity of Wimbledon and Putney Commons and interpret its rich and varied heritage;

Work in partnership with stakeholders to promote and achieve the vision;

Improve facilities used for organised recreation, sport and events;

Encourage volunteering as a rewarding activity engaging people of all ages and abilities;

Work in an environmentally sustainable manner.

By reading the Wimbledon and Putney Commons Conservators 2017 mission statement, it is clear that at the heart of this statement are the fundamental aims of 'conserving, enhancing and protecting' the Commons' natural aspect. Put simply, the natural aspect of a landscape is something that relates to a distinct 'natural' feature of a particular place. As the Commons provide a dynamic and ever-changing environment, we should however remain mindful of the need to not view the site as a place that has somehow been preserved in aspic. In the scope of the Commons' Land Management Plan (2022 to 2032) the natural aspect of the Commons should therefore not be seen as a snapshot in time and space where the landscape is managed to a set of requirements that are defined by a specific moment in history.

For example, 1871, which is the date when the Commons were transferred to the Wimbledon and Putney Commons Conservators from the 5th Earl Spencer, could be seen as the date when the Commons were at their 'best'? An alternative date could be 1953 when Wimbledon Common was first designated as a Site of Special Scientific Interest (SSSI) for its more extensive areas of heathland and acid grassland.

While both dates offer examples of a time when certain landscapes may have been more prevalent than they are today, we must consider what we risk losing in the pursuit of what may have previously existed. For this reason, it is the aim of the Wimbledon and Putney Commons Land Management Plan (2022 to 2032) to take into account the full range and value of the special qualities which exist on the Commons as they exist today in order to 'conserve, enhance and protect' these Commons into the future.

(Insert: aerial photograph (dated 1919) of the area on the Commons which is located alongside one section of Parkside. With Rushmere just in view in one corner of the photograph, there is barely a tree in sight. The question arises as to whether this is the landscape that we wish to re-capture in the 20th century)

To safeguard the Commons for the future, it is useful to understand them within the framework of a concept that has been termed as a 'natural capital approach'. According to the UK Government's Natural Capital Committee (2012-2020), natural capital can be defined as:

"the world's stocks of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible."

Viewed holistically, Wimbledon and Putney Commons contain a significant amount of natural capital which includes trees and woodland, rivers and streams, peat bogs, heathland and grasslands, landscape and cultural assets. Together, these make a significant impact to mitigating the effects of climate change, helping to alleviate flood risks, providing areas of carbon storage and maintaining and improving the quality of life for large numbers of people. Looked at in terms of the ecosystem services which they provide to human well-being and quality of life, when considered against the pressures which the natural world is currently faced with, there has never been a more opportune moment in which to provide a clear plan for the future management of this site.

Like many other green spaces around the United Kingdom and indeed the entire world, there are a number of potential pressures which could affect the Commons over the coming years and these will be driven by complex interactions between environmental, social and economic factors at a national and global level. (reference author)

In the UK State of Nature Report 2019, the main drivers of change have been cited as agricultural management, climate change, urbanisation, pollution, hydrological change, and woodland management. According to the report, combined, these factors demonstrate that the abundance and distribution of the UK's species has on average, declined since 1970 and many metrics suggest this decline has continued in the most recent decade. In short, there has been no let-up in the net loss of nature in the UK. Reporting that almost half (40%) of species in the UK, including animals, birds and butterflies have declined since 1970, the UK is now considered to be one of the most nature depleted countries in the world.

Insert: photograph of Kingfisher perched along the Beverley Brook on Wimbledon Common and reference the restoration project that was carried out during 2019.

In terms of their actual size, the Commons are not overly large but we do have the potential for improving the quality of the area for the good of the natural world and for human life. By putting people at the heart of the natural environment, increasing, where appropriate, the extent of the Commons habitats with less fragmented areas for wildlife, reducing pollution and environmental pressure and helping to improve people's knowledge of the Commons and their surrounding areas we have the potential to create an environment that is far better that the one that we find today. There is also the opportunity to extend beyond the confines of the Commons themselves and work with other local organisations and communities to help the Commons link up with the biodiversity of the surrounding area.

In 2010, Professor John Lawton launched his report entitled 'Making space for Nature 24'. In this report, Professor Lawton said:

“There is compelling evidence that England’s collection of wildlife sites are generally too small and too isolated, leading to declines in many of England’s characteristic species. With climate change, the situation is likely to get worse. This is bad news for wildlife but also bad news for us because the damage to nature also means our natural environment is less able to provide the many services upon which we depend. We need more space for nature.”

As discussed in the Chilterns Land Management Plan (2019-2024), ‘what needs to be done to enhance the resilience and coherence of England’s ecological network can be described in four words: more, bigger, better and joined’. While the Commons are comprised of approximately 1140 acres, neighbouring land belonging either to private or public organisations should also be viewed as important natural and semi-natural space in which to enhance connections and wildlife corridors between the Commons and the wider environment.

(Insert: google map showing Wimbledon and Putney Commons and the areas of green land that surround these two sites. Improved connection between these areas would effectively enhance and enlarge the wildlife habitats that are found in this area).

While extremely ambitious, in summary, over the duration of the Wimbledon and Putney Land Management Plan (2022 to 2032), our main aims and ambitions for these Commons will include the following objectives:

- Achieve a greater understanding of the natural and semi-natural habitats that are found on the Commons and the surrounding area.
- Protect, restore and create important wildlife habitats on the Commons.
- Improve the ecological condition, resilience and diversity of important wildlife habitats on the Commons.
- Halt the decline of native wildlife species on the Commons.
- Control and where possible, eradicate invasive non-native species on the Commons.
- Conserve and improve water resources on the Commons.
- Manage the resilience of the Commons to the impacts of climate change.
- Reduce litter and the harmful effects of environmental pollution.
- Help visitors to discover and value the wildlife and landscape of the Commons.
- Achieve better connection of habitat networks with areas of surrounding land.

(Insert: photograph from the Beverley Brook restoration project along the Wimbledon Common section of the Beverley Brook. ‘Large scale projects such as the Beverley Brook restoration project have played an important role in helping to re-wild specific areas of the Commons).

Achieving the aims and identifying the challenges of Commons’ Land Management Plan (2022-2032)

In 2011, the UK National Ecosystem Assessment was published. This report provided a comprehensive overview of the state of the natural environment in the UK and a new way of estimating our national wealth. The report showed how we have undervalued our national resources and how valuing them correctly will enable better decision making, more certain investment, new avenues of wealth creation and jobs and greater human well-being in changing times ahead.

One of the key messages of the UK National Ecosystem Assessment was that “the natural world, its biodiversity and its constituent ecosystems are critically important to our well-being and economic prosperity, but they are consistently undervalued in conventional economic analyses and decision making”.

As noted in the New Forest Management Plan (2010-2015)

“Ecosystems and the services they deliver underpin our very existence. We depend on them to produce our food, regulate water supplies and climate, and breakdown waste products. We also value them in less obvious ways: contact with nature gives pleasure, provides recreation and is known to have a positive impact on long-term health and happiness.”

The purpose of the Wimbledon and Putney Commons Land Management Plan (2022 – 2032) is therefore to provide a pro-active management framework which highlights the special qualities of the Commons, the importance of its landscape and to identify those areas of the site which are vulnerable or require additional protection. Taking into account relevant international, national, regional and local policies, the Land Management Plan has been designed for everyone who has an interest in the future management of the Commons.

By looking at the Commons and the pressures which face the natural environment as a whole it will become clear how best to manage this site for the benefit of all. Working alongside various partners, implementation, monitoring and evaluation will be a crucial part of delivering actions and developing future priorities. The Commons’ Land Management Plan is a strategic document which provides long-term visions and objectives for the Commons over the next 10 years and it will also provide targets which should be achievable in the short term.

This Plan will remain an active document which is periodically reviewed and revised as required and its on-going use will always take into account new and innovative ideas of how the Commons can be conserved and enhanced in the future.

The WPCC Land Management Plan (2022-2032) is both aspirational and ambitious and will direct the management of the Commons' natural resources in a way that has never been undertaken before. The success of the Land Management Plan relies upon the cooperation and involvement of everyone who works, volunteers or simply cares about the Commons and their future prosperity. It is only through working together with all the Commons' different partners, stakeholders, friends, volunteers and staff that we will be able to succeed in protecting and enhancing this beautiful area of London's countryside.

Perhaps one of the biggest challenges in realising the aims of the Commons' Land Management Plan will be funding….

(See WPCC Business plan for further details of how adequate funding will be achieved).

1.3 - How the Commons' Land Management Plan was produced & presented

The Wimbledon and Putney Commons Land Management Plan (2022 -2032) has been produced in partnership with the Wimbledon and Putney Commons Board of Conservators, Commons' staff, volunteers, stakeholder groups & Forums. Extensive research has also been carried out using historical written and photographic material, surveys and plans that are specific to Wimbledon and Putney Commons and a wide assortment of land management plans that have been prepared for many of Britain's National Parks and Areas of Outstanding Natural Beauty. Throughout the creation of the Commons' Land Management Plan (2022-2032), we have remained committed to ensuring that community involvement and stakeholder engagement have remained an important factor in our decision making. At various stages of the plan, summary updates and reports have been produced. These have been published on the WPCC website and discussed during various public meetings that have been held by the Wimbledon and Putney Commons Conservators.

In addition to the natural and semi-natural habitats that are found on the Commons, this Land Management Plan also covers the aspects of access infrastructure (car parks, signage, paths, bins and benches), health and safety measures on the Commons, the hydrological infrastructure (springs, ditches and pipes), interpretation and education. This Land Management Plan does not however cover the aspects of buildings on the Commons.

1.4 – Introduction to the Commons (including setting)

There are three named areas on the Commons; Wimbledon Common, Putney Heath and Putney Lower Common which together are managed under the name, Wimbledon and Putney Commons. The Commons are located in South-West London and they are approximately 7 miles from central London.

While the exact shape of the Commons has altered slightly during the long history of their existence, nowadays, the Commons lie within the territory of three Greater London Boroughs. Broadly, the northern section of the Commons which includes much of Putney Heath and Putney Lower Common fall within Wandsworth. The southern part of the Commons which is known as Wimbledon Common can be found within Merton and there is a very small area which is located along the western edge of the Commons and forms part of the Richardson Evans Memorial Playing Fields (REMPF). This area of ground falls within the boundaries of the London Borough of Kingston Upon Thames. Together, these three areas of open green space cover approximately 1140 acres (461 hectares).

While a brief history of the Commons will be provided in section 1.5 of the Commons' Land Management Plan, it should be noted that although Wimbledon Common and Putney Heath are largely joined as one area of land (despite being divided along the line of the busy A3 for a distance of approximately 2.8km), Putney Lower Common is completely separated from the main body of the Commons by a distance of approximately 2 miles. Located between Lower Richmond Road and a small section of the Beverley Brook, this beautiful area of land which measure approximately 50 acres (20 hectares) in size remains a distinct yet integral part of the overall area of the Commons.

(Insert: Google Earth view of Wimbledon and Putney Commons)

In terms of the geology of the Commons, while this be discussed in more detail in Section 1.7 of the plan, much of the main body of the Commons is located on a flat plateau which has a layer of river gravel overlying London Clay.

According to Sutcliffe (2000), *"On the western slopes of Wimbledon Common, the solid geology of London Clay gives rise to heavy clay soils, favouring woodland trees such as oak, beech, sweet chestnut and birch. Springs occur on the upper slopes at the junction of impervious rock and in many places, there are boggy areas and streams, the most notable being Farm Bog."*

As the geology controls the Commons' drainage and the soils which are found on the site, both Johnson (1912) and Sutcliffe (2000) conceded that while there has certainly been a loss of species over the lifespan of the Commons, 'the geology has not changed and essentially, this is what makes the Commons what they are'.

Recognised as a nationally important and valuable site for wildlife, various parts of the Commons are designated as a Site of Special Scientific Interest (SSSI), a Special Area of Conservation (SAC) and a Site of Metropolitan Importance (SMI).

SSSI (Designated: 1953 & 1986) (Area of designation: 900 acres/364.5 hectares) Reason for designation: “Wimbledon Common supports the most extensive area of open, wet heathland on acidic soil in Greater London. The site also contains a variety of other acidic heath and grassland communities reflecting the variations in geology, drainage and management. Associated with these habitats are a number of plants uncommon in the London area”.

SAC (Designated: 1986) (Area of designation: 900 acres/364.5 hectares) Reason for designation: North Atlantic wet heaths; European dry heaths; Stag beetles.

SMI (Designated ?) (Area of designation: Wimbledon Common & Putney Heath) Reason for designation: “A large Common incorporating a number of high- quality habitats associated with acidic soils. These include the largest area of wet heath in London, areas of dry heath and one of London’s very few Sphagnum bogs. There also extensive areas of acid grassland, both dry and damp, much woodland and scrub, several ponds and a section of the Beverley Brook.”

(Below: Wimbledon Common SSSI citation)

COUNTY: GREATER LONDON SITE NAME: WIMBLEDON COMMON

BOROUGH: WANDSWORTH AND MERTON

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981.

Local Planning Authority: Wandsworth Borough Council; Merton Borough Council

National Grid Reference: TQ 227720 Area: 346.5 (ha.) 856.2 (ac.)

Ordnance Survey Sheet 1:50,000: 176 1:10,000: TQ 27 SW

Date Notified (Under 1949 Act): 1953 Date of Last Revision: 1975

Date Notified (Under 1981 Act): 1986 Date of Last Revision: –

Other Information: There are several boundary amendments, including extensions.

Reasons for Notification: Wimbledon Common supports the most extensive area of open, wet heath on acidic soil in Greater London. The site also contains a variety of other acidic heath and grassland communities reflecting the variations in geology, drainage and management. Associated with these habitats are a number of plants uncommon in the London area.

The high plateau in the east and north of the site has a capping of glacial gravels overlying Claygate Beds and London Clay which are exposed on the western slope of the Common. The acidic soils, and poor drainage of the plateau give rise to a mosaic of wet heath and unimproved acidic grassland. Semi-natural broadleaved woodland covers the deeper, clay soils of the western slope.

The acidic grassland is mostly co-dominated by common bent Agrostis capillaris and sheep's-fescue Festuca ovina, with soft rush Juncus effusus well-represented where drainage is impeded. Also present are two locally uncommon grasses, wavy-hair grass Deschampsia flexuosa and in damper depressions, purple moor-grass Molinia caerulea. Typical herb species of unimproved grassland occur including heath bedstraw Galium saxatile, tormentil Potentilla erecta, harebell Campanula rotundifolia, and eyebright Euphrasia officinalis. Purple moor-grass also characterises the ground flora beneath encroaching pedunculate oak -- birch woodland on the gravels of the plateau.

A significant cover of heather Calluna vulgaris distinguishes areas of both dry and wet heath. The wet heath is especially important for its large extent and supports typical species such as the heath rush Juncus squarrosus. The brown sedge Carex disticha is present, as is mat-grass Nardus stricta on drier parts. Both of these species are restricted in their occurrence in Greater London. Localised areas of dry heath supporting bell-heather Erica cinerea and dwarf gorse Ulex minor demonstrate the variability of the heathland habitat and are of additional note for an interesting lichen flora.

The semi-natural woods of the clay soils comprise a dense canopy of maturing pedunculate oak Quercus robur and silver birch Betula pendula, with beech Fagus sylvatica, hornbeam Carpinus betulus and aspen Populus tremula in parts. Holly Ilex aquifolium is the dominant understorey species. Hazel Corylus avellana and alder buckthorn Frangula alnus, a species with a restricted distribution in London, also occur. Where sufficient light penetrates there is a herb layer of bracken Pteridium aquilinum and bramble Rubus fruticosus.

Several streams rise at the boundary of the gravels and clays and one feeds a small valley mire known locally as Farm Bog. A rich assemblage of plants uncommon in Greater London occur here, such as bogbean Menyanthes trifoliata, bulbous rush Juncus bulbosus, water horsetail Equisetum fluviatile and several species of bog moss Sphagnum, including S. palustre and S. fimbriatum.

There are several ponds on the Common. The disused Bluegate gravel workings with its variable water level supports an abundance of floating club-rush Eleogiton fluitans in the shallow water. This is a locally uncommon species. Bog mosses, mainly Sphagnum subsecundum are also present, occurring amongst tussocks of rush Juncus species.

The woodland and scrub support a locally important community of breeding birds, including green and great spotted woodpeckers, lesser whitethroat, nuthatch, and in most years, kestrel and lesser spotted woodpecker

A SSSI is a conservation designation denoting an area that is of special interest due to its fauna, flora, geological or physiographical features. These areas form the basic building blocks which all other UK nature conservation legislation are based on. These include National Nature Reserves, Ramsar sites, Special Protection Areas and Special Areas of Conservation. SSSIs are designated and protected under national legislation by Natural England under the Wildlife and Countryside Act 1981, as amended and strengthened by the Countryside and Rights of Way Act 2000; they are chosen to represent the UK's best nature conservation sites. (Richmond Park: confirm date?)

At the current time, most of the areas that are located on the Wimbledon Common SSSI and which come under the control of the Wimbledon and Putney Commons Conservators have been assessed by Natural England under the category of 'Unfavourable recovering'.

Condition assessments for SSSI's

Favourable **-** The SSSI is being adequately conserved and is meeting its 'objectives'.

Unfavourable recovering **-** Often known simply as 'recovering', SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time.

Unfavourable no change **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI unit remains in this poor condition, the more difficult it will be, in general, to achieve recovery.

Unfavourable declining **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to site management or external pressures. The site condition is becoming progressively worse.

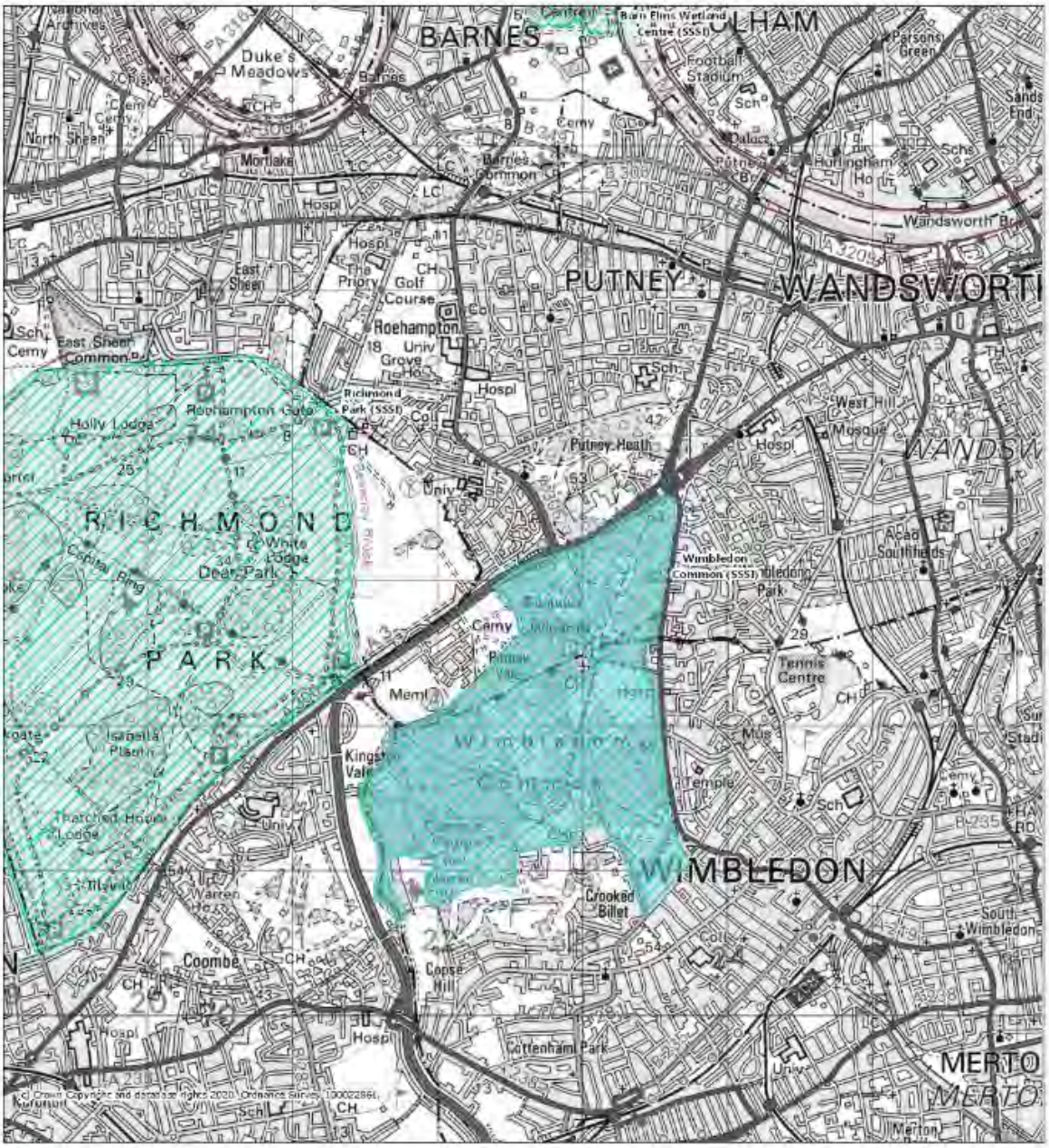
Part destroyed **-** Lasting damage has occurred to part of the special conservation interest of a SSSI unit, such that it has been irretrievably lost and will never recover. Conservation work may be needed on the residual interest of the land.

Destroyed **-** Lasting damage has occurred to all the special conservation interest of the SSSI unit, such that it has been irretrievably lost. This land will never recover.

Information taken from Department of Environment, Food and Rural Affairs – condition assessment for SSSI's

MAGIC

Wimbledon Common SSSI/SAC



Legend

Sites of Special Scientific Interest (England)

0 0.75 1.5

km

Projection = OSGB 36

xmin = 516200

ymin = 169200

xmax = 523100

ymax = 176400

Map produced by MAGIC on 28 April, 2020.

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Despite the great importance of the Commons SSSI, SAC and SMI designations, this hugely important green space which is located close to the heart of London, also provides the landscape for a wealth of cultural and recreational activities.

As noted by James Reader (2000) who held the post of Clerk and Ranger on the Commons between the years (clarify J. Readers years in post) *"According to the 1871 Wimbledon and Putney Commons Act, the management duty of Conservators and their employees is simple…to keep the Commons for ever open and unenclosed and unbuilt on, and to protect the turf, gorse, timber and underwood thereon, and to preserve the same for public and local use, for purposes of exercise and recreation and other purposes".*

Since the Wimbledon and Putney Commons Act came into operation in 1871, the Commons have been enjoyed and used by people in a wide variety of ways and up until the present day, sporting and recreational activities on the Commons have included golf, athletics, horse riding, cycling and team sports such as rugby, football and cricket.

James Reader (2000) continued:

"Most of the area of the Commons, south of the A3 is designated a Site of Special Scientific Interest, and as such we, the Managers, have an agreement with English Nature (later renamed, Natural England) that clearly lays down the operations that we are permitted to carry out there. The most obvious objective, as agreed with English Nature, is to maintain the natural state and beauty of the Commons while preserving and fostering the wildlife. Yet simultaneously, there has to be an element of compromise, taking into consideration the activities on the Commons such as walking, running, cycling, horse riding, golf, football, pick-nicking and many others. All these activities can be categorised as 'exercise and recreation' as stated in the 1871 Act and may conflict with other users".

While this information was written by James Reader over twenty years ago, the sentiment remains very much the same today as it was in the past. Subsequently, there remains a need to manage the Commons, wherever possible, for all users of the area whatever their lawful motivations for using the Commons may be.

Managing the Commons is fundamentally a balancing act and therefore while one of the of the overarching aims of the Commons Land Management Plan (2022 – 2032) is to work towards the goal of raising the overall condition of the Wimbledon Common SSSI from its current assessment of 'Unfavourable recovering' to one that is 'Favourable', there must be elements of compromise. Sporting activities for example have been on the Commons in one form or another for hundreds of years and the presence of these activities helps to form the cultural history of the site. It may however be time to re-evaluate the nature of how some of these activities are held on the Commons and how the important element of 'exercise and recreation' may be able to better fit into the landscape of the Commons during the coming years.

(Insert: photograph of a sporting event on the Commons such as the golf course.)

(Insert a map of Wimbledon and Putney Commons)

1.5 - A brief History of the Commons:

Over the years, detailed accounts of the history of Wimbledon and Putney Commons have been published in a number of articles and local history books. Through the works of local historians such Richard Milward and Norman Plastow, there now exists a concise record of the history of the Commons and its surrounding areas from Neolithic times, almost, to the present day. While a full and detailed account of the history of the Commons may not be necessary for the pages of this Land Management Plan, there is nonetheless some merit in providing an outline of some of the main events that have shaped the long and eventful history of this site.

As suggested by Norman Plastow (1986), "the early settlement of Wimbledon can probably be attributed to the geology of the Commons". Providing a source of clean water which had been filtered by the existing gravel and at a depth that was fairly easy to extract, human settlement on and around the Commons can be reliably traced back to the Neolithic Age (300BC-1000BC).

(Insert: early sketch of Caesar's Well – to show that water has been sourced from the Commons for a considerable length of time.)

From this point onwards, there are records that suggest the presence of a large barrow (burial mound) which was located close to the Portsmouth Road and there is also a record from 1798 which describes a cluster of 23 barrows near Tibbet's Corner. While these barrows are considered to have originated from the Bronze Age (1800 BC to 500 BC) unfortunately, all the barrows were destroyed in the early 19th Century whereby the materials that were used to construct them were re-used to repair roads around the local parish.

Although little, if any, relics from the Bronze Age have survived on the Commons, as noted by Plastow (1986), the Iron Age people have certainly left their mark on the area. First listed as a Scheduled Monument in 1932, Caesar's Camp is situated on a blunt spur of land overlooking Beverley Brook to the west and is now largely found within the grounds of the Royal Wimbledon Golf Course. According to the Historic England website (2022), 'the hillfort is roughly circular in plan except on the NNW side where it is flattened to follow the spur. The ground slopes steeply towards Farm Ravine on this side and would have provided some form of natural defence'. The reason for its designation as a Scheduled Monument is that Caesar's Camp is a large univallate hillfort and is therefore defined as a fortified enclosure of varying shape, ranging in size between 1ha and 10ha, located on hilltops and surrounded by a single boundary comprising earthworks of massive proportions.

Despite alterations and landscaping that have diminished the profile of the earthworks, according to Historic England, Caesar' Camp on Wimbledon Common has survived well. Historic England's online summary of Caesar's Camp continues that "it has only been partially excavated and holds potential for further archaeological investigation using modern techniques. it will contain archaeological information and environmental evidence relating to the hillfort and the landscape in which it was constructed." Despite the current name of Caesar's Camp, over the years, the remains of this hillfort have been known by antiquarians as Bensbury, Warren Bulwarks and The Rounds.

(Insert: plan of Caesar's Camp)

While it is likely that the origins of Wimbledon Common, at least, can be traced back to Saxon times when the village of Wimbedounyng was established, Milward (1986), has pointed out that explicit mention of the Commons does not appear until 1461 when the records (or Rolls) of the Manor Court began. As noted by Milward, it is very likely that the Commons were larger than they are today but from the Middle Ages until approximately 1798, a special Manor Court which consisted of all of the lord's tenants and presided over by his steward would deal with matters affecting village life and all things which concerned 'the rights of common.'

First enshrined in the Magna Carter in 1215, originally, Common land was part of the estate held by the lord of the manor which had been granted to him by the Crown or by a higher ranked peer. Essentially, areas of common land were considered as the waste ground of the manor where the poor quality of the soil had meant that it had never been brought under the plough. It has been estimated that at one time, almost half of the British Isles consisted of Common land providing the rural communities of these areas with a source of wood and pasture for livestock.

(Insert: early engraving of Commoners foraging on the Commons)

According to the National Archives (2021), the historical rights of common were usually of five kinds, although there were others.

- Of pasture: the right to graze livestock; the animals permitted, whether sheep, horses, cattle and such, were specified in each case.
- Of estovers: the right to cut and take wood (but not timber), reeds, heather, bracken and the like.
- Of turbary: the right to dig turf or peat for fuel.
- In the soil: the right to take sand, gravel, coal and other minerals.
- Of piscary: the right to take fish from ponds, streams and so on.

(Insert: artist's impression of Wimbledon Common with livestock in the foreground of the picture (date unknown)

As noted by Milward (1986), as a result of the generally poor conditions associated with common land, use of commons had to be strictly regulated and limitations on what could be grazed or removed from the land usually resulted in producing barely enough for the domestic needs of the commoners.

In the aftermath of the English Civil War (1642-1651), it has been reported by Milward (1986) that 'the Manor Court lapsed into virtual non-interference on the Commons". Effectively, this situation lasted until the beginning of the 19th Century when the land covered by Wimbledon and Putney Commons was considered to be out of control. During this time, the lords of the Manor were the Spencer Family and while in 1807, the 4th Earl Spencer made an unsuccessful attempt to enclose the Commons, it was not util 1864, when the 5th Earl Spencer proposed to "improve" Wimbledon Common by turning it into a public park.

As described by Alan Phillips (date unknown),

"Quite suddenly in 1864 Earl Spencer concluded that Wimbledon Common was beyond control. It was so ill-drained as to be a swamp much of the year; its gravel was nibbled for repairing highways; the gipsies were not only objectionable for dumping rubbish, but even dangerous; the public found it annoying to be excluded by the rifle competitions every summer. He called a meeting to announce these thoughts on 11 November and prepared a Bill for Parliament. By that he intended to enclose the Common; sell part to builders to recover the cost of enclosure, drainage, making new roads, and buying out copyholders, that is, persons who held parcels of land by copy of a Court Roll; and convert the remainder to a public park, reserving a space for his own house and some pasturage within it, as well as his rights over gravel and turf.

(Insert: early drawing by George Cooke of Wimbledon Windmill. The windmill was constructed by a carpenter called Charles March and ceased to operate as a working mill in 1864)

As Phillips points out, public reaction to the Earl's plans was 'swift and hostile' and although it took nearly seven years of public meetings, parliamentary debates and litigation, on 16th August 1871, the Wimbledon and Putney Commons Act received Royal Assent.

Quoting the preamble of the 1871 Act, it is this piece of legislation that has guided the administration of the Commons until the present day:

"It is expedient that provision be made for the transfer from Earl Spencer of his estate and interest in the Commons to a body of Conservators to be constituted so as to represent both public and local interests, whose duty it shall be to keep the Commons for ever open and unenclosed and unbuilt on, and to protect the turf, gorse, timber, and underwood theron, and to preserve the same for public and local use, for purposes of exercise and recreation, and other purposes…

Accompanying the exchange of land from the ownership of 5th Earl Spencer to the Wimbledon and Putney Commons Conservators, an annuity of one thousand two hundred pounds was paid to the Spencer family. This arrangement continued until 1958, when the Conservators discharged this obligation with the payment of a final sum of £22,500. Within ten years, three quarters of the sum had been paid. All of the money was raised by a rate levied on residential properties that were located within three quarters of a mile by foot of Wimbledon Common and Putney Heath or

from the old Parish of Putney and this same levy remains in use up to the current day.

(Insert: painting of John Poyntz Spencer, 5th Earl Spencer (1835-1910)

The body of Conservators is still constituted in exactly the same way as it was at the time when the 1871 Act was passed and there remains in place eight Conservators, three of whom are appointed by various government departments and three who are elected by local rate payers on a tri-annual basis.

In 1864, the 5th Earl Spencer had stressed three evils which he considered were providing serious problems on the Commons. These were lack of drainage, rubbish dumping and gipsy encampments. The Commons which the first board of Conservators took responsibility over was a very different set of locations than exists today. In an article written for the Wandsworth Historical Society in 1994, the author, Dorian Gerhold, made reference to a report that had been written for the Conservators during the 1860's by A.E. Dryden, a Barrister, then living in Putney High Street concerning the condition of Putney Lower Common.

According to the article, Dryden had reported that:

"The Lower Common suffered at the hands of a somewhat low and rough set of people who had been in the habit of misusing it. Cows, donkeys and geese had roamed on it and sewage from dairies and piggeries made its north-east corner a stinking swamp. Carts were left around, rubbish was dumped and washer women put out their clothes to dry".

(Insert: Hubert Von Herkomer's engraving of a gipsy encampment on Putney Common in 1870)

In addition to the problems that were being faced by the Conservators on Putney Lower Common, perhaps one of the most significant issues that persisted at the same time on a large area of Wimbledon Common and Putney Heath was the continuing presence of the National Rifle Association.

As a result of a significant French naval expansion during the 1850's and a growing concern that the French were intent on invading Great Britain, on 12th May 1859, the British government issued a circular authorising Lord Lieutenants to raise Volunteer corps. As part of this move, the idea of a national association to promote marksmanship within the Volunteers was devised. Driven by two prominent noblemen, Lord Spencer of Althorp and Lord Elcho, on 16 November 1859, the National Rifle Association (NRA) was formed.

While a selection of different locations were investigated, eventually, Wimbledon Common and Putney Heath were chosen as the most suitable 'home' for future NRA events to be held. As noted by Christopher Bunch (date unknown) the requisites that had been set out for the selection of potential sites were 'great space, accessibility and vicinity of the Metropolis', to which was added 'picturesque and charm of situation'. The choice of location was fully supported by Lord Spencer, who was also the Lord of the Manor at this time and on 2 July 1860, the first prize

meeting of the National Rifle Association was opened on Wimbledon Common by HM Queen Victoria who fired the first shot, duly scoring a bull's eye at 400 yards.

(Insert: painting of Queen Victoria firing the first shot to inaugurate the Wimbledon Rifle Meeting in 1860.)

With 24 targets on Wimbledon Common in 1860 and a modest 299 Volunteers involved in the inaugural event, by 1888, the number of targets had increased to 125 and there were 41,670 entries recorded as attending this one event.

(Insert: illustration from the London Illustrated News depicting the rifle competition held on the Commons in 1872)

As noted by David Minsell (date unknown), the use of the Commons by the NRA, was not unopposed in 1860 and over the years, objections had continued from other local residents of the area. With reports of stray bullets and local residents increasingly upset at the curtailment of their rights of access over the Commons, the final meeting of the NRA was held on Wimbledon Common in 1889 and in 1890, it moved to Bisley, Surrey, where it remains today.

Rifle shooting on the Commons had however not fully ceased and according to Minutes from various meetings of the Wimbledon and Putney Commons Conservators, between 1890 and 1895, reports continued to detail various incidents of 'wild and careless shooting'.

In April 1883, it was noted:

"The petition of ratepayers asking the Conservators to put an end to the occupation and use of the Commons by the Volunteer Corps for rifle shooting was further considered and it was resolved that the Clerk be instructed to reply to the petitioners that having regard to the importance of the volunteer movement the Conservators do not consider that they can at present properly comply with the request of the petition".

In fact, it was not until the Conservators' Minutes of June 1894 when a letter from the Putney Burial Board dated 23rd May 1864 was read that a full inquest was held to determine the future of the use of the Commons for rifle shooting.

The entry read:

" A letter from the Putney Burial Board dated the 23rd May 1894 relative to the death of a grave digger who had been shot in the back whilst working in the cemetery on the previous day was read, and the Chairman stated that he and the Clerk had represented the Conservators at the inquest….

The Clerk was requested to write to the War Office enclosing a copy of all of the complaints received by the Conservators since 1885 and stating that the Head Common Keeper is prepared to give further evidence if desired as to bullets frequently going beyond the danger zone.

That having regard to the evidence of the cases of risk to life on the Common from bullets and especially ricochets culminating in a death from a rifle bullet on the 23rd

May and to the increase of population in the neighbourhood and to the increasing number of persons frequenting the Commons, the Conservators are of the opinion that the privilege reserved to the Volunteers to practice rifle shooting on the Commons can no longer be exercised with due regard to the public safety and that it devolves upon the Secretaries of State for the Home and War Departments and the Commissioner of Works to provide for the public safety by ordering the ranges to be permanently closed and that copies of the evidence of the complaints and of this amendment be sent to the Secretaries of State and to the Commissioner of Works."

Following various unsuccessful letters of appeal from Horse Guards, on 14 October 1896, the right to shoot on the Commons was finally revoked.

As Gerhold (1994) suggested, as the abuses were checked, and particularly once the National Rifle Association had departed, the task could begin of making the Commons fit for their new role of recreation. Following the departure of the NRA and subsequently the Volunteer Corps from Wimbledon Common, historical events did however inevitably continue to affect and at times shape the future of the Commons.

During the First World War, military training camps occupied a large area of the plateau and a small airfield was situated between Parkside and the Windmill. As part of the war effort, allotments were also located on Putney Lower Common (check this fact) and opposite West Place on Wimbledon Common.

(Insert: photograph of allotments on the Commons: 1918)

(Insert: photograph of the military training camp on the Commons during the First World War).

Once again, during the Second World War, the Commons were extensively used by the War Office for military activities. Trenches were dug across large areas of the Commons, obstacles were positioned across open country to prevent enemy aircrafts from landing and 'dragons teeth' were installed to resist the potential movement of enemy tanks. Large anti-aircraft guns were also positioned on The Plain during the war and other areas of the Commons were used for the purposes of military training and the construction of a prisoner of war camp for captured Italian soldiers.

Following the end of the Second World War, the Commons were, once again, provided with the opportunity to heal and return back to the purposes for which they were protected by the Conservators in 1871. Since this time, there have been events on the Commons which have changed its boundaries and even altered its landscape (see Objective 10: Artificial Hills & Acropolis). There have also been a small number of events which have brought a temporary and unwelcome notoriety to the Commons. Given its proximity to London with its current population of approximately 8.9 million people, the post war history of the Commons has been largely peaceful and as an area of public open space it continues to provide both a green lung for the city and a place for thousands of people to visit and enjoy.

(Insert: black & white photograph of two mounted Keepers patrolling the Commons during 2021)

1.6 – Environmental information

Geology:

While the geology of Wimbledon Common and Putney Heath has been covered by a number of authors in past articles and publications, the most comprehensive information that has been written on this subject was prepared by Una Sutcliffe in Wimbledon Common & Putney Heath, A Natural History (2000). The following information has been extracted from this work.

In general terms, Wimbledon Common and Putney Heath, consist of a relatively flat plateau to the east, which then slopes away to the west of the site towards the Beverley Brook and the Richardson Evans Memorial Playing Fields. There are few topographical features of note. The most significant hills on the Commons are a result of spoil tipping during the construction of the A3.

Two main types of rock outcrop on the Commons. The lowest and earliest of these, underlying the entire area, is London Clay; laid down in the sea, under sub-tropical to tropical conditions, during Eocene times, about 54-52.5 million years ago. Much of the oak woodland that mantles the lower western slopes of Wimbledon Common grows directly upon the London Clay. Resting upon an eroded surface of this (and locally on an overlying sand deposit – the Bagshot Beds) is a layer of pebbly sand and gravel only a few metres thick, laid down in the bed of the river Thames about 430,000 years ago. This outcrops across the plateau top where it supports mainly heath and birch woodland. That Wimbledon Common and Putney Heath survive as an open space today can be attributed directly to this deposit, its poor agricultural quality causing it to have been left in times past as Manorial wasteland, for the use of Commoners. There are small exposures of the Bagshot sands on the Commons – most noticeably in the depression now used as a horse ring adjacent to Gravelly Ride, known locally as the Sandy Ring.

Whilst London Clay is the oldest exposed deposit on the Commons, a borehole sunk at St George's Hospital, less than 2 miles east of the Commons, showed chalk at a depth of 165 metres, overlain by 132 metres of London Clay 23 metres of Reading Beds and 7 metres of Thanet Sand. Cut into the London Clay foundation of the Common is a geologically controlled pattern of small streams fed by springs from the overlying gravel aquifer, with associated Sphagnum bogs.

(Information is required about the geology of Putney Lower Common)

(Insert: Illustration of the Commons geology from Wimbledon Common and Putney Heath , A Natural History, 2000)

Hydrology:

No information for this section of the Land Management Report has yet been produced as it is anticipated that information will become available from the results of the proposed feasibility study into restoring valley mires.

Climate: (Ros Taylor)

This information is currently being prepared by Ros Taylor

1.7 – Landscape

According to the European Landscape convention (2007), landscape is defined as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". Landscape therefore encompasses everything that is both 'natural' and of human design which together makes an area distinctive or unique in its own right.

Providing a unique sense of place, the landscape of a particular area is made up of many different layers from the geology of a site, through to its 'natural' habitats, buildings, and cultural associations. While the overarching ambition of the Commons' Land Management Plan is to protect the integrity of the landscape as a whole there are clearly certain landscape features which provide the Commons with the highest level of historic, aesthetic, cultural and communal value.

Without the inclusion of any built areas of the Commons such as the Wimbledon Windmill which will be covered in detail as part of the Wimbledon and Putney Commons Business Plan, the most outstanding elements of the Commons which clearly provide the area with its distinct and recognisable character include its heathland and mires, areas of natural grassland and its woodland communities.

To help improve our understanding of these important landscapes, in 2016, a National Vegetation Classification Survey and Habitat Assessment was carried out on the Commons by a team of professional ecological consultants. The results that were gathered from this survey have proved invaluable in helping with the ongoing management of the Commons and it is from this report that the special landscape features of the Commons will be explained.

National Vegetation Classification Survey and Habitat Assessment (2016)

In April 2016, ecological consultants, Penny Anderson Associates, were commissioned by the Wimbledon and Putney Commons Conservators to undertake a National Vegetation Classification (NVC1) survey and assessment of the habitats found within the boundary of their landholding on Wimbledon and Putney Commons. The survey covered all 1,140 acres (461 ha) of the Commons and the reason behind the commissioning of the survey was to inform current management and to provide a baseline against which to measure change.

As part of this report, the Commons were divided into three areas based on obvious geographical divisions. Site 1 included all of the areas south of the A3 trunk road, Site 2 is the area of Putney Heath which is north of the A3, and Site 3 is on Putney Lower Common. Dividing the three sites into various parcels of land, each parcel was mapped to NVC coding where possible (e.g. W10a). The NVC types allow for some degree of variation in the community composition to cover known variations

within a habitat type (often reflecting management history or local variations in topography, soils and climate). If a stand was identified as deviating significantly from a standard NVC type, this was identified and described by dominant species and any unusual floristic combinations.

The 2016 NVC report provided the Commons' management team with the single most comprehensive report that had ever been commissioned on the composition of vegetation and habitat types that were found on the Commons at one time.
For this reason, information has been directly sourced from the 2016 NVC report to provide the required biological information for the following vegetation communities that make up the most significant landscapes on the Commons.

- Woodland communities
- Heath & Mire communities
- Grassland communities including Acid grassland & Neutral grassland.
- Aquatic environments

(Insert: NVC Communities and Sub-communities Recorded on the Commons: 2016)

(Insert: Wimbledon and Putney Commons map with Habitat distribution and NVC codes)

Woodland Communities.

(Insert NVC Assessment chart of different woodland and scrub habitats on the Commons)

According to the Commons' 2016 NVC survey, the largest habitat type recorded across the whole area of Wimbledon and Putney Commons is woodland, covering 291.89ha (63.47%) of the area surveyed when the NVC and Phase 1 woodland codes are combined. Scrub communities cover a further 11.34ha (2.46%) of the site. Most of the woodland which has been classified into NVC categories is recorded as single habitat stands and not in mosaics with other habitats (99.35% of the NVC woodland).

The majority of the Commons' woodland is categorised as oak-bracken-bramble woodland – typical sub community (W10a, Quercus robur-Pteridium aquilinum-Rubus fruticosis) 190.72ha (67.89%) The various sub-communities of W10, when combined, cover 254.76ha (90.69%) of the total woodland. There is a much smaller area, 9.06ha (3.23%), of oak–birch–wavy hair-grass woodland (W16, *Quercus* spp.-*Betula* spp.-*Deschampsia flexuosa*) and a substantial area (14.87ha) (5.29%) of a mosaic or transitional community between the two woodland types.

Other woodland habitats are very limited and confined to small areas of willow woodland (W1, *Salix cinerea-Galium palustre*), birch-purple moor-grass woodland (W4, *Betula pubescens-Molinia caerulea*) and alder-nettle woodland (W6, *Alnus glutinosa-Urtica dioica*). These communities combined total less than 0.5ha.

Woodland is the dominant habitat type across Wimbledon Common, around the fringes of Putney Heath south of the A3 and across Putney Heath north of the A3.

There is relatively little woodland on Putney Lower Common and that which does exist has a low conservation interest as much is young planting or derived from the expansion of woody shrubs along lines of older planted trees.

W10 - *Quercus robur-Pteridium aquilinum-Rubus fruticosus* (Oak-bracken-bramble) Woodland

This is a variable community in which floristic differences are related to treatment of the canopy and underwood. Essentially W10 is pedunculate oak (*Quercus robur*) woodland and, although the cover of oak can vary considerably, it is definitely the most common tree and the only woody constant, with the next most common tree being almost always silver birch (*Betula pendula*). This can also be a prominent species in younger stands of the community developing by colonising open ground on neglected commons and field corners. Other canopy trees which can typically occur in this community, and which do occur at least occasionally in this survey, are lime, sweet chestnut, hornbeam (*Carpinus betulus*), ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*) and sycamore. Holly (*Ilex aquifolium*) and rowan (*Sorbus aucuparia*) also reach the canopy but are more common in the understory.

In general terms, these woodlands can often have a distinct understory of shrubs with hazel (*Corylus avellana*) the most common shrub and hawthorn (*Crataegus monogyna*) generally the next most abundant with frequent trees of holly and rowan. Wayfaring tree (*Viburnum lantana*) and Guelder-rose (*Viburnum opulus*) can occur sparsely with blackthorn (*Prunus spinosa*) and elder (*Sambucus nigra*). On Wimbledon Common there is a distinct variation in the occurrence of hazel with much more recorded in the woodlands to the south and west of the site, whilst it is only rarely recorded in the woodlands east of the Inner Windmill Road and Windmill Ride South.

The ground flora in the typical sub-community (W10a) is generally species-poor with three constants - bramble (*Rubus fruticosus* agg.), bracken (*Pteridium aquilinum*) and honeysuckle (*Lonicera periclymenum*) and a very small number of occasional to frequent species. Certainly at Wimbledon the dominant species are bracken and bramble with frequent to occasional ivy (*Hedera helix*), honeysuckle and (more locally) bluebell (*Hyacinthoides non-scripta*), although some are hybrid plants obviously planted. Other woodland ground flora species across the site are generally sparse across the site.

Holly is the most abundant understory species and can become locally abundant or dominant, forming very tall dense stands which shade out all ground flora species.

(Insert: photograph of oak woodland)
In addition to the dominant oak woodland that covers much of Wimbledon and Putney Commons, other woodland types with less cover include:

W16 - *Quercus* spp.-*Betula* spp.-*Deschampsia flexuosa* (Oak-birch-wavy hair-grass) Woodland.

Dominated by Silver birch and acidic ground flora such as purple moor grass *(Molionea caerulea)* and wavy hairgrass *(Deschampsia flexuosa),* this woodland type is mainly found on the Commons east of Inner Windmill Road and Windmill Ride South. The W16 community can also be seen as a precursor to progression to a W10 (oak-bracken-bramble) woodland after oak and birch have colonized the heathland.

(Insert: photograph of heathland edge adjacent to Ladies Mile)

Other very limited areas of woodland on the Commons include:

W1 - *Salix cinerea-Galium palustre* (Grey willow-marsh bedstraw) Woodland

W4 - *Betula pubescens–Molinia caerulea* (Downy birch-purple moorgrass) Woodland

W6 - *Alnus glutinosa-Urtica dioica* (Alder-nettle) Woodland

W21 - *Crataegus monogyna-Hedera helix* (Hawthorn-ivy) Scrub

Additional woodland habitats which do not fit into the NVC classification include planted lines of trees adjacent to the main roads and rides around the Commons and small landscape plantings. Trees species that make up these areas often include both native and non-native species such as horse chestnut, sweet chestnut, London plane and various species of pine.

(Insert: photograph of Southside Common and horse chestnut trees)

(Insert: General Woodland Habitat and NVC Survey Map)

Heathland & Mire Communities (NVC assessment)

(Insert: Assessment of the different Heath and Mire Communities)

While there is no heathland present on Putney Lower Common or north of the A3, on the main area of the Commons, heathland is generally located east of Inner Windmill Road and Windmill Ride South, on The Plain and on the central area of Putney Heath, north of the windmill. There are also occasional small areas associated with the golf course and thin sandy soils close to Memorial Ride and towards the war memorial at the eastern end of the ride. These isolated heathland patches are often found in association with acid grasslands as mosaics.

Heathland covers 19.99ha (4.35%) of the area surveyed. Heather and purple moor-grass dominated communities (H2 and H2c) comprise most of this (19.37ha) and are often found in mosaic or transition communities with grasslands and occasionally scrub and woodlands (Table 5, Figure 6).

(Insert: map showing the 2016 coverage of heathland on the Commons)

The heathlands/mires across the site are generally species-poor, dominated by heather with very localised cross-leaved heath (*Erica tetralix*) as the only other dwarf-shrub species recorded. Purple moor-grass is the main grass associated with the heathland areas although common bent, sheep's-fescue (*Festuca ovina*) and wavy hair-grass are locally frequent or dominant in some areas. The grasses' abundance within the heathland communities depends to a large extent on the growth phase of the heather at any one time. For example, on an area of heath which has recently been cut, grasses may be 90% of the total vegetation as the heather seedlings/regeneration has a low cover, whilst adjacent areas may have only 5% of grasses as the heather is mature and dominant.

In most field survey situations it is relatively simple to split heathland and mire NVC type, however, this is not the case across the majority of the Commons. The mire key in the Field Guide to Mires and Heaths (Elkington *et al*., 2001) initially splits the mires and wet heaths from heathlands on the abundance of *Sphagnum* (absent in this survey in the heath areas), the presence of spring or flush vegetation with specific bryophytes (none recorded), dominance of sedges (rare occurrence of sedges on site), and then the abundance of purple moor-grass (dominant over large areas). This leads to a second key in which the co-dominance of heather and purple moor-grass obvious on the ground at Wimbledon is not one of the options presented, again leading to difficulties with the classification.

Soil investigations to ascertain the depth of peat (it appears to be shallow) and the degree of water impediment may help aid the classification of the purple moor-grass/heather dominated areas in the future but from the data collected in this survey there is no evidence to classify the heather/purple moor-grass areas as anything but heathland.

Heathland and mire communities on the Commons:

H1 - *Calluna vulgaris–Festuca ovina* (Heather-sheep's fescue) Heath

This is a dry heath heather-dominated community which has few vascular associates. Heather is the only dwarf-shrub and the cover and canopy height depend on the growth stage of the heather. Sheep's-fescue is scattered throughout the heather and other grasses include common bent and wavy hair-grass.

H2 - *Calluna vulgaris-Ulex minor* (Heather-dwarf gorse) Heath

In addition to the obviously dry heath community (H1), there are floristically very similar areas which also support a high cover of purple moor-grass. The high cover of this grass causes problems in classifying the community. Purple moor-grass is generally indicative of wet heaths, deeper peats and/or impeded

water flow. At Wimbledon the grass occurs in many of the communities (as described for the woodland community W16a) at higher than expected levels.

M21 - *Narthecium ossifragum-Sphagnum papillosum* (Bog asphodel papillose bog-moss) Valley Mire

The largest valley mire on the Commons is Farm Bog. Farm bog is situated within the southern woodland area of Wimbledon Common, just north of Caesar's Camp. It is an area of valley mire fed by a small seepage of acidic, nutrient-poor spring water rising from a gravelly slope. The SSSI citation describes the site as having '*a rich assemblage of plants uncommon in Greater London… such as bogbean (Menyanthes trifoliata), bulbous rush (Juncus bulbosus), water horsetail (Equisetum fluviatile) and several species of bog moss Sphagnum, including S. palustre and S. fimbriatum.*' Previous surveys (Sinnadurai 1996) note that the vegetation of the mire is predominantly M21 *Narthecium ossifragum – Sphagnum papillosum* valley mire (Rodwell 1991b) grading into M16 *Erica tetralix-Sphagnum compactum* wet heath and M25 *Molinia caerulea – Potentilla erecta* mire.

Purple moor-grass is dominant with a carpet of Sphagnum moss species below, showing gradation to the M25 *Molinia caerulea – Potentilla erecta* mire. Bittersweet (*Solanum dulcamara*) is present along with rushes (*Juncus* sp.) and tormentil. There are two small pools/open areas in the centre. The invasion of scrub and woodland species suggests that the site is or has been dying out, the damming of seepages may halt this process. In total, there are however three valley mire systems on the Commons: Farm bog, Stag bog and Ravine bog. There is also a stream to the north of the windmill, Glen Albyn, which has similar hydrology to the other mire sites and is therefore likely to have been a valley mire in the past.

While the restoration of the Commons' valley mires will be covered in detail in Section 2 of this Land Management Report, it has been proved that through even a small amount of tree removal and where necessary the repair/installation of dams can result in some very impressive improvements to these important areas of the Commons.

(Insert: relevant NVC table) NVC

(Insert: photograph of Farm bog)

Grassland communities (NVC survey 2016)

Acid Grasslands

(Insert NVC survey table of acid grassland on the Commons)

There are two main acid grassland types within the survey area, U1, *Festuca ovina-Agrostis capillaris-Rumex acetosella* (sheep's fescue-common bent-sheep's sorrel grassland) grassland and U4, *Festuca ovina-Agrostis capillaris-Rumex acetosella* (sheep's fescue-common bentheath bedstraw) grassland.

Smaller areas of U2 *Deschampsia flexuosa* (wavy hair-grass) grassland and U20 *Pteridium aquilinum-Galium saxatile* (bracken-heath bedstraw) community were also recorded. The areas assigned to each community are given in Table 6. This shows that U1 is the dominant grassland in terms of area 28.20 ha (67.64% of all acid grassland). A large proportion of the acid grasslands (85.02% Table 3) were found in single habitat stands, i.e. not in a mosaic with other habitat types. Those acid grasslands in mosaics tend to be associated with the heathland areas.

There are no areas of acid grassland recorded on Putney Lower Common although the cricket pitch had, in places, affinities to a species-poor acid grassland vegetation. Very small areas were recorded north of the A3 and on the main block of the Common, acid grassland dominates the large area of
open space at the southern end of Wimbledon Common around Rushmere and areas of The Plain. Smaller patches are generally associated with the heathland fringes.

U1 - *Festuca ovina-Agrostis capillaris-Rumex acetosella* (Sheep's-fescue common bent-sheep's-sorrel) Grassland

This is the main acid grassland community found on the Commons. It is a diverse grassland often on thin dry soils with an open sward of small tussocky grasses amongst which some small ephemeral forbs occur. It can grade into other grassland communities when less parched, with red fescue, sweet vernal-grass (*Anthoxanthum odoratum*) and Yorkshire fog increasing in abundance.

The bulk of the large expanse of grassland south of The Causeway is best described as U1. It is a large area with an uneven topography resulting in a very patchy vegetation cover easily visible on the aerial photographs. Sheep's fescue is the main grass species with areas of frequent red fescue and common bent and occasional patches of perennial rye-grass (*Lolium perenne*), annual meadow-grass (*Poa annua*), rough meadow-grass (*Poa trivialis*), Yorkshire
fog and, locally, mat-grass. Forbs are generally limited, with the sheep's sorrel, cat's-ear (*Hypochaeris radicata*) and ribwort plantain (*Plantago lanceolata*) all occasional. Barer areas support species such as early hair-grass, parsley-piert, sheep's sorrel, common stork's-bill (*Erodium cicutarium*), bird's-foot (*Ornithopus perpusillus*) and species of mouse-ear (*Cerastium* sp.). In small areas red fescue and cat's-ear are more dominant than expected in the typical
community.

U1 acid grassland was also found on the edges to the fairways with the U1b typical subcommunity being the best fit. In places the grassland becomes denser and less intensively managed and here it begins to show some affinity to the U4 sheep's fescue-common bent heath bedstraw grassland type (as described below). In the west, a smaller, narrower part of the fairway has vegetation with a slightly better fit to the U1e heath bedstraw-tormentil subcommunity with fewer annual species and a greater proportion of perennials. This is likely related to the reduced disturbance from recreational pressure from walkers in this location as there were noticeably fewer informal paths crossing the area.

U2 - *Deschampsia flexuosa* (Wavy hair-grass) Grassland

Acid grassland with obviously dominant wavy hair-grass, heather is the only other constant species. Other grasses such as sheep's fescue and common bent occur particularly regularly in the U2a sub-community along with tormentil, heath bedstraw and sheep's sorrel. Across the Common U2 tends to occur in a mosaic or transition with the heath H2 community.

U4 - *Festuca ovina-Agrostis capillaris-Galium saxatile* (Sheep's-escuecommon bent-heath bedstraw) Grassland

This is a much more luxuriant grassland community than U1, although the two main grass species are the same - sheep's fescue and common bent - in the U4 community they form a much denser sward. In the typical community (U4a) additional species, such as sweet vernal grass, can occur regularly with patches of mat-grass and wavy hair-grass in some situations. Wood rush species (*Luzula* sp.) are also common in the sward, whilst the forb complement of the grassland is generally poor with heath bedstraw and tormentil the most common species with speedwell species (*Veronica* sp.) occasional. The main area of this grassland type is The Plain where it is intimately mixed with small patches of heath and U2 grassland in a very small scale mosaic.

Neutral Grasslands

(Insert: NVC chart for neutral grassland communities on the Commons)

Neutral Grassland Distribution

Putney Lower Common is dominated by neutral grassland most of which are tall grasslands, very forb-poor and have traditionally have only occasionally been mown. The playing fields west of Beverley Brook and adjacent to Vale Crescent on Wimbledon Common also represent a large area of neutral grassland but this is regularly managed. Elsewhere, this grassland type is much more fragmented often associated with road verges, woodland edges and amenity/recreational areas where it is often regularly mown.

There are two main types of neutral grasslands on the site, tall rank grasslands (MG1) and generally shorter sown grasslands dominated by perennial rye-grass (MG6 and MG7). However, in many cases where the latter group of grasslands are irregularly or only annually managed, these have become ranker with invading tall grasses blurring, what is often, easily distinguishable grassland sub-community boundaries. In addition, there is another coarse weedy grassland vegetation (OV23) dominated by perennial rye-grass and cock's-foot.

A small number of the MG7 stands are transitional with MG6 grasslands, this is because of the high cover of perennial rye-grass which can occur in the MG6 (*Lolium*

perenne-Cynosurus cristatus) grasslands communities and similarity in the range of common forbs in both types of grasslands.

The three common grassland communities are all forb-poor with grasses accounting for the bulk of the vegetation. Forbs are often the defining features of the sub-communities in grasslands and, therefore, where there is a lack of forb species and the grass complement of the sub-communities is similar, it is not always possible to assign sub-communities, which tends to mean that the community is generally of low conservation value.

There is one very small area which can be classified as a more species-rich grassland community (MG5).

MG1 - *Arrhenatherum elatius* (False-oat grass) Grassland

This is a community in which coarse-leaved tussock grasses, i.e. false oat-grass (*Arrhenatherum elatius*), cock's-foot and Yorkshire fog, are always conspicuous. Cow parsley (*Anthriscus sylvestris*) and hogweed are often frequent with occasional patches of creeping thistle, nettle and common knapweed (*Centaurea nigra*). Below the taller grasses the occurrence of different fine-leaved grasses and forbs tend to differentiate the different subcommunities.

Many of the grasslands occurring on Putney Lower Common are MG1 communities, especially so further north on the Common. It is also a typical grassland community found fringing roads and unmanaged corners of land. Perennial rye-grass can occur in all MG1 sub-communities with a cover of up to 75% in some situations. MG1 and its sub-communities cover 10.53ha (18.71% of all neutral grasslands).

MG7 - *Lolium perenne* (Perennial rye-grass) Leys and Related Grass

Perennial rye-grass has been widely sown into grasslands either to create a productive grassland sward or for amenity grassland and recreational sports areas and as a result it is the main neutral grassland covering 33.77a (60.04%). There are several sub-communities which occur at Wimbledon.

The two main sub-communities are the perennial rye-grass-clover ley (MG7a) and the perennial rye-grass-ribwort plantain grassland (MG7e). The former is a community dominated by perennial rye-grass with frequent white clover and often some cock's-foot and, in older stands, Yorkshire fog. Many of the grasslands on the site, especially north of the A3 have a higher cover of Yorkshire fog than expected, with red fescue and common bent cover also high. The proportion of perennial rye-grass or false-oat grass in the mix is often the deciding factor between the MG1 and MG7 communities.

There are also smaller areas of the perennial ryegrass-meadow foxtail (MG7d) and the bentryegrass (MG7f) sub-communities and these are typically associated with the OV23 perennial ryegrass-cock's-foot open vegetation community (as described below). These areas are small previously re-seeded grasslands with a high degree of recreational pressure from walkers but

limited regular mowing management. This leads to mix of taller grasses and more open bare ground. Some of these areas also have a slight affinity to the MG6 *Lolium perenne-Cynosurus cristatus* (perennial rye-grass-crested dog's-tail) grassland, including the sweet vernal-grass (*Anthoxanthum odoratum*) sub-community (MG6b), perhaps remnants of previous recreational
grass mix sowings.

OV23 - *Lolium perenne-Dactylis glomerata* (Perennial rye-grass-cock'sfoot) Community

This is a coarse, weedy grassland with the two grass species making up the bulk of the grassland community with a few perennials associates and scattered ephemeral species in disturbed areas. Ribwort plantain and dandelions are the main forbs but yarrow, red clover, creeping bent (*Agrostis stolonifera*), nettle, cat's-ear and creeping cinquefoil (*Potentilla reptans*) all occur occasionally.
The extent of this grassland community is very similar to that of MG1 at 10.58ha, (18.82%). It is typically found at the edges of grasslands and on re-sown recreational areas adjacent to roads where there are often disturbed areas and management is irregular.

MG5 - *Cynosurus cristatus-Centaurea nigra* (Crested dog's-tail-knapweed) Grassland

This grassland is a more species-rich grassland than those listed above with a greater proportion of finer grasses and a wider range of forb species. The most common grasses are normally red fescue, crested dog's-tail and common bent with sweet vernal-grass, cock's-foot and Yorkshire fog less frequent.

Omissions

The Wimbledon and Putney Commons 2016 NVC survey did not provide any in-depth study of the Commons' golf course. These areas are highly managed and modified grassland communities which do not easily fall into any specific NVC community. The code that was used in the classification of these areas was J.1.2 (Amenity grassland) as they were considered to hold no semi-natural habitats or features of nature conservation interest. This category was also used for the bowling green on Putney Lower Common and a small area of lawn associated with the flats north of the bowling green.

(Insert: NVC map showing general non-wooded habitats on the Commons such as mires, heath, grassland, ruderal and wet)

(Insert a relevant grassland photograph for the Commons. This could include The Plain, PLC cricket field, road verges, golf course or Rushmere)

Aquatic Environment:

While the Commons' nine ponds are an extremely important part of the Commons mosaic of natural and semi-natural habitats, unfortunately, aquatic communities were not surveyed in any detail in the Commons' 2016 NVC report.

Although there have been other ponds on the Commons in the past, there are currently nine ponds that are located around various parts of Wimbledon Common and Putney Heath.

These ponds include:

- Rushmere (Wimbledon Common)
- Hookhamslade Pond (Wimbledon Common)
- Bluegate Gravel Pit (Wimbledon Common)
- Ravine Pond (Wimbledon Common)
- Queensmere (Wimbledon Common)
- 7 Post Pond (Wimbledon Common)
- Kingsmere (Putney Heath)
- Curling Pond (Putney Heath)
- Scio Pond (Putney Heath)

Varying in size, depth and setting, all of the Commons' nine ponds have been created through human activity which has involved damming up wet areas on the Commons or through the creation of gravel pits which regularly become flooded. All the Commons' ponds are extremely important for the diversity of wildlife they attract, the history that is associated with these locations and the aesthetic value which they provide to the site.

Located within the surroundings of a largely urban landscape, the Commons' ponds are exposed to ongoing pressures such as pollution, recreational damage and the introduction of non-native flora and fauna.

In addition to the Commons' ponds, there are also two stream sections which occur on the Commons and these are sections of the same watercourse which is the Beverley Brook.

As noted in the Commons' 2019 NVC Survey:

"*There are a wide range of waterbodies on site both in terms of their size, origins and vegetation. All appear to suffer from a substantial degree of disturbance caused by dogs regularly swimming in the water. The marginal vegetation is generally restricted to small fringes. The aquatic species can be more abundant but in two ponds there are significant colonies of non- native, invasive, water plants – New Zealand pigmyweed and parrot's-feather which could spread to other waterbodies on or near the site. There are two sections of stream corridors which pass through the survey areas, they do not support a rich or diverse wetland vegetation but do have the potential to allow the spread of Himalayan balsam and Japanese knotweed both of which were recorded in the northern section of Beverly Brook where it passes through Putney Lower Common".*

Management of the Commons ponds and streams will be covered in detail in Section 2 of the Commons' Land Management Plan.

1.8 – Biological Information

1. Flora **(Ros Taylor)**
2. Aquatic vegetation (PH/RT)
3. Fungi (Debbie Chapman)
4. Veteran & notable trees **(PH)**
5. Fauna – Amphibians and Reptiles (PH)
6. Fauna – Fish **(PH)**
7. Fauna – Birds **(Adrian Podmore)**
8. Fauna – Mammals **(PH)**
9. Fauna – Invertebrates (Butterflies and Moths) **(L-EH)**
10. Fauna dragonflies and damselflies (Simon Riley)
11. Non-native invasive species **(PH)**

1: Flora (Ros Taylor)

This section is currently be written by Ros Taylor

2: Aquatic vegetation (PH/RT)

This section is currently be written by Ros Taylor

3: Fungi (written by Debbie Chapman)

Fungi are everywhere and vital to the ecosystem. Wimbledon and Putney Commons are no exception with more than 150 identified species, and probably many more yet to be recorded. Without fungi, the world as we know it would not exist. For most of the year fungi live hidden underground or within plants and only emerge for us to see as mushrooms, puffballs and brackets when they are ready to reproduce and distribute their seed like spores.

Recyclers form the biggest group of fungi and live by breaking down dead plants, returning vital nutrients to the soil for future plant growth.

Mycorrhizal fungi live in partnership with plants in a symbiotic relationship. In this arrangement fungi obtain energy from sugars stored in the plant's roots, and plants get water and essential nutrients in return. Some fungi are very fussy which plants they team up with – such as the instantly recognisable Fly Agaric which can be found under silver birch trees. Like all fungi, mycorrhizal fungi have an underground network of fine filaments, or mycelium. These can cover huge distances, bringing resources from far beyond the reach of the plant's own roots. It is estimated 90% of all the worlds plants would not survive without fungal help.

We are just beginning to understand this fascinating underground mycorrhizal network, which is made up of the mycelium of hundreds of different fungi species and the roots of trees and plants. It has been called the Wood Wide Web by scientists, who think of it as an internet style communication hub for woodlands. It provides a pathway for sugars produced by one tree to move to other nearby trees. Even more amazingly, it seems to allow some trees to selectively pass resources to their own offspring! Other helpful chemicals can also pass along these systems, such as those produced when a tree is under attack from predators. This gives neighbouring trees advanced warning to prepare their own defences - such as making bitter tasting compounds to deter caterpillars from eating their leaves. There are also a small group of **Parasitic fungi** that take nutrients from the plant, weakening it, and giving nothing in return.

(Insert: photograph of Mycorrhizal fungi)

Fungi and the Ecosystem

Having diverse and plentiful fungi is a good sign of a healthy ecosystem, which is why in August 2021 the IUCN (International Union for Conservation of Nature) introduced its FFF initiative. These 3F's, Flora Fauna and Funga, recognise that we should all be thinking about fungi as well as plants and animals when planning for the future of our environment.

Here are a just a few fungi you can see on the Commons – mainly in autumn, but some all year round.

(Insert: photographs of various fungi on the Commons)

The regularly mown unimproved grassland of The Plain is a haven for a host of colourful Waxcaps

(Insert: image)

Dead trees and fallen branches host many other species

(Insert image)

.. and on woodland floors and other grassy areas

(Insert image)

Lichen:

Fungi are also present in lichen. A lichen is not a single organism, but a stable symbiotic association between a fungus and algae and/or cyanobacteria.
Lichens exist in a multitude of shapes usually determined by the organisation of the fungal filaments. And, of course, fungi live on and in both the wildlife that lives on the common, and the humans and our dogs who visit.

4: Ancient, Veteran, Heritage, and Notable trees

Given the long history of disturbance that has shaped much of the Commons' landscape, the woodland on Wimbledon and Putney Common is best described as semi-natural having established through a process of natural regeneration. Occurring on a landscape which historically had been largely made up of heathland and acid grassland communities, much of the woodland that is found on the Commons today is of a relatively young age having largely become established from the early twentieth century onwards.

Despite the relative youthfulness of the Commons woodland, there are however many trees that are present on site that contain a great deal of ecological and cultural interest. With reference to the work that has been carried out by the Ancient Tree Forum, trees of special interest are not only those that have been classed as ancient but they are also trees that can be classified into the categories of veteran trees, heritage trees and notable trees.

Ancient trees:

The term 'ancient' refers to any tree that has passed beyond maturity and is therefore old in comparison with other trees of the same species. An example that is often used to describe how different tree species are categorised as ancient is that while a birch tree would be considered as ancient at 150 years old, a Yew is not defined as ancient until it has reached at least 800 years old. As the process of decay within a tree promotes additional habitats for a diversity of wildlife, the older a tree becomes, the more valuable it is and therefore, great care needs to be taken to protect any trees of this description that may be found on site.

Veteran trees:

Although the term veteran tree has not been precisely defined, a tree that is described in this way is one that exhibits features such as wounds or decay that have not necessarily been caused through the process of age but may be the result of other environmental factors such as physical damage or stress.
Consequently, veteran trees will often support a wide range of habitats niches that would be missing on an otherwise healthy tree of a similar age. As a result of their high ecological value, veteran trees should also be protected wherever it is possible to do so.

Heritage trees:

A heritage tree is marked by its connection to history or shared culture.
Whether its importance originates from cultural associations, a memorable event or a famous person or through their aesthetic design, heritage trees become well known landmarks and are therefore often cherished by the local community.

Notable trees:

A notable tree is one considered to be significant in the local area. This is often due to the size of the tree when compared to other trees which surround it.

The trees of Wimbledon and Putney Commons:

With 291 hectares of woodland on the Commons and numerous other trees lining the perimeter or forming small plantations around the site, there are important ancient, veteran, heritage and notable trees to be found on the Commons. Recent holly clearance work on the Commons has revealed large beech and oak trees that were previously largely hidden from view and dotted around the Commons there are also isolated examples of large native and non-native species that may be providing important habitat niches for wildlife.

Unfortunately, our knowledge about individual trees on the Commons is very limited at the current time and this is something that should be remedied in the future. In terms of heritage and notable trees, this is also something that requires further investigation. While a catalogue of notable trees on the Commons does not exist at the current time, it is important that a record is made about why certain trees were planted and the role these trees play in the cultural history of the Commons. To the untrained or even uneducated eye of the future, a small plantation of pine trees may simply be regarded as non-native trees that should be removed from the Commons whereas, if placed in their correct historical context, the presence of these trees would help to form a greater understanding of the Commons' social and cultural history. This same concept should also apply to any notable trees which may go un-noticed without revealing the story which surrounds the origins of their planting.

In summary, it is acknowledged that far more work needs to be carried out to help us fully understand the true nature of the Commons' trees. This worthy project would be perfect for any budding historian whose findings would help staff, volunteers and visitors to the Commons achieve a far higher understanding of the Commons as a whole.

(Insert: photograph of a large tree or group of trees on the Commons which could sit with either of the aforementioned categories)

5: Fauna: amphibians

There are seven native British amphibian species.

- Natterjack toad *(Epidalea calamita)*
- Common toad *(Bufo Bufo)*
- Common frog *(Rana Temoraria)*
- Pool frog *(Pelophylax lessonae)*
- Great crested newt *(Tritus cristatus)*
- Smooth newt *(Lissotriton vulgaris)*
- Palmate newt *(Lissotriton helveticus)*

Three of these species can be found on the Commons and these include: common toad, common frog and smooth newt. The information that we have about the distribution of amphibians on the Commons has been established through the numerous observations that have been reported by Commons' staff and visitors to the site.

Since 2015, all amphibian reports made on the Commons have been included within the pages of a simple annual amphibian and reptile survey that is compiled by the Commons' Conservation and Engagement Officer.

Interestingly, written in the pages of Wimbledon Common and Putney Heath, A Natural History (2000), it was suggested that past records indicate that great crested newt *(Tritus cristatus)* was present in some ponds in years gone by and a common European tree frog *(Hyla arborea) was also recorded by Bluegate Gravel Pit in 1998.* There have been no confirmed records of the common European tree frog on the Commons since this date and a series of eDNA surveys (2015-2021) that were carried out by the Freshwater Habitats Trust have confirmed that the great nested newt is not present in at least three of the Commons ponds (Rushmere, Bluegate Gravel Pit and Hookhamslade). Unfortunately, there has been no similar eDNA survey work carried out in any of the Commons' other six ponds but equally, there are no reports to suggest that any great crested newts have been seen on the Commons in recent years.

Common Toad (Bufo bufo)

Spending most of the year in moist, shaded areas such as woodland, log piles and rough tussocky grassland, the common toad is easiest to find when breeding in the spring. In Wimbledon Common and Putney Heath, A Natural History (2000), the status of the common toad was described simply as 'less common than the frog'. As part of the annual monitoring of amphibians and reptiles on the Commons', common toads have been consistently recorded at Queensmere and Scio Pond and occasionally they have also been seen at Kingsmere and Ravine Pond.

Approximately 10-12 days after the spawn hatches, it is common to find large numbers of toad tadpoles converging around the edge of Queensmere, in particular, where they can be seen feeding on algae and decaying vegetation.

The fact that all the ponds which contain common toad also contain different fish species does not provide any problem as the toad tadpoles contain a toxin that makes them extremely unpleasant to eat. Outside of the breeding season, Common toads have also been found in woodland, on the heathland and quite often they have also been discovered inside the watering pipes of young trees.

(Insert: photograph of a common frog in a tree watering pie on the Commons)

Common Frog (Rana temporaria)

In Wimbledon Common and Putney Heath, A Natural History (2000), it was written that the status of the common frog on the Commons was abundant and with the exception of Rushmere and Bluegate Gravel Pit, the majority of ponds support this species.

Since 2015, records have shown that frog spawn has been identified in all the Commons' ponds except Queensmere. With the ability to spawn in shallow water which includes garden ponds and even puddles, large amounts of frog spawn are also found in various shallow depressions around the Commons' heathland and at Farm Bog. Unfortunately, apart from providing an easily accessible meal for herons and ducks, the shallow nature of some of the depressions that have been chosen for spawning also means that these areas are liable dry out before the spawn/tadpoles have managed to complete their lifecycle and move into the surrounding area.

Smooth or Common Newt (Triturus vulgaris)

Noted by Drakeford (2000) as widespread on the Commons, the common newt is still regularly found on the Commons.

As spawn is laid by the female newt as individual eggs, each wrapped in a leaf of pond vegetation, unless directly seen in the water, it is not always easy to identify whether or not there are newts in a specific pond. Between 2015 and 2022, common newts were reported in Bluegate Gravel Pit, Hookhamslade Pond and Curling Pond but it's possible that they also use other suitable ponds on the Commons. The largest number of common newts reported in a single pond was in 2020, when 41 individuals were seen around the edge of Curling Pond during the beginning of April.

Outside of the breeding season (February to June) common newts leave the water where they spend most of their time feeding on invertebrates in woodland and other damp and shady places. Apart from the occasional sighting of newts in the water, most of the reports that have been made of common newts on the Commons have followed the discovery of these amphibians under logs, rocks and in various gardens around the site.

(Insert; photograph of a common newt on the Commons)

Legal protection for native British amphibians:

The four widespread species of amphibian, the smooth and palmate newts, the common frog and common toad, are protected only by ***Section 9 (5) of the Wildlife and Countryside Act 1981****. This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy. (Nature net)*

6: Fauna: Reptiles

The UK is home to six native species of reptile. There are three species of snake: adder, grass snake and smooth snake and three species of lizard: common lizard, sand lizard and slow worm. Grass snake, common lizard and slow worm are currently found on the Commons. In addition to these native species, in recent years, the occasional pet corn snake have also been found on the Commons.

Anecdotal evidence suggest that adders were found on the Commons until the mid-1980's but there have been no confirmed sighting of adders on the Commons since this time. Interestingly, according to Atkins (2005 & 2016), although the adder is widespread within Greater London, it is restricted to only four widely dispersed sites and of the four known sites, three would not occur today, were it not for the creation in 1965 of Greater London, which included parts of rural Essex, Middlesex, Surrey and Kent. Also, of the four known sites, Atkins has reported that 'only one is thought not to be either completely or partly composed of animals deliberately introduced by humans'.

Although Wimbledon Common and Putney Heath provide suitable habitat for adders which includes areas of heathland, rough grassland and woodland edge, the eventual demise of adders from these sites could have been the result of a number of combined factors. As illustrated in the English Nature report (Number 666), Conservation status of the adder in Greater London (2005), the following factors could all impact on the survival of adders in a given location and unfortunately, all of these factors could be relevant to the Commons.

These factors include:

- Human pressure and disturbance
- Direct persecution
- Habitat degradation
- Fire damage (accidental or deliberate)
- Ecological challenges such as difficulties with availability of food or climatic variations.
- Genetic viability leading to inbreeding which is especially relevant for smaller populations.

Grass snake (Natrix helvetica)

Grass snakes are found throughout much of England and Wales. They are the UK's largest snake and can exceed one metre in length. Completely harmless to humans, grass snakes are known to predate on amphibians, fish and small mammals. Grass snakes are commonly grey-green in colour, often with a distinctive yellow and black collar around the neck and black markings along the full length of the body.

Once thought to be single species, in 2017, the species of gras snake which is found in Britain and western Europe was classified as a new species (Natrix Helvetica) and therefore distinctive from the species of grass snake which are found in Central and Eastern Europe.

Reports of grass snake on the Commons are extremely rare with the most recent report made on Putney Heath during November 2021. Prior to this date, all reports of grass snake on the Commons have been anecdotal with no photographic evidence to support any claims. Evidence was however discovered of a grass snake via a largely intact piece of shed skin or slough in the area near Fishponds Wood on 26 August 2006.

(Insert: photograph of grass snake taken on the Commons during 2021.)

Common Lizard (Lacerta vivipara)

Native to the UK and widespread across central and northern Europe, the Common lizard measures around 10-15 cm in length and varies in colour from black to bright green. Found in a variety of habitats including heathland, waste ground, woodland and even private gardens, common lizards give birth to live young and can usually be found basking in dry sunny locations with dense protective cover nearby. Being cold blooded animals, common lizards will hibernate from approximately November through to March.

Regarded as 'Fairly abundant' on the Commons by Drakeford (2000), since 2015, the annual reptile and amphibian survey has reported the presence of common lizard on most areas of Wimbledon Common and Putney Heath although they are most prevalent on heathland and grassland areas of the site.

(Insert: photograph of common lizard on the Commons)

Slow Worm (Anguis fragilis)

Growing to a length of between 30-50cm, the Slow worm is a native reptile species that can easily be mistaken for a snake. Slow worms are however legless lizards which have a long, smooth and shiny appearance and similar to the common lizard they are able shed their tail as a means of defence. Unlike Common lizards, Slow worms rarely bask in the open and instead prefer to spend most of their time in deep vegetation or hiding under logs.

In 2000, the presence of slow worms on the Commons was not included in Wimbledon Common and Putney Heath, A Natural History. Although incredibly rare,

since the publication of this book, there have been occasional sightings of Slow worms on the Commons plateau.

Usually, these reports have been submitted by members of the Commons' Maintenance Team while carrying out various tasks such as grass cutting and strimming. It is difficult to know whether the slow worms that have been found on the Commons have been introduced to the site or whether there has always been a colony of these elusive creatures on the Commons.

(Insert: photograph of slow worm on the Commons)

UK Reptiles: Legal status. (taken directly from English Nature Report 666)

All British reptiles are protected to various degrees by the Wildlife and Countryside Act, 1981 (as amended). London's reptiles are protected from intentional killing and injury, selling or other forms of trade. Damage to their habitats is not specifically referred to as a prohibited action. However, as it may be argued that premeditated habitat destruction would amount to an intentional attempt to kill or injure any resident reptiles; their immediate habitat at least, is protected indirectly by the Act. Many important reptile habitats are protected by virtue of their status as a statutory Site of Special Scientific Interest (SSSI) or Local or National Nature Reserve (LNR, NNR). Others are safeguarded from inappropriate development through designation as a non-statutory Site of Importance for Nature Conservation (SINC).

Corn snake (Pantherophis guttatus)

More of an occasional occurrence than a resident of the Commons, since 2015, three corn snakes have been found on various parts of the Commons.

The corn snake is a North American species of rat snake, that is a popular pet reptile species in the UK. It is believed the corn snakes that have been found on the Commons have either escaped from their owners or have been intentionally abandoned. There is no evidence to suggest that corn snakes are permanently surviving on the Commons.

Growing to a length of between 120cm and 180cm, in captivity corn snakes can live into their twenties and they are considered as harmless to humans. Interestingly, in 2015, a Corn snake was found close to Scio Pond on Putney Heath and when collected by a reptile charity that was known to the Commons from past events, it was suggested by one of the members of the charity that the snake could have been on the Commons for a few weeks before it was found.

(Insert: photograph of corn snake on the Commons)

7: Fauna – Fish:

There is relatively little known about the fish stocks that exist in the commons' ponds and the information that is available mainly originates from the pages of the Commons' two most recent books: Wimbledon Common & Putney Heath, A Natural History (2000) and Wimbledon Common, 100 Years of Change (2012). Any additional information that is available on this subject originates from various sightings of live or dead fish that have been found close to the water's edge.

With reference to the various sections of the Beverley Brook that pass through the Commons (Wimbledon Common and Putney Lower Common), the main pieces of information that we have for these areas originates from two small-scale fish surveys that were carried out along the Wimbledon Common section of the brook in 2010 and 2018. Given the fact that the total length of the Beverley Brook is 14.3km, it is also conceivable that what is found in neighbouring land such as Barnes Common and Richmond Park could also be found on the Commons.

Ponds:

At the time of publication, Drakeford (2000) wrote in *Wimbledon Common, A Natural History,* that only five of the eight ponds found on Wimbledon Common and Putney Heath contained fish. These ponds were named as Queensmere, Scio Pond, Kingsmere, Rushmere and 7 Post Pond. While this information remains fairly accurate, as a result of regularly drying out during the summer months, it is not believed that 7 Post Pond still contains a permanent population of fish and there are now definitely a small number of fish in Ravine Pond. Other ponds which also regularly become dry and are therefore unable to support any fish include Bluegate Gravel Pit, Hookhamslade Pond and Curling Pond.

According to Drakeford, the following species of fish were found on the Commons in 2000 and without subsequent investigation, it is presumed that this may still be the case.

Pike *(Esox Lucius)* The pike is a large predatory fish that can grow to 1 metre in length. When hunting, pike will burst out of cover at high speed to catch its prey which can include fish, frogs, small mammals or waterfowl. According to Drakeford, in 2000, Pike were found in Queensmere and Scio Pond but it is generally accepted that Queensmere is the only pond that still supports a population of Pike on the Commons. The largest recorded Pike caught on the Commons was in Queensmere in the mid 1990's. This Pike, named Pricilla "Monster from the Blue lagoon" in a local newspaper article, weighed 22 pounds and when caught was found to have been feeding on full sized Black headed gulls. Following the removal of Pricilla from Queensmere, there have been a small number of other occasions when large Pike have been removed from this pond and this has generally followed a year when the presence of large Pike have had a significant impact on the number of ducklings and even cygnets using this area.

(Insert: picture of Pike on the Commons)

Perch *(Perca fluviatilis)*

Perch are a carnivorous fish which feed on smaller fish or insect larvae. They are easy to identify as they have a very spiky dorsal fin and they have a greeny-brown coloured back with a series of dark vertical bars across the upper sides of their body.

In 2000, Perch were said to be abundant on the Commons and found in Queensmere, Kingsmere and Scio Pond. Perch are still known to be at Queensmere but without apart from this, unfortunately, there is no up to date information about the abundance of Perch on the Commons.

Common Carp *(Cyprinus carpio)*

The Common Carp is a large fish with a rounded body and powerful fins. Easily recognisable by their dark brown to bronze colouration, Common Carp can live up to 50 years. They are omnivorous feeding on plants, algae, invertebrates and other fish. In 2000, Common Carp were reported in Kingsmere and Scio Pond and it is believed this is still the case today. Two common carp have also been reported in Ravine Pond but how they arrived in this area is unknown.

Koi Carp (Cyprinus carpio)

The koi carp is a domesticated version of common carp which originates from East Asia. Most commonly found in ornamental garden ponds, koi carp can vary in colour and similar to common carp, they are at home in muddy ponds.

In 2000, Drakeford reported that a small shoal of koi carp could be found in Rushmere and Kingsmere. There is no up to date information to confirm which ponds, if any, still contain koi carp on the Commons.

Goldfish (Carassius auratus gibelio)

Originating in East Asia, with their gold and silver colouring, goldfish are easy to identify. Most likely discarded on to the Commons by pet owners, in 2000, Drakeford reported that Goldfish could be found in Scio Pond. It is not known whether Goldfish are still found in this pond.

Rudd (Scardinius erythrophthalmus)

Rudd are coppery golden in colour with bright red fins and an upturned mouth. These fish tend to be a shoaling fish and prefer rivers or ponds with a large amount of vegetation. Rudd will feed on snails, worms, insects, insect larvae and algae. In 2000, Rudd were reported in Scio Pond and Kingsmere but there is no up to date information to confirm whether this species can still be found in these areas of the Commons.

Roach (Rutilus rutilus)

Roach is often mistaken for rudd as both fish look fairly alike. Similar to rudd, roach is also a shoaling fish that can be found in lakes, rivers, ponds and canals. The roach is a medium sized fish with silvery white sides and a dark brown or grey back, with a blueish or greenish tint. Roach will feed on a variety of insects, worms and vegetable matter. In 2000, Roach were reported in Scio Pond and Kingsmere but there is no updated information to confirm the status of this species on the Commons.

Tench *(Tinca tinca)*

Tench are recognisable through their olive green colouration. They have a stout body with rounded powerful fins. Tench feed on invertebrates including pond snails and often frequent slow flowing rivers or ponds with an abundance of aquatic vegetation. In 2000, Tench were recorded in Scio Pond and Kingsmere but there is no recent information to confirm their current status on the Commons.

Three-spined Stickleback (Gasterosteus aculeatus)

Three-spined stickleback are one of the most common freshwater fish in the UK where they can be found in lakes, ditches and rivers. Although small in size, this fish is an aggressive predator that hunts tadpoles, invertebrates and other small fish. Its colouring is brownish black with silvery sides and belly. In spring however, the male develops a red throat and belly and bright green flanks.

In 2000, Three-spined sticklebacks were reported as abundant on the Commons and found in the Beverley Brook, 7 Post Pond, Scio Pond, Kingsmere and Queensmere. Unfortunately, there is no more recent data available to confirm whether this information is still correct.

The Beverley Brook:

The Beverley Brook is 14.3 km in length with approximately 2km of this area passing through Wimbledon Common and 500 metres passing through Putney Lower Common.

Similar to the Commons' ponds, there is very little information about which species of fish can be found in the Commons' section of the Beverley Brook but we can achieve a fairly accurate account through the findings of two small-scale fish surveys that were carried out during 2010 and 2018. While not entirely accurate, another indicator of which species of fish can be found in the brook is via the information that can be found in neighbouring sections of the brook which include Barnes Common and Richmond Park.

In Wimbledon Common, A Natural History (2000), Drakeford reports that in 1992, a National Rivers Association Fisheries unit had described the Wimbledon Common section of the Beverley Brook as poor in fish and macro-invertebrates. In 2010, the Environment Agency carried out a survey on 15 June where various sections of the

Wimbledon Common section of the brook were electro-fished. At the time of the survey, the brook was described as a heavily shaded section of river with poor channel morphology. It was however acknowledged that areas of collapsed toe boarding provided some refuge for fish, along with isolated patches of macrophytes and woody debris. A gravel riffle was also reported as being present towards the top section of the brook which was suitable for gravel spawning species such as chub and dace.

The fishery comments for this survey were as follows:

"The site contains a good population of coarse fish dominated by chub and dace. Dace were the most abundant species, with three distinct year classes and a number of very large individuals present. Chub were present to 3lb and dace to 12oz. Other species captured in low numbers were gudgeon, European eel, roach, rudd and stickleback. Fish survey results probably represent 'moderate' to 'good' ecological status".

As part of the preparations for the major restoration project that was carried out along the Wimbledon Common section of the Beverley Brook, a small-scale fish survey was carried out by a team from South-East Rivers Trust in December 2018. This survey revealed nine species of fish along the brook which included chub, dace, roach, European eel, stone loach, minnows, tench, goldfish and gudgeon.

As both fish surveys were carried out prior to the completion of the restoration project along the Wimbledon Commons section of the Beverley Brook, it would seem timely that another fish survey is carried out along this area to measure whether the restoration work has been a success or not.

This survey would not need to be expensive and could very easily be carried out by a team of volunteers with a suitable level of knowledge who would be willing to undertake this activity on behalf of the Commons. If such a group could be organised, then the Beverley Brook and all nine ponds could be surveyed for an up to date assessment of which species of fish are present on the site.

(Insert: photograph of the Beverley Brook)

8: Fauna – Mammals

The oldest known source of information that is available for the Commons' flora and fauna was published by Walter Johnson in 1912. Entitled 'Wimbledon Common; its Geology, Antiquities and Natural History', there are three notable mammals that are absent from the Commons nowadays compared to 1912: the red squirrel, water vole and brown hare. There are also two new species which have arrived on the Commons since the publication of this book, and they are the grey squirrel and the muntjac deer. If we were to go back far enough in history, there would doubtless be other species of mammals that were present on the Commons including beaver, brown bear, wolf and wild boar but perhaps further mention of these species can wait until later chapters.

In 2000, Drakeford wrote in 'Wimbledon Common & Putney Heath, A Natural History, that the following mammal species were present on the Commons:

Carnivores (4 species)

- Fox *(Vulpes vulpes)* Status: Widespread
- Badger *(Meles meles)* Status: Common and stable
- Weasel *(Mustela nivalis)* Status: Quite common and increasing
- Stoat *(Mustela erminea) Status: R*are on the Commons

Insectivores (4 species)

- Mole *(Talpa europaea)* Status: Common and widespread
- Hedgehog *(Erinaceus europaeus)* Status: Common and Widespread
- Common shrew *(Sorex Araneus)* Status: Very common and widespread
- Pygmy shrew *(Sorex minutus)* Status: Very common and widespread

Rodents (5 species)

- Wood Mouse *(Apodemus Sylvaticus)* Status: Abundant on the Commons
- Field Vole *(Microtus agrestis) Status:* Status: Super abundant
- Bank Vole *(clethrionomys glareolus)* Status: Abundant
- Brown Rat *(Ratus norvegicus)* Status: Common and widespread
- Grey squirrel *(Sciurus carolinensis)* Status: Common and widespread

Lagomorphs (1 species)

- Rabbit *(Oryctolagus cuniculus) Status: Very common*

Bats:

- Pipistrelle *(Pipistrellus pipistrellus)*
- Daubenton's *(Myotis daubentonii)*
- Noctule *(Nyctalus noctule)*
- Brown Long-eared *(Plecotus auritus)*
- Serotine *(Eptesicus serotinus)*

While there have been a small number of mammal surveys held on the Commons since 2000, these have been very limited in scale and therefore it is difficult to know exactly how widespread the mammals mentioned in 2000 are on the Commons today.

Carnivores

With reference to the four carnivore species that were found on the Commons in 2000, fox and badger are still regularly seen but it is far less certain whether weasels and stoats remain widespread on the Commons.Through camera trapping, one of the Commons' volunteers, James Copeland, has managed to record activity at three of the Commons' established badger setts but an increase in this activity would certainly help us to monitor the activity of badgers at some of the Commons other known setts.

Over the past few years, there have been occasional sightings of weasels and interestingly, all sightings of this species since 2016 have been made in the areas of ground that is located close to Inner Windmill Road. Without clear evidence, it is however difficult to confirm the certainty of these sightings. Once again, further camera trapping on the Commons may help us to confirm whether a viable population of weasels or indeed stoats still remain on site.

(Insert: photograph taken by James Copeland of badgers on the Commons)

Insectivores:

Of the four species of insectivore that were noted by Drakeford in 2000, the occasional common shrew (usually dead) has been found on the Commons but as these reports have usually been anecdotal, it is unknown whether the shrews were common shrews or pygmy shrews.

Moles, once common and widespread on the Commons are now largely confined to the area surrounding the REMPF and hedgehogs are now sadly only found on Putney Lower Common.

In addition to the excellent work that has been carried out by local volunteer groups such as SW15 Hedgehogs, the most up to date information that is available about the hedgehog population on Putney Lower Common and its surrounding area originates from a series of surveys that were carried out by a team of scientists from ZSL's London Hogwatch between 2018 and 2020. As discussed in the London Hogwatch report from 2020, 'hedgehogs have recently been classified as vulnerable to extinction in the UK as their numbers are estimated to have declined by 46% in the past 13 years'. The report continued that, 'the causes for this decline are complicated but factors such as habitat loss, the use of pesticides and other agricultural chemicals, road traffic and an increasing badger population may all be responsible for the decline in hedgehog numbers.'

Originally identified as a potential hedgehog hot-spot for South London in 2018, during that same year, the London Hogwatch survey revealed that from the 30 cameras that were positioned around Putney Lower Common and Barnes Common,

nearly a quarter of the cameras had hedgehog contacts. Building upon the initial 2018 survey, during the following two years, the survey area was expanded to include other neighbouring green spaces which could potentially provide habitats for the local hedgehog population.

In general, the survey produced some very encouraging results with hedgehogs found at five of the seven survey sites.

These sites included:

- Barnes Common/Putney Lower Common
- Barnes Elms and fishing ponds
- Barnes wetlands
- North Barnes
- Roehampton Gardens.

As a result of the hedgehog surveys that have, in part, been carried out on Putney Lower Common over the past few years, this area of the Commons is managed as sensitively as possible to ensure the ongoing safety of hedgehogs in this area. Areas of grassland are checked for hedgehogs prior to mowing, hibernation boxes have been made available in suitable locations and a series of holes have been cut through the brick wall of the neighbouring cemetery to provide unimpeded access across this 2 acres site.

(Insert: hedgehog photograph on Putney Lower Common)

Rodents:

Of the five rodent species that were identified on the Commons by Drakeford (2000), the grey squirrel and brown rat remain common and widespread with Putney Lower Common being a particularly active area for brown rat.

Through an annual programme of small mammal trapping which usually take place during the Commons' summer Bio-blitz event in June, wood mouse and field vole have regularly been caught and weighed but we have not yet been successful in capturing a bank vole. As the Commons' are in possession of 20 Longworth small mammal traps, it is conceivable that, if led by a suitable volunteer, the extent of small mammal trapping events on the Commons could be increased which would certainly help to improve our knowledge about the distribution of small mammal species around the Commons.

(Insert: wood mouse caught during a small mammal trapping event on the Commons)

Lagomorph:

With reference to the only lagomorph that was included in Drakeford's list of mammals that were found on the Commons in 2000, the status of rabbits as being common on the Commons remains true today. First introduced by the Romans in approximately 43AD for meat and fur and then further increased by the Normans during the mid-12th Century, rabbits are actually known as a non-native invasive species. In Britain, they are however a familiar sight throughout the countryside and despite occasional fluctuations in numbers mainly as a result from viral diseases such as Myxamatosis and rabbit haemorrhagic disease, on the Commons, they have proved to be a real survivor. This said, according to data from the British Trust for Ornithology, since the 1990's, overall, the UK's wild rabbit population may have declined by as much as 60% since 1995, largely in response to Viral Heamorrhagic disease.

Bats:

As demonstrated each year at the Commons' annual Bioblitz event, there is a substantial amount of interest among visitors to the Commons on the subject of bats. Attendance for the guided bat walks which are often led by a volunteer from the London Bat Group are always high and it is not unusual for at least four species of bat to be recorded during these annual events.

The information that we currently have available about the bats that are found on Wimbledon and Putney Commons is however very limited and apart from a few snippets of information that have been collected from isolated surveys, the most comprehensive information that have was obtained from a baseline trapping and roost survey that was carried out in 2013. The 2013 bat survey and report was carried out and prepared by Daniel Whitby, a Natural England bat worker and was organised and funded by the London Bat Group.

The survey involved using an acoustic lure playing a range of species social calls to trap bats and enable accurate species identification and breeding status of bats present on the site. The trapping survey was conducted across a range of habitats and locations on Wimbledon Common over the course of six nights from May to September 2013, avoiding the more sensitive late pregnancy and birth periods.

As a result of this survey, 157 bats were caught belonging to eight different species.

These species included:

- Soprano pipistrelle
- Common pipistrelle
- Daubenton's
- Brown long-eared bat
- Noctule
- Natterer's
- Leisler's.
- Nathusius pipistrelle.

The conclusions of the survey indicated that Wimbledon Comon has a rich bat fauna present. It continued that, like Richmond Park, Wimbledon Common is now completely enclosed in an urban landscape making it a highly important ecological reserve for many bat species. The report concluded that bats were using the Commons for both roosting and foraging and suggested that:

"Species like Pipistrelle and Daubenton's will be commonly foraging outside of the Commons, particularly over water bodies and the River Thames where large bats like noctule and leisler's will comfortably commute larger distances in search of suitable foraging areas. However, other species particularly brown long-eared and natterer's are more likely to be restricted to the Commons and be almost completely dependent on the ecological resources it provides."

As certain species such as brown long-eared bat and natterer's are considered vulnerable locally, the 2013 report suggested that sensitive tree management is essential throughout the Commons as many of the bat species that are found on the Commons roost in woodland trees. As expressed by Whitby (2013) "The felling of a tree with a colony present could cause the local extinction of a species (such as brown long-eared or natterers) from the Commons".

To help protect bats on the Commons, large mature trees of all species that may provide roost space only receive work on them where they provide a very high risk of causing harm to Commons visitors by dropping a limb or completely failing. Another piece of work that has been carried out over recent years is the planting of small whips around various parts of the Commons woodland where a healthy understorey is missing. By creating a dense native understorey within areas of woodland, this will provide additional foraging opportunities which is vitally important for species such as the brown long-eared bat to thrive. Despite these actions, our actual knowledge about the distribution of bats on the Commons is extremely limited and therefore, resources allowing, an updated and comprehensive survey of the bats of Wimbledon Common is due.

(Insert: photograph of brown long eared bat: sourced from the London Bat Group)

9: Fauna – Birds (Adrian Podmore)

Introduction

Bird sightings for Wimbledon Common from the 1950's and 60's make for some eye watering reading with breeding records for red backed Shrike, pied flycatcher, nightingale, wood warbler, redstart, willow tit, hawfinch and cirl bunting. Further breeding species that have been lost since the 1980's and 1990's include linnet, cuckoo, yellowhammer, lesser redpoll, tree pipit and bullfinch while lesser whitethroat, spotted flycatcher, meadow Pipit and house martin have no longer bred since the early 2000's. The last willow warbler bred in 2016. 2011 was the first year since proper records began in 1974, when no ground-nesting birds bred on the Common at all. Although over 100 species were recorded in 2010 and 2011, the annual species count has averaged around the 90 mark, although there is a sense that this masks a significant decline in abundance in recent years.

On the plus side, raptors such as buzzard and red kite have increased significantly, while hobby and peregrine also appear to be prospering. The firecrest is demonstrably expanding its range too while increasing winter appearances from dartford warbler have been very welcome.

With over 150 species seen on the Commons altogether since records began in 1974, providing a synopsis for each one is clearly not practical although the annual reports do give a useful overview of the more common birds. This chapter however, by loosely grouping various species together, focuses on some of the more significant birds, particularly those that are or have been an integral part of the Commons ecology along with those that are red-listed, are in decline or where remedial action may be possible.

Waterfowl & Terns

The Commons support most of the more common breeding waterfowl including moorhen, coot, mallard, tufted duck, egyptian goose, mandarin and the mute swan. The latter has been a particular success story, breeding for the first time after fifty years in 2007 and with the occasional blank year, has continued to do so at Queensmere with the provision of rafts.

Species such as gadwall used to be regular visitors at Queensmere but are now very infrequent. Unlike many ducks which are generalist feeders, gadwall feed exclusively on submerged vegetation which they require in abundance so one wonders if there has been a change in the ponds physiology or water quality. Pochard (red listed) was also regularly seen at Queensmere but only infrequently now although remarkably, a pair did breed at Bluegate in 2013. This bird is susceptible to avian influenza while it too may also be quite sensitive to changes in water chemistry particularly over eutrophication. Shoveler is a dabbling duck that used to appear regularly in double numbers on Kingsmere during the winter months but even half a dozen now is unusual. Shovelers are susceptible to avian influenza and avian botulism while climate change, warmer winters, turbidity and water quality at Kingsmere may also be issues. Little grebe last successfully bred in 2014 at

Bluegate but further attempts in recent years appear to have been unsuccessful. Two breeding pairs at Bluegate in 2014 demonstrate this pond can provide ideal conditions for this bird if a water level of around one metre is maintained along with a rich vegetation (floating, submerged and emergent) and high density of aquatic invertebrates, small fish, crustaceans and amphibians. The nest is a floating platform of aquatic plant matter anchored to emergent vegetation, submerged branches or bushes close to the edge of shallow wetlands.The Common's ponds, particularly Rushmere, also provide an important feeding resource for Common Terns which can often be seen in June and July most likely commuting to Richmond Park.

(Insert: photograph of waterfowl)

Waders

The Commons have provided an important sanctuary for migrating and wintering woodcock (red listed) that arrive each year from the Continent. However, no woodcock were recorded at all in a recent survey by xxxx in 2013 or in 2020. Woodcock is another species in decline in the UK where recreational disturbance and dogs are likely to be the biggest culprit along with drying woodland in times of drought. Encouraging a thicker and more diverse shrub layer in the woodlands along with the restoration of some of the mires and other wetland areas would be a real boon in providing damp soil for feeding on earthworms.

The Plain, particularly the uncut areas when they flood, provides an important refuge for Snipe and Jack Snipe where birds are afforded good views of approaching predators. However, once disturbed by people or dogs they may return to The Plain once or twice but seem to depart for good if put up again. The rough grassland and boggy areas at Ladies Mile also provide good habitat although increased paths through these areas need to be monitored.

Lapwing (red listed) can often be seen flying over in hard weather but will take to The Plain when the surrounding countryside is snowbound or they are grounded by bad weather. One Lapwing was seen briefly displaying on The Plain in 2013 while they have also frequented Rushmere in the past but disturbance is probably too great now.

(Insert: photograph of wader)

Owls & Raptors

First appearing in 2002, the little owl has been an irregular visitor to the Commons over the past couple of decades and its arrival is likely to be dependent on fluctuations in the Richmond Park population. However, it does appear that a pair has taken up residence near the golf courses which would provide their preference for open parkland and hopefully its main prey of large invertebrates, particularly beetles. Occasionally in autumn, short- eared owls, most likely from Scandinavia, can be seen passing through. As a specialist predator of small mammals, predominantly voles, they will be particularly attracted by rough tussocky grassland.

The biggest change in recent years has been the spectacular increase in buzzard and red kite. Buzzard is almost certainly a breeding resident on the Commons now while red kite is breeding in the local vicinity. There are probably two or three Kestrel pairs but with voles providing the bulk of their prey, good sized areas of rough grassland and scrub with thick cover and a deep litter layer are important.

The Hobby, a dashing summer migrant, also breeds on the Commons or in the immediate environs, although it can prove incredibly elusive. At least two pairs bred in 2011. The decline in its usual prey of hirundines and swifts on the Commons is likely more than made up for by dragonflies and sand martins from visits to the Wetlands Centre, but the Commons' ponds are probably an important food source too.

(Insert: photograph of owl)

Woodpeckers, Kingfisher, Cuckoo & Parakeet

The great spotted woodpecker has experienced a 300% population increase since the seventies and one of the birds most likely to be seen on the Commons. The increase in dead and dying trees, its use of garden bird feeders and reduced competition from starlings may all be reasons. With a diet comprised mainly of ants, the green woodpecker is probably holding its own although there is anecdotal evidence of parakeets taking over nesting holes initially used by green woodpeckers. Maintaining areas of grassland with ant hills is a key requirement for this species. The lesser spotted woodpecker (red listed) is an extremely unobtrusive species. Preferring the upper levels of the tree canopy, it is consequently hard to see or monitor. Although no records were received for 2021, this woodpecker probably has a toehold on the Commons still. With low breeding success, it too may be suffering from competition by parakeets and potential predation by the great spotted woodpecker. There is some evidence of the lesser spotted woodpecker preferring wetter woodland near streams along with a good shrub layer, so providing increased water retention e.g. mire restoration and leaky dams may be options.

The Kingfisher clearly breeds along the Beverley Brook and with recent restoration works and various fish introductions, hopefully the future is secure for at least one pair. It should however be possible to create a kingfisher nesting bank, possibly at the Ravine Pond. Designs vary widely but now that there are purpose- built kingfisher boxes, as long as there is a vertical face, even using old containers or tanks and covered in turf or soil have been used.

The cuckoo (red listed) was last recorded as breeding on the Commons in 1987. Just one or two birds pass through each spring now. Another species in decline, likely reasons include issues on their migration routes and wintering grounds along with a reduction in host species, particularly meadow pipits. Moths are one of the important prey items and the decline in this group is likely to be another cause for the reduction in cuckoo numbers.

With strongholds in Richmond Park and throughout Surrey, the ring-necked parakeet is clearly here to stay, although Defra is looking at potentially culling some satellite populations. Although gamekeepers at Richmond Park shot over 100 between 2017 and 2019 and with increasing evidence of peregrines and sparrowhawks both preying on Parakeets, this will have minimal impact on a very adaptable and resourceful bird that can cope with extremes of climate. The main concern is that this species out competes green woodpecker, starling, spotted flycatchers and lesser spotted woodpecker for nesting holes.

(Insert: photograph of Kingfisher)

Larks / Pipits / Wagtails

Skylarks (red listed) are one of the flagship species for the Commons. There were six pairs back in 1983 where breeding was confirmed for both north and south of the Plain. This had reduced to a couple of pairs in the 1990's with the last pairs to breed being in 2007 and finally 2015. In recent years, birds have appeared in late May, early June, possibly failed pairs from Richmond Park and have made attempts to breed but these appear to have been short-lived. Typically, a pair was briefly seen for a couple of days in 2020 but did not linger. Skylarks have specific requirements involving a mosaic of habitats including areas of bare earth, a low sward for feeding but a higher sward for nesting with 20-60cm preferred and 55cm height as optimum. Inevitably, the weather plays a major role in the growth and composition of The Plain's grassland each year. While Skylarks are both seed and insect eaters, the diet of the nestlings is exclusively that of arthropods. Nest failure due to predation is common, particularly from mammals but Kestrels and corvids too. Disturbance from people and their dogs is likely to be the biggest factor. Huge efforts have been made though signage and increasing awareness of the presence of skylarks but unfortunately, it is the case that just one unruly dog can disrupt a breeding attempt.

The Meadow Pipit used to be another regular breeding bird (2003 and before that 1999). Similarly, a ground nesting species, they prefer open areas where they can feed predominantly on insects, flies, beetles, moths and spiders, while supplementing their diet in winter with seeds and berries. They used to be present in varying numbers on The Plain throughout the winter months with flocks of 20-30 regularly seen passing through in the spring and autumn but just the odd one or two are recorded now. It is noticeable that birds found on The Plain, once disturbed appear to find it hard to settle, remaining on the ground again for a short period of time before flying off altogether. For both skylark and meadow pipit, maximising the amount and connectivity of uncut grassland in the winter may encourage further birds to overwinter while for any pairs that do attempt to breed, roping off an area should be implemented.

Wagtails are represented with at least one pair of pied wagtails frequenting the Windmill complex, while one pair of grey wagtail probably breed along the Brook, they will also frequent Kingsmere, Hookhamslade and Queensmere as well.

(Insert: photograph of either lark, pipit or wagtail)

Hirundines / Swift / Flycatchers

In 2014, a pair of swallows bred on the Commons for the first time since 1982. The Stables at the Windmill now support one to two breeding pairs most years. Further artificial nesting bowls have been put up by WPCC staff so it is hoped that the population might expand. Swallows have declined 31% between 2008 and 2018, where climate change, issues on the wintering grounds and a declining insect population may all be key. It has become noticeable in recent years that as soon as the second broods have fledged, the birds immediately disappear possibly indicating a lack of food.

However, the most worrying decline in recent years has been that of the house martin (red listed) 57% down in the UK between 1969 and 2018. There was just one record for 2021. In the past, house martins were a regular sight on the Commons where they could be seen collecting mud from Rushmere for their nearby nests. Dry springs can reduce the opportunities to find mud while many nests are now knocked down or mesh is put up to prevent birds using the eaves of houses, reflecting the public's increasing intolerance to mess - there is clearly an issue of education here.

While swifts do not breed on the Commons, they do use The Plain and Rushmere for feeding, particularly on the Plain in June. The species is red listed with a population decline of 58% (1995-2018). The loss of traditional nest sites is likely to be a contributory factor. The idea of a Swift tower has been discussed previously. From the experiences of other installations, this can be a slow and long-term project and maybe at least five years before birds are attracted to use it, if at all. However, a Swift tower would provide a talking point and an opportunity for education. Another option would be to put some swift boxes on the Windmill. They would be at an ideal height and provide good visibility. The concern about 'mess' is generally unfounded, as adult swifts generally eat any waste from the chicks. For either the windmill or a tower, the key is to be able to provide sound recordings to attract the birds in the first place.

Currently red-listed with an 89% decrease between 1967 and 2012, the spotted flycatcher last bred on the Common in 2008. Passing autumnal migrants are now something of an event. Once again, conditions in the wintering grounds in Africa may be the principal cause. However, these birds do prefer the larger flying insects, including butterflies, moths, craneflies and damselflies, so any reduction in these will also have an impact. Poor weather in the summer months can also result in nests failing as smaller invertebrates are taken but then eaten by the parents rather than fed to the young. Woodland with open glades provides the optimal habitat for seeing and catching insects so recent work by WPCC providing this habitat is clearly welcome.

(Insert: photograph of swallow)

Warblers

The Commons provide some excellent habitat for this group with good populations of blackcap, chiffchaff, garden warbler and whitethroat where numbers can seem denser than in the countryside sometimes. Blackcap has experienced a stellar increase in recent years, being the site's most numerous warbler with perhaps 70 pairs. This may in part be due to its ability to take food from garden feeders during winter although these are likely to be continental birds but its liking for nesting a couple of feet up in the middle of a dense bramble patch may reduce predation and disturbance from dogs and people.

Numbers of chiffchaff are probably stable, although there is a sense that garden warbler and particularly whitethroat have started to decline, possibly due to the recent, late and cold springs resulting in little cover and food once they arrive. Lesser whitethroat used to breed up to 2002 but prefers tall, thick hedges, often singing from deep inside hawthorns and blackthorns.

A national phenomenon reflected in a 78% decline from 1995-2015, there were 100 pairs of willow warbler in 1970. One can only imagine what the Commons must have sounded like in spring. With just a handful of spring and autumn migrants now, climate change is likely to be the biggest player here with strong populations still in the north of the UK. However, being a ground nesting bird, disturbance, dogs and predation are all likely to have made their mark, combined with a potential decline in insect food. Willow warblers like dense young birch thickets, for example that at Ladies Mile, so it would be good to encourage this habitat further but once it matures and becomes less dense then coppicing is ideal in producing new thickets.

Encouragingly, one bird that has increased its presence in recent years is the dartford warbler. Previously seen in 1938 with a pair breeding in 1936, this bird has been appearing most winters since 2016. On the edge of its range in Britain, it is dependent on mature, dry heath habitats for not only its mostly insectivorous diet of spiders, but also for surviving cold, harsh winters as it is non-migratory. The critical habitat requirement is gorse that is not only in good condition but is of medium height e.g. 1-1.5m along with the provision of a dense continuity between the ground vegetation and the gorse so usually mature heather. Very young or old, leggy gorse or heather under 50cm are avoided. Interestingly of all the birds on the Commons, it seems that the Dartford warbler may be able to tolerate human disturbance best and certainly birds seem to co-exist with the many visitors to the UK's heathland National Nature Reserves.

The occasional reed or sedge warbler pass through on migration but with a reasonably sized reedbed on the Commons, there is no reason to suppose why a pair of reed warblers could not be encouraged to take up residence as even a few square metres of reed can suffice. Similarly, the expanding population of cetti's warblers could also be attracted.

(Insert: photograph of Dartford warbler)

Crests & Tits

The long-tailed tit is probably one of the Commons' most well- known and charismatic residents and appears to have a stable population with perhaps 50 to 60 pairs. Dense patches of gorse provide its preferred nesting habitat where nests are constructed from spiders' webs and lichen and then lined with feathers.

The marsh tit (red listed) is a scarce visitor although pairs have bred in 1979 and more recently in 2016. Despite their name, marsh tits are most often found in damp broadleaf woodland, copses, parks and gardens where they feed mostly on insects, seeds and berries, often caching food over winter. They prefer to nest in existing tree holes, rather than excavating their own. It is however the shrub layer that is most important so increasing the understorey / low wet scrub of some of the woodlands would be beneficial.

The goldcrest has a stable population but in the last decade or so, it has been the firecrest that has been going from strength to strength, with nine singing birds recorded in the spring of 2019. These birds favour the northern and western parts of the Commons where dense stands of holly, yew and ivy provide their favourite habitat. While woodland management is generally about letting the light in, retaining some denser blocks of 'jungle' still have their place and all add to diversity.

(Insert: photograph of long-tailed tit)

Starling, Thrushes & Chats

The Commons used to support significant post breeding flocks of Starlings (red listed) with anywhere up to four hundred birds in June / July. A species with another nationwide decline (66 % since the mid-1970s), causes are still unknown but some studies suggest that mortality of first year youngsters has significantly increased. Starlings are heavily dependent on soil invertebrates like earthworms and leatherjackets in their grassland foraging areas. It is possible this food supply has declined, possibly due to less being available during dry summers or to the increasing crow population that uses The Plain for feeding and roosting.

Some observers may be surprised to know that both the song and mistle thrush are now on the red list where loss, degradation and over management of habitat are likely causes of their population declines. Current evidence suggests that only 60% of adult song thrush survive to breed the following spring. Requiring a mix of woodland and grassland habitat, the song thrush likes to nest in low, dense vegetation while food consists of worms, slugs, snails, fruit and other invertebrate prey. Encouraging a dense shrub layer in some of the woodlands while introducing any measures that prevent drying out of soil, particularly in droughts, for example new pond and wetland areas would be welcome. The Commons do support good numbers of visiting thrushes from Scandinavia and Iceland in the autumn, notably redwing (red listed) although less so fieldfare (red listed). Numbers of redwing vary considerably during the winter but can increase rapidly in spells of cold weather where the denser, more mature stands of holly trees provide shelter and food.

The stonechat is one of the more charismatic visitors to the Commons, often one of the first spring migrants to be seen in February or March and again on their return trips throughout September and October. Some years there are just two or three sightings while in others such as 2016, there were 45 records involving 60 birds. There is a sense that whereas in the past, birds would spend protracted periods of time on the Commons, visits are now considerably shorter. However, individuals did stay for the whole of winter in 2004 and 2016. There is no reason to suppose that with enough rough grassland, scattered bushes and scrub habitat with suitable perching opportunities that birds should not regularly overwinter, particularly as Bushy Park and Richmond Park (18 in Nov 21) host suitable numbers.

Whinchats (red listed) used to be regular visitors to the heather patch on The Plain during their spring and autumn migrations. One suspects this area has been used historically over many years. They favour uncut, rough grassland with small shrubs to perch on. However, if The Plain is cut early in the summer, much of this habitat is lost to migrating birds particularly this species.

The Plain has always been a magnet for migrating Wheatears. While spring migration has always been more pronounced, sightings used to average around a dozen to 30 per year with a bumper year in 2011 of over 50 separate birds. In recent years however, just a handful are now seen.

(Insert: photograph of starling)

Finches, Buntings & Sparrows

Linnet, bullfinch, greenfinch and house sparrow have all undergone noticeable demises.

Linnets (red listed) have declined by 57% in the UK between 1970 and 2014 and last bred on the Commons in 1987. They feed primarily on the seeds of small-seeded plants and are particularly fond of dandelion seed. They also take insects especially in the summer and particularly for their young. Linnets like thick unkempt hedges for food and cover where they will nest semi-colonially.

In 1985, the Bullfinch had 22 territories on the Commons with the last record of any springtime pairs around 2006. While the occasional bird still visits in the winter, this handsome finch has been a sad loss. They have a strong preference for dense, mature hedgerows that offer thick cover and a good supply of food particularly fruit and berries so an orchard on the Commons would be of benefit to this species..

From 2000, the Greenfinch (red listed) population on the Commons was actually expanding with flocks of up to 40 birds not being uncommon. However, from around 2010, the greenfinch has been hit hard by the parasitic disease trichomonosis. There is still the odd pair at their previous stronghold along the Causeway while another pair appears to have taken up residence within the increasing tree cover at the corner of Rushmere Pond.

There is a small population of house sparrows (red listed) at the Green which also appears to utilise the trees at the corner of Rushmere. While the decline in this species is well documented (70% between 1995 and 2017), lack of food, diminishing

habitat and avian malaria are all potential causes. The last records of any birds at the Windmill were in 2011. Maintaining long swards of grassland will provide more insects while these birds are very partial to red millet and live mealworms – terraces of sparrow boxes also appear to be effective should any be enticed back.

The Commons' birch and alder trees provide vital food for wintering siskins and lesser redpolls (red listed) although the larger winter flocks of the latter are much less frequent now, possibly due to climate change while these is also some evidence of a reduction in birch seed food supplies.

The Commons still support a pair of reed buntings, usually on The Plain but this is well down on the 18 pairs in 1983. As another ground nester, they are hugely susceptible to disturbance by people, dogs, cats and corvids and with the chicks fed exclusively on invertebrate prey which may be harder to find, it is no surprise that there has been no evidence of successful nesting in recent years.

(Insert: photograph of bullfinch)

Summary & Recommendations

The decline in the Commons' birdlife is clearly being mirrored across the UK and at 70 species long, the UK Red list for birds has nearly doubled from that of 1996. Thanks to Dave Wills and Ron Kettle, WPCC is fortunate in having a detailed record of observations since 1974. Along with four monthly transect walks conducted since xxxx, these records illustrate, perhaps better than any other ecological group for the Commons, just how dramatic the loss in our biodiversity has been. It is also clear that the scientific world is still some way from fully understanding all the causes but urbanisation, pollution of air, water and soil, increased dog ownership, climate change, changes in wintering or summering grounds abroad, human disturbance, reduction in food availability and increased prevalence of disease are all likely factors. While many of these issues require a global or national response, what can WPCC do to help stem or even reverse some of these declines. Four areas that could be addressed are habitat, disturbance, community engagement / education and supplementary measures. These four areas will be discussed in further detail during section 2 of the Land management Report.

10: Fauna - moths & butterflies (Les Evans Hill)

Information currently being prepared by Les Evans-Hill

11 – Dragonflies and damselfies (Simon Riley)

Information currently being prepared by Simon Riley

12 - Invasive non-native species

According to the Joint Nature Conservancy Council (JNCC), 'non-native' species are those that have reached Great Britain by accidental human transport, deliberate human introduction, or which have arrived by natural dispersal from a non-native population'. While the introduction of non-native species into the environment is a global concern, in Britain alone, there have been more than 3,000 non-native species recorded as established or reproducing in the wild.

Although many non-native species cause no harm to the environment, there are a significant number of these species that do pose a threat to the nation's natural (native) biodiversity. With a long history of plant and animal introduction to the British Ilses, it is important to have a clear understanding of the impact that invasive non-native species (INNS) can have on the natural environment as this will help determine the most suitable course of action that is required to deal with this problem. It is therefore important that a few terms are clearly defined to avoid confusion. These terms refer to native species, non-native species (or introduced species) and invasive non-native species.

Native species: This term refers to species that are found in an area for entirely natural reasons and have not been introduced through human activity.

Non-native species: Non-native species are species that are found outside of their natural range, most often as a result of human activity (Natural History Museum website: 2022). The list of non-native species in Britain includes virtually any species that did not naturally occur before the arrival of humans to these islands.

Invasive Species: This term refers to species that are found outside of their normal range and may have a negative impact on native species, human well-being and the economy. As there are some species such as bramble, bracken and ragwort for example that may be considered as invasive but are in fact both native to the British Isles and a useful part of the natural environment, it is important to note that this management plan will only focus on invasive non-native species (INNS) as there is a very clear distinction between the two.

According to the Natural History Museum's website (2022), while most non-native species do not cause harm to the environment, approximately 10-15% of them have become invasive and have had a negative impact in some way'. The website continues that in the UK, approximately 1.8 billion pounds a year is spent trying to deal with the problems that have been caused by INNS. Whether through the predation of native species, competing for resources, introducing new diseases or

hybridisation with other species, INNS are, alongside climate change, considered to provide one of the biggest threats to global biodiversity.

In Britain, some INNS have now become commonplace and familiar to much of the population. The grey squirrel (released in the UK in 1876) for example which for many people is the only squirrel they have ever known managed to largely outcompete the native red squirrel ensuring that our native breed is now found in only a very locations around the country. It should also be considered that some species which may be categorised as INNS, such as wild rabbits, parakeets, grey squirrels and deer have become much loved by the general population and therefore without a very clear case for reducing their numbers, any programme of eradication should, as far as possible, be avoided.

To echo the sentiment of the RSPB,

"We do not advocate the 'demonisation' of non-native species, or the eradication of every plant or animal brought to the UK by people; some non-native species do not have a direct detectable effect on native wildlife, and some species are too well established for any realistic practical response". (RSPB:2022)

Also, in total agreement with the information found within the Richmond Park Management Plan (2019-2029) the control of invasive species that are found on a particular area of land must be tailored to the exact requirements of that area alone. On Wimbledon and Putney Commons, the principal INNS which are currently managed can be found in the following list:

- Oak Processionary Moth (Thaumetopoea processionea)
- Japanese knotweed (Fallopia japonica)
- Himalayan balsam (Impatiens glandulifera)
- New Zealand Pigmyweed (Crassula helmsii)
- Parrot's Feather (Myriophyllum aquaticum)
- Various terrapin and turtle species

As a result of the ongoing effects of increased globalisation and potentially climate change, it is likely that the prevalence of INNS in the British Isles will continue if not increase in the future. Coming into force on 1 January 2015, the European Union's Invasive Alien Species Regulation estimated that while there are nearly 2,000 non-native species already established in the UK, the number of new arrivals was also increasing with 10-12 new non-native species becoming established each year. This trend was mirrored across Europe and the rest of the world.

As stated in the Great Britain Invasive Non-Native Species Strategy 2015, the overarching aim of this strategy is to minimise the risk posed by, and to reduce the negative impacts of INNS in GB.

To achieve this, four main types of management were suggested which included, eradication, containment, control and mitigation and it is with these broad principles in mind that any management of INNS on the Commons in the future will follow.

(Insert: photograph of Himalayan balsam removal along the Beverley Brook).

1.10 – People, Stakeholders, Access & Recreation

- Paths & access (PH)
- Signage & interpretation on the Commons (PH)
- Provision of bins, litter picking and the control of fly-tipping on the Commons. (PH)
- Provision of benches and public seating on the Commons. (PH/Paula Graystone)
- Car Parking on the Commons. (PH)
- Health, recreation and well-being on the Commons (PH)
- Health and Safety provisions on the Commons (Jack Rowland: WPCC)
- Tree Safety (Jack Rowland: WPCC Maintenance Manager)
- Bye-law enforcement (Richard Thompson)
- Volunteers (PH)

1: Paths & Access

Following a series of workshops and discussions with Wimbledon and Putney Commons staff, volunteers and Conservators, the issue of access to and within the Commons formed an important part of the 2020, MRG Studios Landscape and Ecology Situation Report for Wimbledon and Putney Commons. It was noted in the report that one of the key issues that needs to be addressed within the Commons is access for communities around the site.

It was further remarked by MRG Studios (2020):

“The A3 is a considerable barrier to the site on its western boundary and splits the northern half of Putney Heath from the rest of the Wimbledon and Putney Commons. Improving these entrances could help connect the surrounding neighbourhoods to the Commons and make the space more inclusive for all”.

In total there, there were 21 entrances on to the Commons from surrounding communities that were highlighted in the report which ranged from hard surfaces to well-worn or muddy tracks.

Another section of the report dealt with the issue of providing access within the Commons which included walking paths, horse rides, cycle paths and roads. As

access within the Commons is key to providing a destination that is both accessible and inclusive, challenging paths, the lack of a looped cycle path for leisure cyclists and closed canopy woodland edges which compromise a sense of safety and security were all noted as existing features of the Commons landscape.

Leading on from the work that had been produced by MRG Studios, in June 2020, planning consultants Barker Langham produced an outline masterplan strategic options report which was submitted to the Wimbledon and Putney Commons Board of Conservators for their consideration.

With reference to access to and within the Commons, under Section 3.2 of the report, it was outlined that “accessibility to and within the Commons will be key to enhancing the current visitor experience and will assist attracting new users by removing current barriers to visitation.

Under Option 1: Enhancing the Core, potential opportunities included:

High & medium priority path improvements – This would include paths around what was termed as the Windmill hub and the REMPF hub and other areas of the Commons. Re-surfacing work and path repairs would be carried out with self-binding or compacted gravel.

Re-surface and re-landscape car parks – This would involve carrying out work at the Windmill hub and the REMPF hub and re-landscaping would include re-grading, re-surfacing, re-planting, SUDS (Sustainable Drainage System) compliance and low-level lighting, for improved integration in the landscape.

Further options which were included under Option 2 of this section of the report (entitled Growth and legacy), included both options noted under option 1 as well as the additional suggestions of including lower priority path improvements, re-landscaping the visitor entrance facing Windmill Road and installing bike racks. While all of the options that had been raised by Barker Langham could, if agreed by WPCC, be achieved, the cost for such a large undertaking would be considerable and therefore, at the current time, no policy has been agreed to undertake such a significant piece of work. This by no means suggests that path repairs and restoration work is not already carried out on the Commons and over the past few years, there have been two major path restoration works carried out and numerous smaller operations which have helped to improve access around the site. The most significant path restoration works that have recently been carried out the Commons have included the resurfacing of the Inner Windmill Road (approximately 1300 metres) in 2018 and the resurfacing of approximately 800 metres of tow path along the edge of the Wimbledon Common section of the Beverley Brook during 2020.

In the case of the Inner Windmill Road, this work was completed following a successful public appeal where approximately £56,000 was raised through public donations and the Beverley Brook path restoration work was funded via a grant from Southern Western Railway’s Customer and Communities Improvement Fund and from donations to the Friends of Wimbledon and Putney Commons. In both cases, each of the of the paths provides a multi-use route with a hard standing surface that is suitable for pedestrians, cyclists, wheelchairs and pushchairs.

(Insert: photograph of path restoration work along the Wimbledon Commons section of the Beverley Brook)

In addition to the two large footpath restoration projects that were funded through public donations and grants, to further improve access within the Commons, approximately 500 metres of Memorial Ride and 300 metres of Bluegate Ride were also successfully re-surfaced in 2018. All the costs for these two ride projects was raised by donations from the Wimbledon Village Stables who are now the only commercial riding school who regularly use the Commons for their business.

For more limited path and ride restoration projects, all work is carried out by the Commons Maintenance Team. Over the past few years, the Commons' Maintenance Team have carried out work along many sections of the Commons' 16 miles of horse ride and path repairs have been completed around all areas of the Commons.

(Insert: photograph of the Commons' Maintenance Team carrying out path repairs on the Commons)

2: Signage and Interpretation on the Commons

As part of a Heritage Lottery Funding bid that was carried out by the Commons during 2019 and 2020, London based landscape design practice MRG Studios produced a report which was entitled Wimbledon and Putney Commons Landscape & Ecology Situation Analysis (February 2020).

In this report, the following main areas of interest were covered:

- Interpretation in and of the landscape
- Access to the Commons
- Access within the Commons
- Landscape ecology
- Climate change and resilience.

In terms of providing visitors to the Commons with relevant information about the history and management of the site, some of the suggestions that were proposed in the report included providing additional named walks and trails on the Commons, the use of light touch trail markers and the positioning of thoughtfully located information boards. It was suggested in the report that:

“Demystifying and informing visitors of the rich cultural and natural heritage of the Commons could greatly enrich their experience of the landscape and also protect fragile habitats. Potential themes for interpretation could include landscape processes, landscape heritage elements and their continuing influence and the future significance and value of landscape assets.” (MRG: 2020).

While it is anticipated that over time, resources will become available to fully realise many of the points that have been suggested in the MRG report, at the current time, clear, informative and up to date signage and visitor information can be found across all areas of the Commons.

Directional Signage can be found at the following locations:

- The Windmill complex
- The Richardson Evans Memorial Playing Fields (REMPF)
- Springwell Car Park
- The Wimbledon Common Golf Course
- Map boards are located at numerous key locations around the Commons.
- Cycle signs are located around most areas of the Commons.
- Horse riding signs are mounted on posts around most areas of the Commons.

(Insert; photograph of directional signage and bicycle racks close to the windmill)

(Insert: photograph of No Cycling and Horse Ride signage in the woodland)

(Insert: photograph of Warning golf in play signage)

Interpretative signage on the Commons.

Public information and interpretative signage is located at all major 'gateways' around Wimbledon and Putney Commons and informative, accurate and up-to-date signage is always placed on display around locations where significant or interesting projects are being carried out. Examples of interpretative signage that can regularly be found on the Commons includes:

Skylark Protection Area on The Plain (annually in force from 1 March to 31 July)

Oak Processionary Moth (OPM) information (annually displayed around many areas of the Commons from 1 April to 30 September) This information alters during various stages of the OPM season and includes details of the presence and threat of OPM to people and animals and the control and removal of OPM on the Commons.

Dogs out of ponds notice (annually displayed from 1 March to 31 July) All nine of the Commons' ponds are included.

There are currently 22 large notice boards located around various strategic locations on the Commons. The notice boards provide regular and up to date information about events, conservation and wildlife activities, landscape work and the adherence to specific bye-laws.

A3 & A4 sized wooden notice boards are mounted on wooden posts at multiple locations around the Commons. These notice boards are used to display temporary information about specific events or campaigns that are taking place on the Commons.

Information boards are on display at various points along the Beverley Brook on Wimbledon Common. The information contained on the notice boards informs visitors about the ongoing river restoration project that is taking place in this area of the Commons.

(Insert: photograph of one of the large notice boards on the Common)

(Insert: photograph of one of the Commons dogs out of ponds notices)

3: Provision of bins, litter picking and the control of fly-tipping on the Commons

Managing the issue of litter and unwanted waste on the Commons is an ongoing task that takes up a considerable amount of the Commons resources.
These resources include staff and volunteer time as well as the financial resources that are required to remove litter and unwanted waste from the Commons.

At the current time, there are 28 litter bins and 82 dog waste bins located around various parts of Wimbledon and Putney Commons.
Traditionally, these bins were emptied by the Commons' Maintenance Team on a Monday and Friday morning. Unfortunately, as a result of the 2020 COVID-19 lockdown which resulted in a significant and prolonged increase in visitor numbers to the Commons, the twice weekly litter picking arrangement that was in place, simply couldn't cope and a new form of management for this issue was soon developed.

At the height of the COVID-19 lockdown, staff from the Commons' Maintenance Team, Keeper Team and REMPF Team, were involved for much of 2020 and the beginning of 2021 with the daily task of removing litter and dog waste from bins around the Commons. At one point, the problem became so acute that staff were operating on a shift system from dawn until to dusk and the cost of removing litter from the Commons increased by approximately six times the usual level that we were accustomed to during a 'normal year'.

(Insert: photograph of Keeper Team and piles of litter at Rushmere during 2020)

While the number of visitors to the Commons has gradually decreased from the levels that were experienced during 2020, since this time, the Commons have remained a major attraction to visitors throughout the year and the problem of litter sadly remains far worse than should be expected.

To help ensure the Commons remain as free from litter as possible, since the middle of 2021, a new member of staff has been added to the Commons team with the sole responsibility of litter picking and removing litter and dog waste from designated bins around the Commons. During the busy spring, summer and autumn periods of the year, this member of staff is on duty five days a week, including weekends and during the winter period this time is slightly reduced to cover a three day week. While the Commons' Maintenance Team and Keeper Team support this work during especially busy periods of the year, the presence on the Commons of a designated waste management operative has provided other members of the team with additional time in which to carry out other important duties.

The only areas on the Commons which are not looked after by the designated waste management operative are the Richardson Evans Memorial Playing Fields which are looked after by the ground staff who manage this site and Putney Lower Common which is looked after by a designated Ranger. In addition to this, fly-tips, which often result in large amounts of rubbish having to be removed by tractor and trailer are also dealt with by the Commons' Maintenance Team but thankfully, while these events are always unwelcome, they do not occur on the Commons too often.

(Insert: photograph of a fly tip on the Commons)

In addition to the work that is carried out by the Commons' full-time staff, another very important element to how the Commons are kept clear of litter is through the assistance that is provided by volunteers. Over the years, this group has included local residents, schools, clubs and local organisations as well as the many young people who have helped on the Commons as part of their Duke of Edinburgh Award scheme. With some volunteer litter pickers venturing out on a daily basis and others visiting weekly or even monthly, there are very few locations on the Commons which are not covered by this very special group of volunteers.

While most volunteer litter pickers are very much self-led and visit the Commons at a time of their own choosing, there are also organised litter picking events throughout the year and it should be noted that litter picking on the Commons does not only include activities on the land but also in the water.
Throughout the year, the 2km section of the Beverley Brook on Wimbledon Common is litter picked, at least on a three week basis, by an organised group of volunteers who are equipped with waders, rubber gloves and litter sticks. As riparian owners, the Wimbledon and Putney Commons Conservators take a huge sense of pride and responsibility in ensuring that as much litter as possible is removed from its watercourses. During each year, volunteers remove huge amounts of litter from the Beverley Brook which would otherwise end up in the Thames or potentially find its way out to Sea.

(Insert: photograph of litter picking along the Wimbledon Common section of the Beverley Brook)

4 Provision of benches and public seating on the Commons

In 2022, there were 221 benches on Wimbledon and Putney Commons.
These benches include a variety of different styles from a bench that is formed of slatted wooden planks that are fixed on to a metal frame to the newer benches which are made entirely from English oak.

All the benches on the Commons have been donated as memorial benches and all of them have been paid for by their respective donors. In 2017, a full inventory was made of the Commons benches and information on all the benches is available on a data base at the Rangers Office. As some of the benches on the Commons were dedicated as far back as the 1940's, there is a clear variation in the quality and condition in which some benches are currently found. Consequently, we are currently in the process of trying to locate all the bench donors or family members to provide them with the option of replacing old benches with the new style of wooden bench that was introduced to the Commons in 2018. Since this date, 24 of the new design of wooden benches have been installed on the Commons and it is hoped that in time, all benches on the Commons will be of this uniformed appearance.

Moving forward, we have identified a number of suitable locations where benches can be installed in the future. Currently these areas include locations along the Beverley Brook, within the REMPF Memorial garden and on Putney Lower Common. While the presence of benches on the Commons will improve more inclusive access to the Commons, we are mindful that too many benches around specific areas of the Commons could detract from the natural beauty of the landscape. At some point around the year 1999, the decision was made by the Wimbledon and Putney Board of Conservators to not add any more benches on the Commons south of the A3 and especially on areas of heathland. This decision was, once again agreed during 2009 and therefore any new benches on the Commons are only positioned where absolutely required.

(Insert: photograph of a new memorial bench on the Commons)

5 Car Parking on the Commons

There are currently four car parks located on the Commons and all parking on the Commons is free of charge. These areas include:

- Windmill Car Park
- Springwell Car Park
- REMPF Car Park
- Telegraph Car Park

Windmill Car Park (SW19 5NQ)

The Windmill Car Park is the largest of the Commons' four car parks. It located within view of the Wimbledon Common Windmill and it can be accessed by turning onto Windmill Road from the nearby Parkside. Windmill Car Park contains provision for the parking of approximately 215 vehicles and of this total number, there are eight spaces which have been allocated for disabled drivers. Six of these spaces are located close to the entrance gates to the car park and there are two more disabled spaces that have been made available next to the entrance of the Windmill Tea Rooms.

While much of the car park has been surfaced with tarmac, the actual parking bays are formed of compacted earth and there are three lines of white painted telephone poles which mark the various parking bays. Similar to the other three car parks on the Commons, parking is free at the Windmill Car Park although there is a voluntary car parking scheme available at this location. Voluntary car parking can be paid by direct debit, through tap to pay or by paying cash directly into a machine. There is currently one paying machine which is located opposite the gentleman's toilets. The Windmill Car Park is open to the public, 365 days a year and its gates are open from dawn until dusk. Responsibility for locking and unlocking the car park gates forms part of the daily duties for the Commons' Keepers.

This car park forms one of the main hubs of the Commons and as a result, it is busy throughout the year. In addition to providing parking spaces for motorized vehicles, there is also provision for approximately 36 bicycles to be secured to metal racks. Facilities close to the Windmill Car Park include the Windmill Museum, the Windmill Tea Rooms and toilets (including disabled toilets).

(Insert: photograph of Windmill Car Park)

Springwell Car Park (SW19 4UW)

Springwell Car Park contains provision for the parking of approximately 25 vehicles and it can be accessed via Sunset Road which adjoins the nearby Camp Road. This car park is fully surfaced with tarmac and in addition to parking spaces this area also provides four metal bicycle racks.

In the strictest sense, according to the Commons' Bye-laws which are enshrined in the Wimbledon and Putney Commons Act, 1871, "*No unauthorised person shall allow to remain stationary on the Commons any carriage, motor car, or other vehicle during the period from half an hour after sunset to half an hour before sunrise".*

Over time, this particular regulation has been relaxed and similar to Telegraph Car Park, Springwell Car Park is open 365 days a year and parking is available 24 hours a day. As a result, this car park is only closed to the public in cases of emergency or at times when repairs are required.

(Insert: photograph of Springwell car park)

REMPF Car Park: (SW15 3PQ)

If sensibly parked, the REMPF Car Park contains provision for the parking of approximately 170 vehicles. The area from the entrance of the car park towards the sheds and the corner of the pavilion has been surfaced with tarmac while the rest of the car park has been formed of road plainings and compacted soil.

There are four parking bays which have been marked out using white painted telephone poles but there are no line markings as the surface of most of the car park is not suitable to be able to preserve a painted surface. The REMPF Car Park can be accessed directly from the A3 dual carriageway and it is open Monday to Friday 8am to 4.00pm and during weekends from 9am to 4.00pm.

Similar to the Windmill Car Park, the car park at the REMPF, forms another important hub on the Commons. Providing vehicular parking for the majority of the organised sporting events which take place on the Commons, the REMPF Car Park is extremely well used. In addition to vehicular parking, there are also a small number of bicycle racks available and public toilet facilities are located at one end of the pavilion. There are no disabled toilet facilities available near to this car park.

(Insert: photograph of REMPF Car Park)

Telegraph car Park (SW15 3TU)

Telegraph Car Park contains provision for the parking of approximately 25 vehicles. This car park is located next to the Telegraph Pub on Putney Heath and it can be accessed via Telegraph Road or Wildcroft Road. There are no designated parking bays in this car park and therefore it is not always clear for drivers to know exactly where to park. The surface of the car park is comprised of a wide tarmac strip which forms part of a designated cycle route and the actual parking area is made of compacted earth. This car park is open 24 hours a day, 365 days of the year. Apart from the provision of parking spaces, there are no other public facilities available in this area.

6 Health, Recreation and well-being on the Commons

In the opening section of the Wimbledon and Putney Commons Act 1871, there is a passage which reads:

"And whereas it is expedient that provision be made for the transfer from Earl Spencer of his estate and interest in the commons, to a body of Conservators to be constituted so as to represent both public and local interests, whose duty it shall be to keep the commons for ever open and uninclosed and unbuilt on, and to protect the turf, gorse, timber, and underwood thereon; and to preserve the same for public and local use, for purposes of exercise and recreation, and other purposes:

From this passage, it is clear that while we, as the stewards of the Commons, have a responsibility to protect the natural aspect of the Commons, it should not be overlooked that the 1,140 acres of land which make up the Commons were also protected for the enjoyment (re: exercise and recreation) of people. While there are certain activities which are prohibited under the Commons' Bye-laws, there remains a great deal of freedom in which visitors are able to enjoy the Commons.

Activities which may be enjoyed on the Commons include golf, horse riding, running, walking, playing and various organised sports events.

Golf:

Golf has been played on the Commons since 1865, when the London Scottish Rifle Volunteers, who were stationed on Wimbledon Common, established a 7- hole golf course. The Wimbledon Common golf course is the second oldest continuously played course in England and Wales, and pre-dates the formation of the Commons under the Wimbledon and Putney Commons Board of Conservators. Two clubs use the Wimbledon Common golf course. The London Scottish Golf Club formed in 1865 and the Wimbledon Common Golf Club (formerly known as the Wimbledon Town Golf Club) founded in 1908. The course is unusual in that it is used by two clubs, each with their own starting point. The London Scottish Golf Club formed in 1865, start at their 1st tee, Elcho, which is the Wimbledon Common Golf Club's 8th tee. Even more confusing, Wimbledon Common Golf Club's 1st tee is Plateau, which is the London Scottish 12th!

(Insert: photograph of golf on the Commons)

Horse Riding

There are 16 miles of horse rides and two designated horse exercise rings on Wimbledon Common and Putney Heath. The Commons' horse rides are open to all members of the public to ride on, as well as for use by local commercial stables.

Running:

Running is one of the most popular leisure activities which takes place on the Commons. Whether running alone or taking part in organised events, the Commons' play host to organised running clubs and societies, as well as to charity runs and school cross country races.

Running clubs which use the Commons include:

- Belgrave Harriers
- Hercules Wimbledon
- South London Harriers
- Thames Hare & Hounds
- The Veterans Athletic Club (VAC)
- Wimbledon Windmilers
- South London Orienteers & Wayfarers
- Parkrun

Walking:

The Commons provide the perfect backdrop for walking. With a variety of different scenic views to enjoy, the Commons provide a welcome destination for visitors to experience a healthy walk in the country. While all of the Commons is available for walkers to enjoy, care does need to be taken when walking across the golf course or along horse rides.

Walking with dogs:

Wimbledon and Putney Commons are a very popular location for people to walk their dogs. While all visitors to the Commons are welcome to enjoy the natural beauty, walking and exercising dogs should be done responsibly and with consideration to others.

It is therefore required that no more than 4 dogs are walked in any one group – regardless of the number of people.

As noted on the Wimbledon and Putney Commons website, please help us to keep the Commons safe and welcoming by following these simple guidelines.

- Keep your dog in sight and under effective control.
- Don't let your dog disturb other visitors
- Please keep your dog off the golf greens and fairways as much as possible.
- Pick up after your dog and dispose of the bag responsibly.
- Be aware of instructions and notices around the Commons.
- Microchip and tag your dog.

Organised Sports on Wimbledon and Putney Commons Common

The Richardson Evans Memorial Playing Fields (REMPF):

Owned and managed by the Wimbledon and Putney Commons Board of Conservators since 1925, most of the organised sporting events on the Commons are hosted at the REMPF. The REMPF is a large grassed sports facility which is located close to the busy A3 road. As part of this sports facility, there is a large pavilion, public toilets and extensive car parking facilities. The REMPF is used by Saturday and Sunday league

football teams and the club house is home to a local football team called The Old Thorntonians.

The REMPF also has outstanding rugby facilities which are used by the London Cornish RFC as their home ground. Within the Pavilion there are ten fully fitted changing rooms and the site is also home to Thomas's London Day School who use the sports pitches, cricket nets and a long jump pit throughout the year.

At the top of the pavilion, there is also another small area that is home to the Thames Hare and Hounds which is the oldest adult cross-country running club in the world. Founded in 1868, this club has been running on the Commons ever since.

In addition to football, rugby and athletics, in recent years, the REMPF has also hosted Australian rules football, ultimate frisbee, dog fly-ball and even Mongolian wrestling.

Cricket

The first record of cricket being played on Wimbledon Common dates back to 1854 when the Wimbledon Cricket Club marked out a field near to the Windmill and used tents as changing rooms. While the Wimbledon Cricket Club moved to Wimbledon Lakeside in 1889, cricket still remains a firm fixture on the Commons. Today, there two cricket fields on the Commons and these are located opposite the reservoir on Putney Heath which is played by the Roehampton Cricket Club and on Putney Lower Common which is played by the Putney Cricket Club. Although both these areas are located on the Commons, the management of both fields is carried out by the teams themselves.

Cycling on the Commons

Responsible cyclists are very welcome. Cycling provides a wonderful way to get around the Commons and it keeps you fit and healthy. Cycling is not however permitted on all areas of the Commons and there are designated cycle tracks which can be used to enjoy the Commons. If you do cycle on the Commons, please be considerate towards other users. The Commons are not part of the transport network and it is important that cyclists know where they can cycle safely and responsibly, so they can enjoy the Commons while also allowing others to enjoy them as well.

Please:

- only cycle on the designated shared use pedestrian and cycle tracks
- always give way to pedestrians and horse riders
- slow down around pedestrians and horse riders
- never exceed 10 mph
- always use you bell to alert other users if you are approaching them from behind.

(Insert: photograph of an organised sporting event on the Commons)

7 Health and safety provisions on the Commons (Jack Rowland)

This information is being prepared by Jack Rowland

8 Tree safety (Jack Rowland)

This information is being prepared by Jack Rowland

9 The Byelaws, their origins and their application. (Richard Thompson: WPCC Senior Keeper)

The Wimbledon and Putney Commons Conservators are responsible for the maintenance and preservation of Wimbledon Common, Putney Heath and Putney Lower Common. The Conservators derive their powers from the Wimbledon and Putney Commons Act 1871. The act provides the Conservators with the powers to make Bye-laws and to ensure and maintain the smooth running of the Commons. They employ a team of six mounted keepers and four horses to enforce theses Bye-Laws. The keepers represent the Conservators on the Commons 365 days a year, providing a highly visible security presence on the Commons, designed to reassure and protect all the Commons visitors.

Keepers are empowered under the Act to enforce the Byelaws. Section 93 of the Act states, that a Keeper has the power to "seize and detain any person offending or having offended against the Act or any Byelaw of the Conservators, whose name and address is unknown and to convey him with all convenient dispatch before a Justice to be dealt with according to law". Therefore, where an offence has been committed under the Byelaws if the person refuses or fails to give their name and address a Keeper can arrest them and produce them before the magistrates. Although this sounds straight forward, the practical application of enforcing the Byelaws in this traditional way are not practical or compatible with the modern Criminal Justice System. Although, ultimately the keepers still have the power to take a matter before the magistrates, the proportional costs and abstractions to the already stretched team, weighed up against the sanctions that could be handed down make such a strategy unworkable.

Byelaws are normally dealt with by way of a fixed penalty notice, which local authorities have the power to issue. The 1871 Act does not provide the Conservators with the power to issue fixed penalty notices. So, the keepers have to adapt and rely on a common sense, practical application of the byelaws. They look to be firm, friendly and polite when dealing with people who have fallen foul of the rules. In the vast majority of cases, pointing out the offence and giving the reasons why a rule is in place and should be adhered to, does normally have a positive outcome.

In situations where someone is unwilling to accept a verbal warning or there is a pattern of repeat offences, Keepers will look to take a more robust approach escalating the matter by reporting the person to the CEO, who will look at the evidence, if there

is sufficient evidence to pursue a successful prosecution, a decision will be taken as to whether we should go forward and seek to obtain a magistrate's court summons or send out a final written warning notice. In the event of any more serious criminal activity on the Commons, keepers will try to secure evidence and work in partnership with the police to support them in taking forward a prosecution. The keepers team try to forge a good working relationship with the local safer neighbourhood teams. When necessary, they can assist in more serious breaches of the byelaws by applying for an injunction or anti-social behaviour orders where the evidence supports such a course of action.

Over time, the pressures on the Commons have grown and more and more people want to be able to enjoy the great outdoors. The benefits of doing so are well documented. The pressure on the keepers to ensure that everyone can enjoy the Commons without interfering or upsetting others, or the environment have increased. But through a common sense, realistic and practical approach to the application of the Byelaws, they continue to be able manage and maintain the harmony of Commons that people love so much.

(Insert: photograph of Mounted Keepers on patrol)

Volunteers

Since the signing of the Wimbledon and Putney Commons Act in 1871, volunteers have continued to play an important role in the history of the Commons. Throughout this history, there has been an unbroken succession of Conservators (commonly known today as trustees) who have volunteered their time to help protect and conserve the Commons. In total, there are eight Conservators. Three are appointed by various Government departments (Ministry of Defence, Home Office and Defra) and five are elected by local ratepayers on to the Board of Trustees via a triannual election.

While the Wimbledon and Putney Board of Conservators share the overall responsibility for the running of the Commons, there are also many other volunteers who help to look after the Commons in a wide variety of ways.

On average, the Commons receive between five and a half and six thousand hours of volunteer help per year. On the Commons we have always worked on the principle that every task which is carried by volunteers on this site provides a meaningful activity that is needed to help look after the Commons. Although the Commons' volunteer programme may grow in the future, it should remain a top priority to ensure that volunteering always benefits the actual needs of the Commons and in this way a real sense of purpose can be maintained among all of our many volunteers. At the current time we are very fortunate in having litter picking volunteers on the Commons on a daily basis and there is usually at least one organised weekly activity that takes place on site, although there may be a short waiting list to join at least some of these groups.

The role of managing organised volunteers on the Commons is the responsibility of the Conservation and Engagement Officer. The member of staff who fills this position is therefore the first point of contact for all volunteers on the Commons and it is their responsibility to ensure that all volunteer questions are answered and all safety requirements are in place prior to any events taking place. Depending on the nature of the volunteering activity that is being carried out on the Commons, supervision of volunteer groups is generally carried out by full-time members of the WPPC team but in time, the on-site supervision of certain volunteering opportunities may become available to suitable volunteer leaders.

To help volunteer leaders to carry out their work, all volunteers are required to inform the Conservation and Engagement Officer if they would like to attend a particular session as numbers can be limited for the attendance at certain events. To help ensure that staff and volunteers remain connected and informed about the role that each other play on the Commons, a quarterly newsletter entitled Common Ground is circulated to staff and volunteers. Contributions for this newsletter are provided by team leaders from each of the Commons departments and from the volunteers themselves. To ensure that this newsletter remains special to staff and volunteers, it is not circulated beyond these groups.

With ongoing tasks such as the management of the Commons' heathland and the clearance of litter to consider, volunteering has become an essential part of looking after the whole site.

At the time of writing the Commons' Land Management Plan, volunteer opportunities on the Commons included:

- Weekend scrub bashing team
- Mid-week volunteer estate team
- Beverley Brook volunteer litter picking team
- Duke of Edinburgh volunteers
- Volunteer litter pickers
- Organised single session volunteer groups
- Farm Bog volunteers
- Wildlife recorders

Weekend Scrub bashers:

The Commons' weekend scrub bashing team first met during summer 2015. Since this time, scores of different individuals have become involved with this group and it's great to acknowledge that even after 8 years, some of the original members of the team are still regularly helping to tackle invasive scrub on the Commons heathland. Supervised by the Commons' Conservation and Engagement Officer, the Commons' weekend scrub bashing team are an essential part of how the Commons' heathland and areas of acid grassland are looked after and without their ongoing commitment, these areas would eventually become lost to woodland.

Managing different areas of the heathland on a rotational basis, the group not only keeps much of the heathland open but a suitable amount of scrub in various stages of growth is also maintained somewhere on the heathland which provides an ideal food source and nesting site for many species of wildlife.

While the social distancing rules that were in effect for much of 2020/21, temporarily disrupted much of the management that would have usually been carried out on the Commons heathland, from 1 April 2021 to 31 March 2022, the Commons' weekend scrub bashers helped to clear invasive trees on areas of heathland adjacent to Green Ride and on heathland adjacent to Roehampton Ride.

(Insert: photograph of scrub bashing along the edge of Roehampton Ride)

Mid-week volunteer Estate Team:

Established in 2018, the Commons' volunteer estate team are a truly flexible group of individuals who meet on a Wednesday morning every three weeks where they carry out a number of activities that are required to look after the Commons. From 1 April 2021 to 31 March 2022, this group have been involved with hazel coppicing along Lower Gravelly Ride, coppicing and the clearance of invasive vegetation at Stag Bog and Ravine Bog, scrub bashing on the heathland to the south of Hookhamslade Pond and painting around the windmill complex.

The Commons' volunteer estate team are currently supervised by a member of the Commons' Maintenance Team who is able to help direct the team where to carry out activities, provide the tools and refreshments and answer any questions about the Commons that may arise during each session. Although this group was formerly supervised by the Commons' Conservation and Engagement Officer, providing other members of the Commons full-time staff with the opportunity to become engaged with volunteering on the Commons has proved to be an ideal method of increasing the skill base of the staff who are involved and helping to close the gap between the work that is carried out by staff and volunteers.

(Insert: mid-week volunteers painting the Information Centre)

Beverley Brook litter picking volunteers:

Established in 2020, the Commons' Beverley Brook litter picking volunteers meet every three weeks on a Wednesday morning where they spend up to three hours removing litter from along the brook. At the current time, this group is managed by Bill Rowland who is also responsible for looking after Putney Lower Common and assisting with a variety of other security and maintenance jobs on the Commons. While there could be scope for this group to be supervised by a suitable volunteer in the future, the presence of a member of the Commons' full-time team means that waders and equipment can be transported from the Rangers Office to the brook and rubbish can be transported to the skip area after the task has been completed.

Duke of Edinburgh Volunteers:

Over the course of the past few years, there have been 165 young people who have helped on the Commons as part of their involvement with the Duke of Edinburgh Award programme. Covering all three levels of the award programme (Bronze, Silver and Gold) from 1 April 2021 to 31 March 2022, there were 89 Duke of Edinburgh volunteers who helped on the Commons providing a total of 711 hours of service in helping to look after the Commons. As many of the Duke of Edinburgh volunteers are under the age of 16 years old, most of the volunteering that is provided by this group involves litter picking. This is an activity that is often carried out under the supervision of a parent or guardian and the person involve simply updates us about their progress through regular emails and by providing photographs of the litter which they have collected.

(Insert: DofE photograph)

Volunteer litter pickers

Although some of the Commons' volunteer litter pickers carry out this activity as part of a group, most people prefer to litter pick independently when out walking or even jogging on the Commons. As a group, the hours that are amassed by the Commons' volunteer litter pickers far outweigh those of any other single group and as a result, the Commons as a whole, would look much poorer without their contribution.

Organised single session volunteer groups:

Each year, local societies, organisations and schools all provide voluntary help on the Commons. These groups are always supervised by a full-time member of the Commons' team as most groups are largely unfamiliar with the Commons and especially the sensitivity that is involved with carrying out tasks on many areas of the Commons SSSI. The activities that are generally carried out by these volunteers include group litter picks and scrub bashing.

Farm Bog Volunteers:

The volunteers that help to look after Farm Bog are supervised by a volunteer leader from London Wildlife Trust (LWT). Their task is to cut back unwanted vegetation from Farm Bog and generally help to protect this important wildlife site for the future. Recently, LWT volunteers have carried out a great deal of cutting back to ensure the extent of Farm bog is returned to a point that is as close as possible to the area that was found at the time of the original Wimbledon Common SSSI designation in 1953. Future activities will include the removal of trees and scrub that will help this site to retain more water than it has been able to for many years and encourage the growth of important sphagnum mosses.

Volunteer Wildlife Recorders

The Commons are truly fortunate to have a number of volunteers who possess specialist knowledge on a wide range of different wildlife subjects. Including expertise on birds, moths, butterflies, dragonflies, damselflies, badgers and plants, the Commons' wildlife recorders provide a valuable source of data that can be used to help manage this important site. Throughout the year, a variety of wildlife walks, talks and training courses are also provided by the Commons' wildlife recorders which help to provide education about many aspects of the Commons flora and fauna. With much of the information that is collected by the Commons' wildlife recorders submitted as part of the Commons' Annual Monitoring Report, thanks to this group, a lasting historical record of the Commons' Natural History is secured.

(Insert: photograph of Volunteer Wildlife Recorders on the Commons)

1.11 – Education and raising public awareness - comms (Ros Taylor/PH)

This work is currently being undertaken by Ros Taylor.

Wimbledon and Putney Commons Land Management Plan:

Objective 1: Lowland heathland

1: Discussion:

Lowland heathland is an internationally important landscape which is listed as a priority habitat for conservation in the UK Biodiversity Action Plan. At the current time, there are approximately 60,000 hectares of Lowland heathland in the UK which is about 20% of the world's resource of this rare and threatened habitat. According to an article published by English Nature in 2002, entitled 'Lowland heathland, a cultural and endangered landscape', there is now only 16% of the heathland area that previously existed in the UK in 1800. In 1800, heathland covered 400,000 hectares of the UK with approximately 230,000 hectares of this found in England.

Lowland heathland is comprised of a mosaic of habitats that are found on extremely impoverished, acidic soils (pH 3.4 to 6.5) which occur in areas with mild temperatures and regular rainfall. The landscape in which Lowland heathland can be found is characteristically open and dominated by low growing vegetation, with areas of bare ground, wetland and scrub.

Through a combination of factors that have included agricultural intensification, afforestation, urbanisation and the decline in traditional land management techniques, the dramatic decline of Lowland heathland in the UK has resulted in a far more fragmented habitat than once existed.

Heathland on Wimbledon Common and Putney Heath:

While there are still significant areas of Lowland heathland in parts of the UK such as Cornwall, Devon, Dorset, Hampshire and even Surrey, in London, Lowland heathland is now limited to only a few remaining sites. This amounts to a total area of 80 hectares of Lowland heathland within the London area with the largest single area of this habitat found on Wimbledon Common and Putney Heath. There are approximately 20 hectares of this habitat which remain on the Commons. In 2022, there were no areas of heathland recorded on Putney Lower Common or north of the A3.

Apart from occasional small areas of heathland that are found around the edge of the Wimbledon Common golf course or near to the southern end of Memorial Ride, most of the Commons' heathland is generally located east of the Inner Windmill Road and Windmill Ride South, on The Plain and on the central area of Putney Heath, north of the Windmill.

As a direct result of the Lowland heathland that can be found on the Commons, since 1952, 364.5 hectares of the Commons' total area of 461 hectares have been designated as a Site of Special Scientific Interest (SSSI). In 1986, this same area of land was also designated as a Special Area of Conservation (SAC). SSSI and SAC designations are only assigned to areas of land in the UK that are especially valuable in terms of the flora, fauna, physiological or geological features that can be found on them and as result, they are provided with a high level of legal protection.

WPCC Heathland: 2022

According to the Commons' Citation for Special Area of Conservation which includes the component of the Wimbledon Common SSSI, the qualifying habitats of the designation include the presence of European dry heaths and North Atlantic wet heaths with cross leaved heath *(Erica tetralix).* In simple terms, according to Symes and Day (2003), dry heath communities form on free draining soils, where there is very little water retention, while wet heaths have developed on sites that are waterlogged for prolonged periods of the winter. While dry heath communities are often dominated by dwarf shrubs such as heather *(Calluna vulgaris)*, the waterlogged environment of the wet heath restricts the coverage of this species, providing opportunities for a range of other vegetation to develop. On the Commons' remaining areas of wet heath, cross-leaved heath is present, although at the current time, these areas are largely dominated by dense stands of purple moor grass *(Molinia caerulea),* which, if a grazing regime were in place, would be constrained by the presence of livestock.

Like other areas of Lowland heathland, wet heath is vulnerable to a range of management issues that include nutrient increases, woodland succession, a reduction in species diversity and drying out. While the Commons' heathland has been viewed as a single entity within the management section of this land management plan, the special requirements that are necessary for the management of wet heathland such as the need to retain water levels in certain areas of the site have been considered.

2: **Significance**

Historical context:

The origins of heathland can be traced back approximately 7,000 years to a period of history when large wild herbivorous mammals began to roam over much of what is now north-west Europe. While it is generally considered that during this time, much of Britain was covered by trees (approximately 85%), the presence of large wild grazing mammals meant that alongside woodland, areas of open habitat, such as heathland, would have soon developed as natural elements of the landscape. With the arrival of domesticated livestock during the Neolithic period, some 6,000 years ago, and the increase in settled agricultural communities, the creation of a more open landscape would have only increased as trees were felled to provide increased amounts of land for settlement and farming.

Throughout Britain's pre-industrial history, heathlands were found in many areas of the country, with their distribution being a result of environmental factors such as climate, geology, soil type and subsequently, through the results of human design.

As noted by Chatters (2021), "throughout history, the land of Britain has been divided amongst a powerful elite. Heathlands represent a residue of what was left as more valuable tracts of countryside were exploited to the full". For much of Britain's history, heathland would have been regarded by the largely agrarian population as a common element of their every- day existence but today, heaths are often regarded as rather special and rare.

While the remaining area of heathland on Wimbledon and Putney Commons, currently only extends to a fairly limited 20 hectares of land, we know that heathland once extended across huge swathes of this part of Britain and beyond. Providing a tangible link with the past, the heathland on Wimbledon Common and Putney Heath provides an important reminder of the pre-industrial landscape which existed around this part of the world less than 200 years ago.

Cultural and Aesthetic context:

From Old Norse and Anglo-Saxon through to the present day, landscapes which include heathland have been included in literature, poems and film. While sometimes romanticized by authors such as D.H. Lawrence who viewed the heath as a positive antidote to the discomfort of London, heathlands have more often been represented as places of disorder and rebellion. For Shakespeare, the heathland landscape was even portrayed as a place where the noble MacBeth met with the three witches whose predictions ultimately led to his untimely demise.

Often located on the edge of more urban conurbations, heathlands were places where people could meet away from settled society and engage in the less genteel activities that could be found at fairs and sporting events. As with Jerry's Hill on Wimbledon Common, it should also be noted that heathlands were often used as sites where the decaying remains of unfortunate highwaymen and other criminals were exhibited as a warning to others who may be intending to embark on a similar and often short-lived life of crime.

Whether it is presented as fact or fiction, the image of the heath has remained an important part of British culture throughout the ages and while it is hoped that some of the riotous connotations that once surrounded this landscape have now receded into the past, the heathland landscape still has great appeal for the casual visitor of the twenty-first century.

Long forgotten is the fact that heathland often provided the sustenance for people to survive and today, this landscape is more often enjoyed for its somewhat stark beauty during the autumn and winter and the colourful floral display which adorns the landscape between August and October of each year. On more than one occasion, visitors to the Commons have commented that the heather reminds them of a holiday they've had in Scotland or a happy time they may have experienced on the Commons many years before.

Ecological context:

Lowland heathland is one of the most important landscapes for wildlife conservation in Europe. In Britain, a large proportion of heathlands have been designated as SSSI's, which is a status that is awarded to areas of special interest due to their fauna, flora, geological or physiological features. As a result of this designation, certain activities are prohibited and there are strict legal duties concerning how these areas should be managed and protected.

While no two heaths are the same, they all share common characteristics. In general, a heathland forms part of a wider landscape which combines elements such

as woodland, scrub, grassland, bare ground, mires, ponds and running water. It is this mosaic of habitats that makes heathland of such high value to wildlife attracting a wide range of birds, insects, plants, reptiles and mammals.

Although heathlands are in a natural and constant state of change, the condition of each heathland is largely shaped by the landscape which surrounds it. In areas where large expanses of open heathland still exist such as those found in the New Forest and certain areas of Dorset, increasingly rare bird species such as nightjar *(Caprimulgus Europaeus),* Dartford warbler *(Sylvia undata)* and woodlark *(Lullula arborea)* can be found. In addition to this, these important areas also provide the most important habitat in the UK for all six natives reptile species.

But, while large, open heathlands provide the ideal setting for wildlife, the smaller, often fragmented heathlands which can still be found on areas like Wimbledon Common and Putney Heath still have an important role to play in the protection of wildlife. In fragmented heathlands, the main features which define the landscape are the presence of dwarf shrubs such as heather, common gorse *(Ulex europaeus)* and occasionally broom *(Cytisus scoparius)*. In addition to these species, there will also be the presence of various levels of scrub, bracken *(Pteridium aquilinum),* grasses and potentially, patches of isolated bramble *(Rubus fruiticosus);* all of which help to provide a rich source of food or habitat for wildlife.

While there are only a small number of species that wholly depend on heather or gorse for their entire life cycle, it is the gaps in between bushes and the structural diversity that is provided by the mosaic of different aged vegetation that helps to support the wide variety of wildlife that can be found on the heathland.

Perhaps one of the most important elements of this structural diversity is the presence of bare ground which is something that we have been actively managing on the Commons for many years. Bare ground is a key component of the heathland matrix as it provides a valuable breeding and hunting ground for a wide range of invertebrate and vertebrate species.

Bare ground creation carried out by the Commons' Maintenance Team: 2021

3: **Condition**

Approximately every six years, all SSSI land is assessed against the six conditions that are listed below. All SSSI sites are divided into units (although some sites may only have one unit). Each unit is then assessed separately and this can often result in a mixture of 'Favourable, Unfavourable and Destroyed units across one SSSI. At the current time, the heathland that is located on Wimbledon Common and Putney Heath is classified as:

Unfavourable recovering.

Condition assessments for SSSI's

Favourable **-** The SSSI is being adequately conserved and is meeting its 'objectives'.

Unfavourable recovering **-** Often known simply as 'recovering', SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time.

Unfavourable no change **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI unit remains in this poor condition, the more difficult it will be, in general, to achieve recovery.

Unfavourable declining **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to site management or external pressures. The site condition is becoming progressively worse.

Part destroyed **-** Lasting damage has occurred to part of the special conservation interest of a SSSI unit, such that it has been irretrievably lost and will never recover. Conservation work may be needed on the residual interest of the land.

Destroyed **-** Lasting damage has occurred to all the special conservation interest of the SSSI unit, such that it has been irretrievably lost. This land will never recover.

Information taken from Department of Environment, Food and Rural Affairs – condition assessment for SSSI's

4: **Management of the Commons heathland**

While various heathland management agreements have been in place on the Commons since 1985, over the past few years, heathland on Wimbledon Common and Putney Heath has been managed under the prescriptions of the following management agreements with Natural England.

- Higher Level Stewardship (HLS) agreement (2008 – 2017)
- Countryside Stewardship agreement (CS) (2018 – 2022)
- Countryside Stewardship agreement (CS) (2023 – 2027)

At an operational level, over the duration of the Commons' HLS and CS agreements, the management of the Lowland heathland on Wimbledon Common and Putney Heath has included the following operational objectives.

- There should be no loss of heathland which should cover between 50% and 70% of the identified areas of heathland on the Commons.
- Restoration of Lowland heathland on degraded sites dominated by scrub and grass.
- Reduce accumulated nutrients and expose heather seed bank.
- Removal of scrub and invasive trees from heathland sites to achieve a maximum cover of between 15% and 20%.
- Develop a heather and gorse mosaic of age and structure through all four stages of growth to promote wildlife diversity.
- Collect heather seed in October from existing stands for use both on site and on request from other heathland sites.
- Control Purple moor grass.
- Control pernicious weeds such as creeping thistle *(Cirsium arvense)*, common ragwort *(Senecio jacobaea)* and hogweed *(Heracleum sphondylium).*
- Control of non-native species.
- Control of bracken where it threatens flora.
- Control water loss from wet heath by blocking drainage channels.
- Maintain fire breaks.

Current Management:

Since the beginning of 2023, the Commons' heathland and two areas of acid grassland have been managed under a CS mirror agreement which provides a seamless extension to the previous CS agreement that was in place on the Commons. CS mirror agreements have been offered to land-owners and managers where the existing agreement already delivers the environmental outcomes expected. The duration of the current CS agreement will last for a period of five years and following this, it is anticipated that the next phase of heathland management will be carried out under the new Environmental Land Management (ELM) scheme.

Under the ELM, there will be three new schemes from which the Landscape Recovery scheme is best designed to meet the Commons requirements. The Landscape Recovery scheme will support landscape and ecosystem recovery

through long-term projects, such as restoring wilder landscapes in places where it's appropriate, large scale tree planting and peatland restoration. The scheme will begin piloting approximately 10 projects in 2022 and launch in all areas by 2024.

CS Higher Tier management agreement (including mirror agreement)

The aim of the current CS agreement with Natural England is "to provide a mosaic of vegetation which allows all heathland features to flourish, including pioneer heath and bare ground which benefits rarer invertebrates, birds, reptiles and plants".

Heathland management prescriptions within this agreement include the following:

Do not apply any fertilisers or manure
Only use pesticides, including herbicides, to spot-treat or weed wipe for the control of injurious weeds, invasive non-natives, nettles, rushes, or bracken.
Do not plough, cultivate or re-seed
Control and manage birch, oak and other scrub species in all areas managed under this agreement by cutting and stump treating so that by year 5 cover of scrub (not including gorse) in the areas of heathland managed under this option is no more than 10%. Remove all cut materials.
Provide between 2-10% bare ground by scraping back turves in the areas shown managed under this agreement. Do not create bare ground on historic or archaeological features. Do not disturb bare ground with vehicles.
Maintain the full range of age classes of European and western gorse by rotational burning/cutting and removing arisings and or grazing selected stands. Do not flail. Areas dominated by gorse and/or which constitute a fire hazard, must cover no more than 20% of the site European gorse no more than 10%. To control further spread follow with an approved herbicide, applied through stump treatment or with a foliar spray, without damaging the surrounding vegetation.
Maintain fire control measures across all heathland areas.
Manage dense Bracken stands/deep Bracken litter layers rotationally in years 1 to 5 by cutting/bruising/spraying (using an approved herbicide) as appropriate.

All heathland management on the Commons is carried out by WPCC staff and volunteers. As habitat management can be intrusive, all heathland management activities on the Commons are carried out at a time that is least likely to disturb breeding or hibernating patterns of wildlife.

Volunteer on the heathland during 2021

CS Heathland Management Programme 2023 to 2027

Activity	Year 1 (2023)	Year 2 (2024)	Year 3 (2025)	Year 4 (2026)	Year 5 (2027)
Large tree removal (Oct- Feb)	Heathland edge/Jubilee Path	Heathland edge/Wet Heath	Heathland edge/Centre Path	Heathland edge/ Roehampton Ride	Heathland edge/ Green Ride
Scrub management (All year with discretion)	As required	As required	As required	As required	As required
Stump removal (Oct – Feb)	Heathland edge/Jubilee Path	Heathland edge/Wet Heath	Heathland edge/Centre Path	Heathland edge/ Roehampton Ride	Heathland edge/ Green Ride
Heather cutting (mid-Oct)	Area TBC		Area TBC		
Gorse cutting (Oct-Feb, avoid extreme temperatures)		Area TBC		Area TBC	
Bracken control (June-August)	Bracken bruising all areas	Bracken bruising all areas	Bracken bruising all areas	Bracken bruising all areas	Bracken bruising all areas
Bare ground creation (discretionary)		Area TBC	Area TBC		
Firebreak management (summer)	Fire breaks mown	Fire breaks mown	Fire breaks mown	Fire breaks mown	Fire breaks mown
Acid grassland management (Aug-Sept)	The Plain and 2 additional sites mown	The Plain & 2 additional sites mown	The Plain & 2 additional sites mown	The Plain & 2 additional sites mown	The Plain & 2 additional sites mown
Heathland cut & collect (Aug-Sept)	Southern Pound & Green Ride	Southern Pound & Green Ride	Southern Pound & Green Ride	Southern Pound & Green Ride	Southern Pound & Green Ride
Golf course restoration (Oct to Feb)	Area TBC		Area TBC		

Heathland tree work CS agreement 2023 - 2027

Map 1: Putney Heath

Map 2: Wimbledon Common

5: **Vision**

The vision for the Commons' heathland is to ultimately ensure that it reaches a SSSI condition assessment of 'Favourable' which indicates that it is being adequately conserved and meets all the required objectives. This will not however be a simple thing to achieve.

Despite the ongoing efforts of staff and volunteers, Wimbledon Common and Putney Heath provide an extremely fragmented relic of the heathland landscape which would have once covered much of this area of London and Surrey. Such fragmentation has resulted in a heathland that is overwhelmingly species poor and provides a simplified ecosystem that has become separated from the processes which helped it to evolve and subsequently maintain it. As a result of urbanisation, industrialisation and an increasingly wealthy society, the pastoral economy that once secured the ongoing survival of the Commons' heathland has long gone and today, the heathland is managed through wholly artificial means.

In the mid-1960's, conservationist Norman Moore had predicted that as Dorset's heathlands became increasingly isolated, the diversity of species in those areas would inevitably decline. Over a period of thirty years, these predictions were proved correct and in 1994, Rose and Webb, discovered that all and especially the smaller heaths in Dorset had suffered significant species loss. If this was the case for the relatively extensive heaths of Dorset, it can only be assumed that the heathland found on Wimbledon Common and Putney Heath must have also faced a similar set of circumstances.

In addition to the fragmented nature of the Commons' heathland, there are also other factors to consider including disturbance, pollution and climate change. With a large urban population living within travelling distance of the Commons and relatively few large green areas in which to exercise, areas such as the Commons have, over the years, come under increasing pressure from increased recreational use. No matter how benign the intention, sensitive habitats such as heathland have suffered. While this became all too clear during the COVID-19 pandemic of 2020/21, where paths in all areas of the Commons became ever wider and areas of grassland were trampled to mud, over the decades there has been other notable damage caused to the heathland through sustained stresses to the ground.

In the Commons' annual bird report for 2013, its author, David Wills, produced a powerful and impassioned report which stated his opinion about the state of the Commons' birds at this time.

The report stated:

"As in 2011, it is disappointing to have to report that it proved to be another blank year for ground-nesting birds. Much effort was once again aimed at attracting the Skylark back to the Meadow (i.e The Plain) during the relevant months but unfortunately to no avail. One probability being that this bird's basic requirements involve a much greater area of adequate ground cover in which to nest than that presented. Elsewhere much endeavour continues to be expended on the clearing of birch scrub on the plateau, particularly in the Ladies Mile area, where, it has to be

said, the heathland is looking as lush and inviting as ever, and yet still remains noticeably sterile when it comes to attracting bird life. It is difficult these days to believe that during the 1980s, six of the Common's seven ground-nesting birds bred in this area. Certainly, one of the problems in this respect, compared with then, is the number of visitors who forsake the pathways to walk through these sensitive areas. With no controls in place to alleviate this particular problem, such as signage, it seems unlikely that we will ever again experience the comparatively low levels of disturbance that existed a few decades ago. Creating suitable habitat is one thing, protecting it is quite another – each being futile without the other. National declines excepted, it surely cannot be entirely coincidental that the majority of those birds nesting in our trees or in dense scrub are thriving, while those using ground cover have disappeared. Furthermore, if there is no balance, then the ongoing struggle between the freedom of visitors to enjoy recreational pursuits on the Common and that of its ground-nesting birds can only result in the continued depletion of the latter –a scenario that is slowly but surely already being played out at several of our ponds, in which there are often as many dogs as waterfowl these days. One cannot help but recall the words of environmentalist David Bellamy who back in 2000 warned that the greatest danger facing the Common is that it becomes 'loved to death'. –the inference being of course that its increasing magnetism eventually becomes the instrument of its decreasing flora and fauna. Whilst one appreciates and indeed lauds the conservation measures and hard work of both staff and Conservators in this respect, disturbance on the Common in the future is likely to remain unrelenting, so too the challenges, not least of which being the avoidance of becoming too easily resigned to the consequences of its popularity."

Pollution is another factor that can influence the status of the Commons' heathland. With elements such as vehicle use, domestic fuel burning and industrial activity all contributing to aerial pollution, when compounds such as nitrates, nitrites and ammonia are deposited onto the natural landscape, fertility is added to the soil. This has a directly negative effect on sensitive species such as fungi and benefits the fertility of grasses, bracken and bramble all of which can outcompete other important components of heathland flora. In short, a heathland that is polluted by nitrogen will deteriorate in quality and therefore become dominated by a few vigorous, and often unwanted species.

On the Commons' this situation is further exacerbated by the increasingly large number of dogs regularly exercising on the more open heathland and acid grassland areas. Their defecation product, unless cleared up by their owners, will be a source of phosphate enrichment in these otherwise nutrient poor soils. In combination with nitrogen deposition, phosphate enrichment has significant nutrient potential favouring rapid growing species at the expense of slower growing heathland plants. Although dog waste bins are provided regrettably not all owners clean up after their dogs and make use of these facilities.

In addition to pollution there are also the possible effects of climate change. Climate change has global consequences for biodiversity and the general consensus from the scientific community is that we need to act now in order to address the threats which climate change may bring.

According to Chatters (2021), ‘heathlands are highly effective long-term sinks for atmospheric carbon, although there is a huge variation in performance within and between sites. For example, the gleyed soils of wet heaths can hold approximately 438 tonnes carbon per hectare and even parched sandy podzols will hold about 138 carbon per hectare. Counterintuitively, a heathland may store more carbon than a mature forest in the same area.” (Barton et al. 1999)

While much of the information that has been provided above indicates the possibility of a fairly bleak future for the Commons’ heathland, this remains a habitat that needs to be saved. Through our current involvement with a five-year CS management agreement, we are helping to restore areas of damaged heathland, create new areas of bare ground and improve the structural diversity of the entire habitat. While there are many challenges to overcome in achieving a healthier and more bio-diverse heathland, we are making good progress and it is conceivable that at least part of the heathland matrix (increased coverage of dwarf shrubs, bare ground, open landscape) can be achieved over the next few years. As confirmed through correspondence with Natural England in February 2022, a healthy heathland is one where a high structural diversity is present and because of our continued management of the Commons’ heathland under the prescriptions of a CS agreement this too is being achieved which should be seen a measure of success in protecting this important habitat.

In managing an area of heathland that has for many years been almost entirely disconnected from the processes which originally shaped it, one of the problems that we have encountered on the Commons is that while a specific area may feature on a map as heathland, the reality is that over the years, it has become increasingly wooded. In addition to this, some of the trees that are now contained within these wooded ‘heathland’ sites have reached quite an impressive size and therefore in the case of species such as the English oak *(Quercus robur),* it would make very little sense, either ecologically or culturally, to remove these trees from the Commons’ landscape.

Where a high density of established native trees are located on a particular area of the Commons’ heathland, these areas will be looked after in a way that resembles the management of wood pasture or parkland. According to the Woodland Trust (2022), landscapes that are comprised of wood pasture or parkland often provide a mixture of habitats including scrub and dense woodland groves, to more open grassland or heathland with scattered trees. By thinning dense areas of trees that have become established on heathland sites while also retaining a suitable coverage of native species, it is anticipated that the use of techniques such as pollarding will, over time, help to create veteran and ancient trees on the Commons while also helping to provide suitable conditions for heathland flora and fauna to thrive.

As with the establishment and management of heathland, one of the fundamental attributes of maintaining woodland pasture is however the aspect of grazing. As a result, within any discourse on the management of the Commons heathland and associated habitats, the potential reintroduction of grazing animals to the site must be addressed. Although much larger in scale than the Commons, the heaths of the

New Forest which are grazed and still contain strong elements of the pastoral tradition, demonstrate how a heathland can be improved with the presence of large grazing animals.

While the subject of grazing will be covered in a subsequent chapter of the Commons Land Management Plan, the following passage aptly describes what the addition of grazing on the Commons could mean for the continued survival of the heathland.

“The first step to the recovery of Britain’s heathlands is to remind ourselves of the splendour of a working heath, with all the delights and diversity that it brings. A healthy heath is a place where all dependent species are successful in responding to environmental change at their own pace and on their own terms. In such a landscape there is no need to endlessly manipulate the minutiae of ecosystems - if we are successful in caring for the heath, then heathland species should be able to care for themselves. The ultimate objective of intercessions by conservationists is to make future interventions un-necessary.” (Chatters: 2021)

A return to grazing on the Commons?

While the Commons’ heathland represents a far smaller area than it almost certainly covered in the past, there may still be scope to re-claim various additional areas of heathland on the Commons in the future. Remaining mindful of the need to not damage other important habitats that may have become established on the Commons during the intervening years, under a new ELM agreement with Natural England, certain areas of young woodland and scrub could be thinned for the benefit of heathland.

Potential Heathland restoration work under ELM:

Map 1: Heathland south of Hookhamslade Pond

Map 2: Heathland south of The Plain

Map 3: Putney Heath: North of A3

6: **Monitoring assessment – (management targets)**

According to the Commons' current CS agreement with Natural England, indicators of success (not binding) for the management of heathland include the following:

By year 3 there should be a mosaic of short vegetation and patches of undisturbed bare ground of varying size spread throughout the areas of heathland. The bare ground should cover between 5% and 10% of the heathland.
By year 3 there should be 2 species typical of lowland heathland made up of grasses (bents, fescues, wavy hair grass, cotton grasses, purple moor grass, white beak sedge, black bog rush, deer grass) and wild flowers (tormentil, heath bedstraw, sheep's sorrel, bog pimpernel, sundews, bog asphodel, heath milkwort) at least occasionally flowering during May to July.
By year 3, there should be between 25% and 90% cover of dwarf shrubs (heather, bell heather, dwarf gorse), except when wetland indicators are dominant.
There should be a wide range of age classes of dwarf shrubs present. This should include between 10% and 40% cover of pioneer stage, between 20% and 80% cover of building/mature stage , no more than 30% cover of degenerate stage, no more than 10% cover of dead dwarf shrubs.
By year 2, there should be between 5% and 50% cover of Common/Western Gorse present in a range of age classes from pioneer through to degenerate. 90% of gorse cover should be dense, compact stands, usually less than 0.5 ha.
There should be no more than 33% cover of purple moor grass in dry heath and 66% cover in wet heath. It should not dominate to the exclusion of other species but there can be some dense tussocks to help provide structural diversity.

By year 3, there should be less than 20% cover of trees and scrub on the areas of recognised heathland on the Commons.
There should be no signs of recent burning (within the last three years) over at least 95% of the area.
By year 5, there should be the same or increased extent of lowland heathland habitat natural processes permitting.

Wimbledon and Putney Commons Land Management Plan:

Objective 2: Meadow and Grassland Management

1: Discussion

According to the Wildlife charity, Plantlife (2022), 'meadows and other species-rich grasslands now cover less than 1% of the UK which has been a loss of 97% (7.5 million acres) in less than a century. The main cause for these losses has been attributed to the conversion of unimproved grassland to 'improved grassland' or arable land. While this has led to higher economic productivity, in recent years, it has been increasingly recognised that traditional meadows also provide a wide range of important services. As noted by Blakesly and Buckley (2016) these include favourable habitats for pollinators and pest control species as well as carbon storage and positive benefits for human health and well-being.

When referring to an area of grassland as a meadow, traditionally, this term has been used to describe grasslands that are mown specifically for the production of hay. In practice, this means that a meadow is left uncut through spring and early summer and then cutting and the removal of vegetation follows a few months later. In traditional farming communities, the late-summer cut would be followed by a period of grazing that would help to remove any excess vegetation from the site which if left unmanaged would eventually build up into a thick layer of thatch at the bottom of the sward.

As most communities in the UK are no longer in possession of grazing livestock, Plantlife (2022) have suggested that by following a programme of grassland management where vegetation is cut and collected at the right time of year, meadows can be created in gardens, parks, community spaces and along grassy verges. In fact, according to Plantlife, *"any grassland habitat can become a meadow – we just have to let the flowers bloom."*

There are however many different types of meadow and therefore knowing exactly what type of grassland is on the land that you are helping to care for is an important way of managing both expectations and success.

Geology, soil conditions, topography, drainage and land use all contribute to the type of meadow that is available and according to the National Vegetation Classification (NVC) for British plant communities, there are 47 different grassland communities available, many of which have two or more associated sub-communities. All grassland communities are however classified into four main categories: Mesotrophic grasslands, Calcicolous grasslands, Calcifugous grasslands and Montane communities.

Providing a mosaic of different grasses, wild-flowers, rushes, ferns and even fungi, all meadows help to support a diverse range of species. These include invertebrates such as bees, butterflies, grasshoppers and beetles as well as different birds and a wide range of small mammal species. According to Plantlife, there is also evidence to suggest that wildflower meadows can store up to 30% more carbon than a flower-less meadow. Evidence also suggests that meadows are good for us as human beings. Like other natural open spaces, exposure to wildlife can reduce stress and induce a feeling of general happiness and who can argue with that?

Wimbledon and Putney Commons Meadows:

In total, there are 37 different areas of grassland on Wimbledon and Putney Commons. These areas include sports fields, cricket grounds, a golf course, amenity grassland, road verges and areas of natural or semi-natural grassland that are or could be managed under the same general principles of accepted meadow management. In total, the combined area of grassland on the Commons amounts to approximately 89 hectares. From this area, there are approximately 27.18 hectares that could be managed primarily as wildflower meadow sites. This area does not include any potential alterations to the REMPF as this will be covered in Objective number 9.

Understanding the composition of the Commons' many and varied grassland sites has been helped considerably by the information that is available within the Commons' 2016 NVC report. In this report, the Commons' grassland has been broadly divided into acid grasslands and neutral grasslands.

Acid grassland:

Acid grassland occurs on nutrient poor, free draining acidic soils with a Ph lower than 5.5. Often occurring as part of a heathland mosaic, acid grassland is a UK Biodiversity Action Plan habitat and therefore it is a top priority for wildlife conservation nationally.

Along with other local areas such as Richmond Park and Barnes Common, Wimbledon and Putney Commons support important areas of acid grassland.

While the poor soil conditions that are associated with acid grassland result in fairly low growing vegetation, acid grassland is home to nationally scarce plants and invertebrate species and therefore the management of this habitat on the Commons is of high importance.

Although there was no acid grassland recorded on Putney Lower Common during the 2016 NVC survey, on the main block of the Commons, acid grassland dominates the large area of open space at the southern end of Wimbledon Common around Rushmere. It is also found on The Plain and the area that is located east of The Plain.

According to the Commons' 2016 NVC survey, there are two main acid grassland types on the Commons which include U1 *Festuca ovina-Agrostis capillaris-Rumex acetosella* (sheep's fescue-common bent-sheep's sorrel) grassland and U4, *Festuca ovina-Argrostis capillaris-Rumex acetosella* (sheep's fescue-common bent heath bedstraw) grassland. There are also much smaller areas of U2 *Deschampsia flexuosa* (wavy hair-grass) grassland and U20 *Pteridium aquilinum-Galium saxatile* (bracken-heath bedstraw) community that were also recorded.

U1 – Festuca ovina-Argrostis capillaris-Rumex acetosella (Sheep's fescue common bent-sheep's-sorrel) grassland.

U1 is the most dominant acid grassland type in terms of the area that it covers on the Commons. It covers 28.20 hectares which is 67.64% of all acid grassland that is found on the Commons. U1 is a diverse grassland that is often found on thin dry soils with an open sward of small tussocky grasses amongst which some small ephemeral forbs occur. It can grade into other grassland communities when less parched, with red fescue *(Festuca rubra)*, sweet vernal grass (*Anthoxanthum odoratum*) and Yorkshire fog *(Holcus lanatus)* increasing in abundance. U1 acid grassland is found on the Commons in the bulk of the large expanse of grassland south of the Causeway and around the edges of the fairways which surround the Wimbledon Common golf course.

U4 -Festuca ovina-Argrostis capillaris-Gallium saxatile (Sheep's-fescue common bent-heath bedstraw) Grassland.

U4 is a much more luxuriant grassland community than U1, although the two main grass species are the same – sheep's fescue and common bent, in the U4 community they form a much denser sward. The main area of this grassland type is The Plain. A diversity of flowering forbs and a wide range of grass species is found within this grassland type.

The Plain contains the largest area of U4 acid grassland on the Commons

Neutral Grasslands:

Neutral grasslands occur on soils in the pH range of 5-7. Often occurring on damper soils which, historically, have been difficult to cultivate, neutral grasslands have traditionally been used for hay making and are therefore more typical of the popular image that many people may have of a wildflower meadow. According to the Commons' 2016 NVC survey, Putney Lower Common is dominated by neutral grassland most of which are tall grasslands which are very forb poor. The playing fields west of Beverley Brook and adjacent to Vale Crescent on Wimbledon Common also represent a large area of neutral grassland. Elsewhere, this grassland type is much more fragmented and is often associated with road verges, woodland edges and amenity/recreational areas.

According to the 2016 NVC survey, there are two main types of neutral grassland on the Commons. These comprise the tall rank grasslands (MG1) and generally shorter sown grasslands dominated by perennial rye-grass (MG6 and MG7). The three common grassland communities are all forb poor with grasses accounting for the bulk of the vegetation.

MG1 – Arrhenatherum elatius (False-oat grass) Grassland.

This is a community in which coarse-leaved tussock grasses, e.g. false oat-grass *(Arrenatherum elatius),* cock's foot *(Dactylis glomerata)* and Yorkshire fog are always dominant. Cow parsley *(Anthriscus sylvestris)* and hogweed *(Heracleum sphondylium)* are often present with occasional patches of creeping thistle *(Cirsium arvense)*, nettle *(Urtica dioica)* and common knapweed *(Centaurea nigra)*. According to the 2016 NVC survey, many of the grasslands occurring on Putney Lower Common are MG1 communities as are some of the Commons' road verges and unmanaged corners of land. MG1 and its sub communities cover 10,53 hectares (18.71% of all neutral grasslands).

MG7 – Lolium perenne (Perennial rye-grass) Leys and Related Grasslands

In the past, perennial rye-grass has been widely sown into grasslands either to create a productive grassland sward or for amenity grasslands and recreational sports areas and as a result it is the main neutral grassland covering 33.77 hectares (60.04%).

Neutral grassland close to the Oasis Academy on Putney Lower Common

2: Signifcance

Historical context:

With similarities to the origins of heathland, areas of open natural grassland were probably first established and maintained by the presence of large roaming herbivores. As suggested by Peterken (2013) hay making from grass and the creation of meadows must however have coincided with the development of metal blades and therefore, in Britain, haymaking may date back to the Iron Age or even possibly the Bronze Age.

Whatever date haymaking can be traced back to, until the early part of the twentieth century, hay making and the presence of meadows formed an important part of the British landscape encompassing a traditional way of life that had endured for centuries. During the Second World War, approximately six million acres of grassland was ploughed for the production of food and along with it, an essential part of the British countryside almost wholly disappeared within the passing of a single generation.

As mentioned in a short article entitled ‘Happenings at Haseley Mill – Saving Our Magnificent Meadows & Fallen Willow Tree Clear (Floodplain Meadows Partnership:2022) ‘it could be argued that meadows were the resource that underpinned many communities, providing hay for livestock (essential for farming, transport, food, milk) and herbs for medicine and cooking. The article continues that ‘the decline and loss of meadows and species rich grasslands is without parallel in the history of nature conservation in the UK.’

Cultural & Aesthetic context:

> *“For most of the year, meadows are ‘just green’ but the essence of their appeal is colour. For a few glorious weeks in spring and early summer they become a riot of yellow, whites, pinks and purples so spectacular that some become the target of pilgrimages and many are thronged with open day visitors” (Peterken:2013)*

A great deal of work is involved with the traditional management of meadows. Today much of this, such as scything and baling has been mechanised. On the Commons the management of meadows and other areas of grassland appears to simply involve one person or a very small team of people using machinery to cut and sometimes remove vegetation from each site. The analysis of meadow condition, acquisition of suitable equipment or contractors, assessment of weather and other important subtleties go largely un-noticed.

Although the annual arrival of tractors and baling equipment on site may no longer be viewed as a cause for celebration, it is still able to remind us of the historic management practices that incidentally gave rise to diverse meadow flora and fauna and reflected the rhythm of rural lives. Historically, the cultural significance of meadows for those who worked on them or lived close by has given rise to works of art, poetry, song and literature.

Given the very urban surroundings of the Commons, today the mowing, cutting and baling, as seen annually around various parts of the Common, could once again, be promoted locally as both a fun and educational event to witness.

Despite the hard work of agricultural labour, the portrayal of meadows within popular culture and particularly the portrayal of hay making has often led to images of a place and time that was both happy and social and one in which a large proportion of the community worked together for a common goal.

As a result of combined cultural interpretations of the rural idyll, Peterken (2013) makes the point that perhaps “we should not be surprised that, when the conservation of the remaining flower meadows comes under debate, the response goes well beyond biodiversity, scientific interest and environmental services”.

Haymaking on Wimbledon Common: 1950’s

Ecological context:

To appreciate the ecological value of a meadow, it should be viewed alongside the various habitats that surround it. While the sward may be at the centre, the surrounding hedges, bramble, nettle and even trees all form part of the whole functional unit of the meadow. As noted by Kirby (2001), the valuable features of a grassland/meadow site include a complete succession from bare ground to patchy scrub, topographical variation, structural variation, the presence of seed-bearing plants, additional habitats within and around the site and the availability of hibernation sites.

In terms of the flora and fauna that each meadow can support, size is definitely a very important factor but equally important is the type of grassland that is available on each site. According to the Commons' 2016 NVC survey, the various parcels of grassland that can be found on the Commons can broadly be divided into areas of acid grassland and areas of neutral grassland.

In terms of the Commons' neutral grassland which includes areas such as road verges, sports fields and recreational sites, apart from the 2016 NVC survey, the information that we have available to us for these areas is extremely limited as very little co-ordinated surveying has ever been carried out on these areas of the Commons.

As a result of a series of annual monitoring reports that were written by Dr Ros Taylor between 2014 and 2020, the ecological information that we have available to us about certain areas of acid grassland is however far more comprehensive. While the Commons' annual monitoring reports provide ecological data about all areas of the Commons, the focus of each report was very much targeted towards The Plain and its immediate surroundings. Through a combination of Dr Taylor's own biological recording on The Plain and the ecological data that had been provided by various other volunteer wildlife recorders, it was reported in the 2019 annual monitoring report that overall, 67 species of flora had been recorded on The Plain. While this figure was lower than in some previous years, when more typically between 75 and 80 species were recorded, it should be noted that only one person was recording flora on The Plain during this year. It should also be noted that during 2020, there were only 51 plant species recorded on The Plain but this apparent reduction in plant species may well reflect the significant increase in disturbance that was experienced by the Commons during the various COVID-19 'lockdowns' and the inevitable disruption this caused to volunteer recording. Only one recording visit was possible that year.

Despite the fact that acid grassland is considered to be only moderately rich in terms of the vegetation that it can support, Dr Taylor's annual monitoring reports revealed that with the correct management in place, the diversity of plant life which acid grassland meadows are able to support can be quite significant.

In Taylor's 2020 Annual Monitoring Report, it was noted that:

"The characteristic floral elements of The Plain's floral mosaic; Yellow Rattle *(Rhinanthus minor),* Tormentil *(Potentilla erecta),* Creeping and Meadow Buttercup *(Ranunculus repens, R. acris),* Bird's-foot Trefoil *(Lotus corniculatus),* Common Sorrel *(Rumex acetosa),* Ribwort Plantain *(Plantago lanceolata),* Red and White clover *(Trifolium pratense, T. repens)* were all present as were other typical small white-flowering plants, Heath Bedstraw *(Galium saxatile),* Common Mouse Ear *(Cerastium fontanum)* and Lesser Stitchwort *(Stellaria graminae).* In previous years, additions to this list had also included local rarities such as Bee Orchids *(Orphrys apifera)*, Southern Marsh Orchid *(Dactylorhiza praetermissa)* and Adders tongue fern *(Ophioglossum vulgatum).*

If suitable management is in place to provide a wide range of different habitats in and around the edge of a meadow, grasslands can also support a wide diversity of fauna including birds, mammals, reptiles, amphibians and invertebrates. While many visitors to a meadow will notice species such as birds, bees and butterflies, a healthy and well managed meadow can also be home to millions of other less obvious creatures. These will likely include the microscopic wildlife that survives in the soil as well as other creatures that depend on the meadow's living vegetation to lay eggs, pupate and feed.

While there is some variation between the value that different grassland types hold for invertebrates, in general, it is accepted that all areas of unimproved grassland are of high value to invertebrate life and therefore as noted by Kirby (2001) 'the widespread destruction of unimproved grassland over recent decades has had as profound effect on invertebrates as it has on plants.

As discussed by Plantlife (2022), flower rich meadows, pastures and fields in the UK are not only home to over 700 species of wild flower but they also support nearly 14,000 species of invertebrate and are able to store 500% more carbon than fields of pure grass.

While much of the wildlife that is associated with meadows also relies on other habitats, the restoration of as many of the commons' open meadows and smaller associated grassland sites will be invaluable in helping to improve the biodiversity of the whole area.

Yellow rattle (Rhinanthus minor) on The Plain (2022).

3: Condition

Approximately, every six years, all SSSI land is assessed against the six conditions that are listed below. All SSSI sites are divided into units (although some sites may only have one unit). Each unit is then assessed separately and this can often result in a mixture of 'Favourable, Unfavourable and Destroyed' units across one SSSI. At the current time, the only areas of grassland on the Commons that have been included in the condition assessment are areas of acid grassland and these have been classified by Natural England as:

unfavourable recovering.

Condition assessments for SSSI's

Favourable **-** The SSSI is being adequately conserved and is meeting its 'objectives'.

Unfavourable recovering **-** Often known simply as 'recovering', SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time.

Unfavourable no change **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI unit remains in this poor condition, the more difficult it will be, in general, to achieve recovery.

Unfavourable declining **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to site management or external pressures. The site condition is becoming progressively worse.

Part destroyed **-** Lasting damage has occurred to part of the special conservation interest of a SSSI unit, such that it has been irretrievably lost and will never recover. Conservation work may be needed on the residual interest of the land.

Destroyed **-** Lasting damage has occurred to all the special conservation interest of the SSSI unit, such that it has been irretrievably lost. This land will never recover.

Information taken from Department of Environment, Food and Rural Affairs – condition assessment for SSSI's

4: Management of the Commons' Meadows and grassland sites.

The focus within this section of the Commons' land management plan is on the restoration of the Commons' meadows and grassland as opposed to the creation of any additional areas of this particular habitat. As previously discussed, there are broadly two different types of grassland on Wimbledon and Putney Commons and these are acid grassland and neutral grassland. It is the aim of this land management plan to ensure that a suitable programme of management is in place that will help to enhance all the Commons' areas of grassland and meadows for the benefit of wildlife and for the enjoyment of visitors to the site.

As noted by Plantlife (2022), there are many factors that will influence the type of vegetation that is able to grow on a particular site and these include the availability of light, water, weather conditions, soil type and nutrient levels, the slope and aspect and the way in which the land has been used and managed. Without regular and ongoing care, which at the very least, should include an annual programme where vegetation is cut and removed from the site, any open area of land will gradually revert to scrub and eventually woodland. Following the basic principles of looking after the ground conditions of each site to avoid compaction and erosion, cutting and baling at the right time of year and employing a degree of patience to allow nature to do what nature does best should ensure that, over time, all the Commons' meadows and smaller areas of grassland can be vastly improved from the condition in which many of them are currently found.

Cut and collect work being carried out on The Plain during 2021

There are currently 37 separate areas of grassland that are located on Wimbledon and Putney Commons. In total, these areas cover approximately 89 hectares of land. At the current time, these areas are managed for a variety of purposes which include sport, recreation and conservation. All 37 areas of grassland have been listed below with an indication of the priority uses which each area is currently managed for. As with many aspects of looking after the Commons, the management of the grassland and meadows that are located across the three sites that make up Wimbledon and Putney Commons involves a careful balancing act between the needs of people and the needs of wildlife.

As a result, the current management programme for the Commons' meadow and smaller grassland sites has been designed, wherever possible, to achieve both these requirements. It must be appreciated however, that being located within the surroundings of a heavily populated urban environment, a degree of compromise will often be required to ensure that each area is managed for the benefit of all concerned.

Putney Lower Common:

- The Cricket Field – 1.25 ha (sport & recreation)
- All Saints Church Field – 2.8 ha (school sports and recreation)
- PLC Fairground site – 1.29 ha (conservation)
- Main Field – 4.24 ha (conservation)
- Oasis Academy 0.26 ha (conservation and recreation)
- Commondale – 0.22 ha (conservation)
- Old Polo Field – 0.71 ha (conservation)
- Small meadow to the north of the foot bridge – 0.15 ha (conservation)

Putney Lower Common grassland sites

Putney Heath (North of the A3)

- Conservators Triangle – 0.09 ha (conservation)
- Roehampton War Memorial/Medfield Street grassland – 0.23 ha (conservation and recreation)
- Roehampton Church School slope – 0.8 ha (conservation and recreation)
- The Frying Pan – 0.26 ha (recreation)
- Telegraph Meadow – 0.27 ha (conservation)
- Putney Heath Cricket Field – 1.14 ha (sport and recreation)
- Putney Heath Fairground site – 0.85 ha (conservation)
- The Green Man – 0.22 ha (conservation and recreation)

Putney Heath (north of A3) grassland sites:

Wimbledon Common and Putney Heath (South of the A3)

- Tibbet's Meadow - 0.83 ha (conservation)
- Grassland surrounding the Windmill complex - 1.94 ha (conservation and recreation)
- The Plain – 11.27 ha (9.65 ha conservation) (conservation and recreation)
- Wimbledon Common Golf Course – 21.38 ha (sport/conservation)
- West Place – 0.81 ha (conservation and recreation)
- Southern Pound Meadow – 0.45 ha (conservation)
- Centre Path Lower Meadow 0.23 ha (conservation)
- Causeway Triangle – 0.84 ha (conservation)
- Rushmere – 7.7 ha (pond =0.82 ha) (4.65 conservation) (conservation and recreation)
- Wimbledon Common Fairground site – 3.35 ha (recreation and conservation)
- Wilberforce Field – 0.55 ha (conservation)
- The Scout Field – 0.07 ha (conservation)

Wimbledon Common & Putney Heath (south of A3) grassland sites. The above map does not include the Wimbledon Common golf course as this area will be covered in a subsequent chapter of this Land Management Plan.

REMPF:

- Main Field – 12.07 ha (sport)
- The Splash Field – 1.17 ha (sport including car parking facilities)
- Archery Field – 0.16 ha (sport including car parking facilities)
- Extension Fields – 9.03 ha (sport)

REMPF

Grass Verges:

- Westside Common – 0.62 ha (conservation)
- Southside Common – 0.62 ha (conservation)
- Parkside South – 0.05 ha (conservation)
- Parkside North (Jubilee Path to Tibbets Corner – 0.3 ha (conservation)
- Putney Heath Road – 0.5 ha (conservation)

Roadside verges:

Providing a summary of the general management requirements of the areas listed above, the following points should be noted.

Sports:

From the list of 37 grassland sites on the Commons, eight of these areas are predominantly managed for sporting activities and part managed for recreational activities. These areas include the REMPF, two cricket fields, Wimbledon Common golf course and an area on Putney Lower Common that is used for sporting activities by two local primary schools which contain very little outdoor space within their own grounds for sports and games.

The management of all sporting areas on the Commons will be discussed in subsequent chapters of this land management plan.

Running track on the REMPF Extension Fields

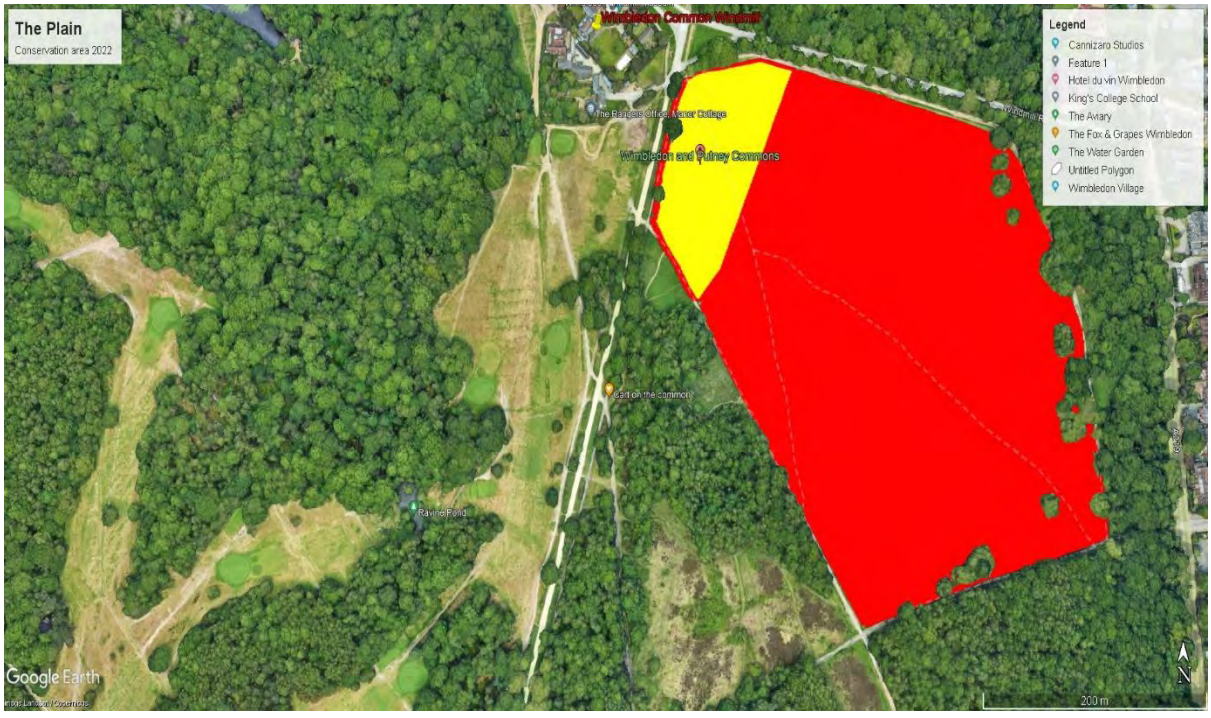
Recreation

From the list of 37 grassland sites on the Commons, 13 of these areas are managed, in part, as recreational areas although in most cases, this requirement is combined with a general policy to improve the conservation value of each site. In practice, this means that most ‘recreational’ sites contain a wide un-own margin around the perimeter of each area and in the case of at least eight of these areas, large areas of each site currently remain unmown during the summer months. The best example of this type of management practice can be seen on the area surrounding Rushmere and on The Plain.

The area surrounding Rushmere is a well-used recreational area on the Commons. At least half of the overall site is left uncut during the summer months and in areas where mowing is carried out, wide uncut margins are grassland are retained for conservation.

On the Wimbledon Common Fairground site, a compromise is made by leaving large areas uncut and mowing other parts of the site to accommodate recreational activities and events such as fairs and the annual Bookfest.

Rushmere and the adjacent fairground site. The areas bordered by red are the only sections of this area that are mown for amenity purposes during the summer. All other areas are left un-cut.



The two photographs above show the area of the Commons known as The Plain. The total area of this piece of land is approximately 11.27 ha. Approximately 9.65 ha (shaded in red) is cut and baled once a year. The area shaded in yellow is mown approximately twice during the summer as this piece of ground provides an important area of amenity grassland that is used for various activities during the year.

Areas of recreation includes a wide range of grassland sites on the Commons and these areas are either located close to significant visitor hubs or they are used for events or as traditional meeting places on the Commons. Some of these areas include the grassland that surrounds the windmill complex, part of the Rushmere site, the Wimbledon Common fairground/Bookfest site and the area that adjoins the Roehampton War Memorial.

Conservation

From the list of 37 grassland sites on the Commons, 19 areas of grassland are predominantly managed for their conservation value and 7 areas are managed for both conservation and recreational requirements. These areas range in size from tiny slithers of road verge through to large meadows such as The Plain.

At the current time, conservation management on grassland sites may include leaving areas completely uncut to managing other areas of land through an annual programme of cut and collect. While this situation may not be ideal, the current programme that we have in place on the Commons is a direct result of the resources that we have at our disposal.

Cut and collect on Tibbet's Meadow 2021

Current programme of cut and collect on Wimbledon and Putney Common (2022)

Areas that are cut and baled by contractors and included in the Commons current CS agreement:

- The Plain (11.27ha) approximately 4/5th of the site is cut and baled and 1/5th is managed for recreational purposes and for use during public events on the Commons.
- Tibbet's Meadow (0.83 ha)
- Centre Path Lower Meadow (0.23 ha)

Areas cut and baled by contractors that are not included in the Commons' current CS agreement:

- West Place Meadow (0.81 ha)
- Wilberforce Meadow (0.55ha)
- Putney Heath Fairground site (historic name and no longer used by the fair. (0.85ha)
- Putney Lower Common Main Field (4.24ha)
- Putney Lower Common Fairground site (1.29ha) (no longer used by the fair)

Areas where a programme of cut and collect is carried out by WPCC staff:

- Oasis Academy Meadow (0.26 ha)
- Telegraph Meadow (0.27ha)
- Southern Pound Meadow (0.45ha)
- Westside Common road verges (0.62ha)

Out of the 19 areas (plus The Plain) that are predominantly managed for conservation, 12 of these areas are currently included within an appropriate programme of management that should help to enhance these sites as wild flower meadows. For the remaining areas of ground, there are four small meadows and four separate areas of road verge that could be included in future cut and collect operations although this would be subject to the availability of resources.

Other areas that are also managed primarily for conservation should be left untouched as they contain a high concentration of large ant hills which is a good indicator of a well established and healthy grassland setting.

Operational considerations:

As noted by Plantlife (2022) at a basic level, caring for any wild flower meadow involves allowing grasses and wild flowers to grow until late summer followed by a programme of cut and collect where all cut materials will be removed from site. Ideally, a suitable level of grazing should then be introduced to the area during autumn and winter as this will help to remove excess vegetation, control the development of unwanted plants, improve the structure of the sward and create gaps that will assist seeds to fall into the soil. To avoid compaction of the ground which

may inhibit the growth of wild flowers, it is also important to ensure that vehicles only access meadow sites where it is absolutely necessary to do so. Unfortunately, at the current time, grazing is not something that we have on the Commons but we do try to mimic the traditional timings and management techniques associated with the care of our meadows as closely as possible.

Timing of cutting

When discussing the management of hay meadows, Perken (2013) suggested that in June, 'the meadow is or should be cut'. He continued, "leave it any longer and heavy rains will flatten the grass, the grass will accumulate less biomass each day and the grass will become steadily less nutritious. Mid-summer provides the best chance of the prolonged, hot sunshine needed to dry and remove hay."

In reality, hay cutting dates can vary from June through to September as work on the ground is often largely dependent on the prevailing weather conditions. As conservation is very much our priority in managing the Commons' various meadow sites, we have however opted to carry out the cut and collect phase of our meadow work during the beginning of August of each year. Following the old saying that you should 'make hay while the sun shines', leaving the summer cut any later than the middle of September could increase the chances of our harvesting work coinciding with wet weather which would prolong the work of the contractor and increase the amount of unwanted arisings that are left behind on each site. Conversely, another factor in having the Commons meadows cut by early August relates directly to the very dry summer of 2022 when the parched landscape of the Commons could very easily have set alight and caused a significant danger to the health and safety of both visitors and wildlife on the site.

By leaving the cut and collect work until later in the summer, we have maximised the chances of allowing the key plant communities on each site to flower and set seed and we also aim to minimise the adverse effects that an earlier cut would have on invertebrate and other wildlife communities. In addition to this work, on some of the Commons' lager meadow sites, such as The Plain, a small percentage of the total area also remains uncut each year. This provides additional areas that will remain undisturbed as well as providing an important foraging area for other wildlife during the cooler months of the year.

Cutting methods

As noted by Parr and Way (1988) 'cutting reduces the abundance of coarse grasses reducing shade and altering the competitive balance to allow more stress tolerant species, especially low growing forbs to survive'. Cutting without the addition of grazing may not be the best scenario but there are still many benefits of carrying out this programme of work, not least the preservation of the open aspect of the meadow itself.

As with all meadow cutting on the Commons, mowing always commences from the centre of the field and moves outwards as this provide an important means of escape for any wildlife moving from the meadow into the surrounding landscape. Care is also taken with the height of the cutting deck to avoid soil disturbance and

the creation of excessive areas of bare ground that can be colonized by unwanted and potentially invasive vegetation. When vegetation is cut on the Commons' larger meadow sites, it is tedded, where equipment is available, and removed from each site as soon as possible to avoid nutrient enrichment of the soil and to prevent the development of a mat of dead vegetation across the ground. As pointed out by Blakesly and Buckley (2016) 'repeated removal of cuttings maintains the low nutrient status of semi-natural grassland, thus inhibiting the growth of more aggressive grasses'.

Control of invasive weeds:

Another important consideration within the Commons' overall programme of meadow management, is the control of invasive and unwanted plant species.

Of all the unwanted plants that have been found on the Commons' various areas of grassland, common ragwort *(Senecio jacobaea)* has proved to be the most invasive. Common ragwort is a native plant species which can be found growing throughout the British Isles. As a native plant it is protected by the Wildlife and Countryside Act 1981, which means that it is illegal to uproot unless it is done with consent from the owner or legal occupier of the land where it is growing.

Common ragwort produces alkaloid toxins which if ingested can lead to neurological and liver damage and in the worst-case scenario, the death of infected animals. Whilst alive, Common ragwort is usually avoided by livestock because of its unpalatable taste. It is however at its most dangerous when cut and dried in hay as it loses its bitter taste and is more likely to be eaten. As a result of the danger that common ragwort poses to livestock, it is one of the five plants listed as "injurious" in the Weeds Act 1959, which required land owners to prevent it spreading. This Act has been updated by the Ragwort Control Act 2004.

Responsibility for assessing the risk and control of ragwort on any piece of land lies with the land-owner or legal occupier of the land.

"Where land is affected by common ragwort, the owner/occupier should make an assessment to determine whether action should be taken to prevent the spread of common ragwort to neighbouring land by establishing the risk posed to grazing animals or forage production" (Defra: 2004)

The following levels of risk have been designated by Defra (2004)

High Risk	Common ragwort is present and flowering /seeding within 50 metres of land used for grazing by horses and other animals or land used for feed/forage production.
Medium Risk	Common ragwort is present within 50 metres of land used for grazing by horses and other animals or land used for feed /forage production.
Low Risk	Common ragwort or the land on which it is present is more than 100 metres from land used for grazing by horses and other animals or land used for feed/forage production. (where there is low risk identified, no immediate action is required).

When assessing the impacts of ragwort removal on the Commons, it should be acknowledged by everyone who uses the site that despite its apparently bad reputation, common ragwort is actually one of the most important plants for wildlife in the British Isles. Over 200 invertebrate species have been recorded on common ragwort in the UK and at least 30 of these species are entirely dependent on this plant. Therefore, a serious reduction in the coverage of this plant on the Commons would result in the loss of a very important source of nectar, food and habitat for a wide range of species.

It is for this reason that ragwort is only controlled on areas of grassland where cut materials may end up as fodder for livestock. In these cases, ragwort is pulled by volunteers and disposed of in a suitable area that is located away from any additional grassland sites. All ragwort that is found on the Commons' and is located away from areas of managed grassland will be left on site and untouched.

Note:

"Common ragwort should be controlled on bridleways where the bridleway runs across grazing land or land used for forage production and where grazing animals may be at risk. Where there is no risk, it should not be necessary to control common ragwort simply because horses will be ridden along the bridleway. It is the riders responsibility to ensure that horse when ridden or lead on a bridleway does not ingest ragwort." (Defra 2004)

The caterpillars of the Cinnabar moth (Tyria jacobaeae) eat the leaves and flowers of Common Ragwort during the summer months.

5: Vision

Despite the highly fragmented nature of the Commons' various meadow sites and the relatively small area that each of these provides, the fact that most areas of the Commons were never cultivated for the production of food is very positive for the successful management of wildflower meadows. As noted by Gough and Marrs (1990), 'low levels of nutrient availability are recognised as crucial for long-term species co-existence in grasslands. The opposite applies in agriculture and horticulture'.

This said, the urban nature of the Commons surrounding environment does provide other issues which need to be dealt with such as the problems caused through the deposition of dog waste on the land and the problems that are associated with atmospheric pollution. While the issue of atmospheric pollution is something that needs to be seriously addressed in the UK, serious action on this point is perhaps something that largely exceeds the scope and influence of the Commons' current Land management Plan.

The issue of dog waste and the effects this has on parts of the Commons' natural landscape is however something which should not be overlooked and therefore it is the duty of this management plan to at least highlight the potential for tighter controls over the way that dogs are allowed to be exercised around specific areas of this site. According to an article entitled 'Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath (Shaw et al date?), in areas where extensive dog walking is allowed, the input of nitrogen, phosphate and potassium from canine faeces and urine clearly has potential to exert a significant fertilizing effect. In areas of the Commons such as heathland and acid grassland, over time, this can lead to a detrimental effect on the balance of flora that can be found at each site. Similarly, according to Bonner and Agnew (1983) a study of public recreation grounds found there was a strong linear relationship between defecation density from dogs and soil phosphorpous, and that in one area, there were high residual phosphorous levels three years after dogs had been banned.

Of course, one way to reduce this problem would be to advocate the establishment of specific and highly sensitive areas of the Commons as dog free zones or at least insist that dogs are kept on lead while in these areas. If this suggestion is however considered to be undesirable or even unmanageable, an alternative improvement on the current situation would be to focus resources on the improvement of public access routes, public signage and targeted campaigns around areas of highly sensitive ground. While there will always be some people who will act irresponsibly while on the Commons, it has been our experience that where correct and up to date information has been made available on site, visitors have generally, acted according to our requests. One important point of discussion that was raised by Shaw et al (date) was that faecal deposition, soil phosphate and ammonium all peaked at 1 metre from the path. If resources allow, it may be the case that improving the quality of access around highly sensitive areas of the Commons may encourage visitors to remain on these areas with their dogs reducing both the negative impacts of trampling and the deposition of dog waste.

Responsible dog campaign on the Commons 2019.

All said, the Commons still have an amazing opportunity to enhance the condition of many of its open meadow sites. While a great deal of work is already in progress to enhance many of the Commons larger meadows, there are at least 10, if not more, locations that could be enhanced with the right programme of management. It should be noted however that all of this work comes at a financial price and if much of it were to be undertaken by Commons' staff it would also involve a great deal of added pressure to an already very busy workload.

There is however one area of meadow management that has been referred to by Peterken (2013) as belonging to the category of 'meadows on the margins' which will be of great interest to us in the future. According to Peterken, meadows on the margins include areas on the edge of woodland rides, alongside hedges, on railway embankments, in graveyards and on road verges. Although a programme of work has already been started on a few of the 'marginal meadows' that are located on the Commons, by enhancing some of the Commons' road verges, not only could these often neglected areas of land be improved as wild flower meadows but it would also provide a clear demonstration of our commitment to enhancing the quality of our local environment as a whole.

Lower Richmond Road verge along the edge of Putney Lower Common

According to Plantlife's road verge campaign, over 700 species of wild flowers grow on our road verges which is nearly 45% of our total flora and one mile of flower rich verge can produce up to 20kg of nectar sugar per year which is enough to feed millions of pollinators. Plantlife's vision for Britain's road verges is:

"one where they are managed for wildlife as a matter of course. Restoring flower-rich habitats along our road network ensures the survival and natural spread of both common and rare species – for their own sake, for the sake of the wildlife they support, for the environmental benefits they bring and for that all-important contact with nature for Britain's road users". (Plantlife: The Good verge guide: 2022)

While the first priority of managing the Commons' road verges must always remain the safety of pedestrians and road users alike, the argument that is presented by Plantlife for the management of road verges as 'mini-meadows' is compelling and certainly something that could be achieved on the Commons without a disproportionate investment in either time or money.

With the correct investment in suitable equipment and under trained supervision, the ongoing management of certain road verges on the Commons could potentially be carried out, in part, by volunteers which would ultimately provide a real sense of

community involvement with this worthwhile conservation project. As with all other meadow work that takes place on the Commons, timing is everything and therefore to maximise species diversity, cut and collect work would need to be carried out between August and September of each year. If possible, it would also be of benefit that more than one cut is carried out per year and this second cut should take place before Christmas or very early in the year as this will further help to mimic the pattern of traditional management.

While there may be a viable seed bank of wild flowers on each site to help with the establishment of each road side meadow, if initial attempts prove unsuccessful, plug plants or even yellow rattle could be used to enhance each area. With the appropriate selection of native wild flowers, the Commons' road verges could be significantly transformed from largely unnoticed corridors of rough grassland to areas that are brimming full of colour and wildlife.

As part of any vision for the future management of the Commons' various meadow sites, the question of grazing should be explored.

As noted by Blakesly and Buckley (2016) grazing is often cited as the best management option for grassland restoration as it can maintain diversity in the sward and provide bare ground for regeneration. It has now been just over 100 years since grazing ceased on the Commons and perhaps the reintroduction of this traditional management technique is no longer a viable option for what has after all become a very urbanised landscape. The question of reintroducing livestock back to the Commons is however something that is repeatedly raised from one year to the next and therefore perhaps now is the ideal opportunity to find out whether grazing could ever conceivably return to these Commons.

Wimbledon Common photographed in the early 20th Century

6: Monitoring Assessment (management targets)

There are two main grassland habitats that require monitoring on Wimbledon and Putney Commons. Those are areas which fall under the category of acid grassland and those areas which fall under the category of neutral grassland.

The monitoring for both types of grassland habitat on the Commons is in accordance with the JNCC Common Standards Monitoring Guidance for Lowland Grassland Habitats (2004). Contained within this guidance, there is a set of conservation objectives for monitoring five distinct grassland types. There are however a set of general guidelines that have been provided by the JNCC which can be used to monitor all these different areas.

> "For all lowland grasslands, habitat extent and specified features of the sward composition (according to grassland type) should be treated as primary attributes. These are the habitat characteristics that are recommended for determination of community condition. If a sward falls below the quality threshold or target for one or more of these, then the feature is deemed to be in unfavourable condition". (JNCC 2004)

According to JNCC guidelines, a practical approach for monitoring most lowland grassland sites is to make structured and consistent field inspections to each site. Timing of monitoring needs to be made in advance and in most cases, it is suggested that grassland sites can be assessed over much of the spring and summer growing season when the indicator species are present. Within the JNCC monitoring guidance, there are two grassland attributes that are not taken into account because of resource constraints and these include species diversity and productivity.

With reference to the grassland monitoring that was carried out by Una Sutcliffe and Ros Taylor from 2014 to 2020, it has been reported by Taylor that the best recording was made from late April until early June of each year. To ensure that monitoring of the Commons important grassland sites continues into the future, it would be appropriate for either one or more volunteers to carry out this activity. Alternatively, this may also be achieved through a dedicated funding stream that would allow the Commons to employ the services of a professional ecologist at regular intervals (2-3 years) to help record the condition of many of the grassland sites that are located around the Commons

UK Guidance on Conservation Objectives for Monitoring Lowland Acid Grassland.

Attributes	Targets	Method of assessment	comments
Extent	No significant loss of feature.	Comparative assessment with vegetation map or aerial photos	Recoverable reduction = unfavourable Non-recoverable reduction = partially destroyed.
Sward composition: frequency of positive indicators	As a generic standard, the frequencies of positive indicators should at the very least, conform the presence of the target community.	Structured observation or sampling Volunteer help required	Normally, a decline in the frequency of key indicators will suggest declining quality.
Sward composition: frequency of negative indicators	As a generic standard, no species should be more than occasional throughout the sward or together more than 5% cover.	Structured observation or sampling Volunteer help required	Examples of negative indicators are… Cover targets of less than 5% are not generally recommended.
Sward composition: Cover of negative indicators: rank grasses	Targets should be set to register high or increasing cover as unfavourable.	Structured observation or sampling Volunteer help required	Care should be taken with the setting of targets as thresholds may vary considerably by site and conservation goals.
Sward composition: Cover of negative indicators: scrub	Targets should be set to register high or increasing cover as unfavourable. As a generic standard, woody species and bracken together should be at no more than 5% cover.	Structured observation or sampling Volunteer help required	These targets should be used with caution. Scrub and tree cover can form a useful transition habitat across part of a site.
Sward structure: average height.	As a generic standard, sward height should be within the range 1-25cm.	Direct measurements at points across stand. Volunteer help required	Locally, sward heights may vary considerably and in some cases may be

			in patchily unfavourable condition. Bear in mind that some invertebrates require a range of sward heights.
Sward structure: litter	Target should set to register high or increasing cover as unfavourable. As a generic standard, total extent should not be more than 25% cover of the sward.	Structured observation Volunteer help required	The percentage of litter can be hard to estimate. Only include a continuous, readily observable layer in the cover estimate. Beyond 25% cover would indicate insufficient removal of biomass by grazing or cutting.
Sward structure: extent or bare ground	Asa generic standard, total extent should be no more than 10% of the sward.	Structured observation Volunteer help required	The percentage of bare ground can be hard to estimate so it is recommended that only the bare ground visible without disturbing the vegetation be included in the cover estimate.

UK Guidance on Conservation Objectives for Monitoring Lowland Meadows (Neutral Grassland)

Attributes	Targets	Method of Assessment	Comments
Extent	No significant loss of feature	Comparative assessment with vegetation map or aerial photos	In exceptional circumstances, target maty be set to accept some loss to other habitat, e.g. if required by specialist taxa. Assessing loss will vary according to site and available vegetation maps and/or aerial photos.
Sward composition: grass/herb ratio	Target should be set to register a low or decreasing herb cover as unfavourable. As a generic standard, the grass:herb ration should fall within the range 40-90% herb cover.	Structured observation Volunteer help required	The grass:herb ratio is often regarded as a useful indicator of soil nutrient status, where competitive grasses generally increase at the expense of other taxa under high nutrient conditions. The grass:herb ratio fluctuates due to weather effects, e.g. a wet spring may favour grasses over herbs.
Sward composition: frequency of positive indicators	As a generic standard, the frequencies of positive indicators should, at the very least, confirm the presence of the target community.	Structured observation Volunteer help required	When setting targets, select a number of representative species (normally 2-6). Care should be taken to choose species that show high fidelity to unimproved neutral grassland.
Sward composition: frequency of negative indicators: weeds (?)	As a generic standard, no species should be more than occasional throughout the sward or together more than 5%.	Structured observation Volunteer help required	Examples of negative indicators include…
Sward composition: Rank grasses and sedges	Targets should be set to register high or increasing cover as unfavourable.	Structured observation Volunteer help required	Care should be taken with the setting of these targets as thresholds may vary considerably by site and conservation goals.

	As a generic standard, no species be individually at more than 10% cover, or collectively at no more than 20% cover.		
Sward composition: Cover of negative indicators – scrub and tree species and bracken	As a generic standard, woody species and bracken together should be at no more than 5% cover.	Structured observation Volunteer help required	Targets should be used with caution. Scrub and tree cover can form a useful transition habitat across part of a site, but if more than occasional throughout a sward, even at less than 5% cover, scrub and bracken can soon become a problem.
Sward structure Average height	As a generic standard, in hay meadows, the lower limit is 5cm, with no upper level.	Direct measurement at points across stand Volunteer help required	Locally, sward height may vary considerably and in some cases may be in patchily unfavourable condition. Bear in mind that some invertebrates require a range of sward heights.
Sward structure litter	Target should be set to register high or increasing cover as unfavourable. As a generic standard, total extent should be no more than 25% cover of the sward.	Structured observation Volunteer help required	The percentage litter cover can difficult to estimate, so it is recommended that only a continuous, readily observable layer is included in the cover estimate. Beyond 25% cover would indicate insufficient removal of biomass by grazing or cutting.
Sward structure Extent of bare ground	As a generic standard, total extent should be no more than 5% of the sward.	Structured observation Volunteer help required	The percentage of bare ground can be hard to estimate so it is recommended that only the bare ground visible without disturbing the vegetation be included in the cover estimate.

Wimbledon and Putney Commons Land Management Plan:

Objective 3: Woodland Management:

1: Discussion

If left un-managed, the natural tendency for most of the land in Britain would be to eventually develop into woodland. With open land invaded by trees such as oak, birch, hawthorn and ash, a process of natural succession is carried out where one kind of vegetation is simply replaced by another.

According to the Woodland Trust (2022), although woodland coverage has gradually increased in the UK since the 1940's, much of the initial woodland gain was through the planting of non-native conifer plantations. As described in the Woodland Trust's report entitled 'State of the UK's Woods and Trees 2021', in the years that immediately followed the end of the Second World War, 'many of the surviving ancient semi-natural woodlands (ASNW) were felled to increase the area available for farming or simply felled and replanted as conifer plantations for timber production'. This decision resulted in devastating consequences for many species of wildlife that were dependent on ancient woodland.

Recognising the damage that had been caused, in more recent times, many of the conifer plantations that were planted on former sites of ancient woodland are now being restored to predominantly native woodland.

Despite an increased awareness by government of the need to plant more trees throughout the British Isles, according to the Woodland Trust (2022), “The UK is one of the least wooded countries in Europe with just 13% tree cover compared to the European average of 37%, and only 7% of this is native woodland. To reach the target of 17-19% tree cover recommended by the Independent Climate Committee, trees will need to be planted on an unprecedented scale.”

Despite the increase in the UK’s woodland coverage, the UK State of Nature Report 2019, concluded that through a combination of factors which include the lack of appropriate management, over grazing by deer, increased recreational disturbance and nitrogen pollution, nature in woodland remains under pressure. As reported by the Woodland Trust (2021), just 7% of Britain’s woodland is currently in good ecological condition. Those areas of woodland that are in poor ecological condition are characterised by low levels of deadwood, few veteran trees and a lack of open habitats within the woodland setting. Other factors that characterise poor woodland condition include low diversity in the ages of trees and low species diversity.

The pressures that affect woodland and trees in the UK are diverse and dependent on location and species but over a relatively short timescale, most woodlands in the UK have been affected by a series of pests and diseases which have often caused immense damage to the areas which they have colonized. Some of the most devastating tree diseases to have arrived in the UK within living memory have included Dutch elm disease, Ash dieback, Acute Oak decline and the pathogen *phytophthora ramorum* which causes extensive damage and death to more than 150 plant species including some forest species.

In terms of tree pests, perhaps the species which has recently caused the most dramatic effect on both tree and public health has been the oak processionary moth (OPM). OPM (*Thaumetopoea processionea)* is a non-native species of moth that was first introduced to the UK (Kew, West, London) in 2006. The caterpillars of OPM mainly target oak trees and present a hazard to human and animal health. Developing tiny hairs which contain an irritating protein called thaumetopoein, contact with the hairs can cause itching skin rashes, eye irritations and in some cases, can result in sore throats and breathing difficulties. Despite active management of this pest by the Forestry Commission (FC) and various landowners, at the current time, OPM has become established in most of Greater London and in some surrounding counties. OPM has been present on Wimbledon and Putney Commons since 2011 and it is managed on an annual basis.

OPM photographed on the Commons' during 2021

Woodland on Wimbledon and Putney Commons:

The woodland on Wimbledon and Putney Commons is classified as secondary woodland as it has developed on what was formerly open common land. The woodland on this site is therefore comparatively young and there are very few trees beyond the age of 150 years old.

While it is traditional to describe a woodland in terms of the dominant tree species, like many secondary woods, the overall woodland area on Wimbledon and Putney Commons is comprised of a mosaic of species which include both native and non-native species. Native trees are those which naturally colonized the British Isles following the last ice age and this includes a total of 33 different species. Non-native species are those which have subsequently been introduced by people, some of which have become naturalised or established in a region other than their place of origin.

According to the Commons' 2016, NVC report, woodland is clearly the largest habitat type recorded across the whole area of Wimbledon and Putney Commons, covering approximately 291.89 hectares. Scrub communities cover a further 11.34 hectares of the site.

While other trees are present on the Commons, the NVC survey categorised the majority of the woodland on the Commons as oak-bramble-bracken – typical subcommunity *(W10a, Quercus robur-Pteridium aquilinum-Rubus fruticosis).*

Combined with the various smaller sub-communities of W10, this covers 254.76 hectares (90.69%) of the total woodland area. The main other noteworthy woodland type is oak-birch-wavy hair grass *(Quercus spp-betula spp-Deschampsia flexuosa)* comprising 9.06 hectares (3.32%) with a substantial mosaic area or transitional community (14.87 hectares) between these two woodland types. As noted in the report, other woodland habitats are very limited and confined to small areas of willow woodland *(W1, Salix cinera-Galium palustre),* birch-purple moor-grass woodland *(W4, Betula pubescens-Molinia caerulea)* and alder-nettle woodland *(W6, Alnus glutinosa-Urtica dioica).* Combined, these communities cover less than 0.5 hectares.

Essentially, *W10, Quercus robur-Pteridium aquilinum-Rubus fruticosus* (oak-bracken-bramble woodland), is classed as a variable community in which floristic differences are related to the condition of the canopy and underwood. Typically, W10 is however a pendunculate oak woodland and although the cover of oak can vary considerably, oak is without doubt the most common tree. As found on the Commons, within this woodland category, silver birch is almost always the next most common tree with a mixture of other species such as lime, sweet chestnut, hornbeam, beech, sycamore, holly, hazel and rowan found to a lesser degree around the woodland.

The ground flora in the typical sub-community (W10a) is generally species poor with three constants – bramble, bracken and honeysuckle. This description is certainly apparent on the Commons where the dominant species are bracken, bramble, ivy, honeysuckle and the occasional and localised appearance of bluebells, although some of these appear to be hybrid plants that, at some time, were planted by persons unknown. Other woodland ground flora across the site is sparse but species such as wood avens, enchanters nightshade and *Dryopteris* ferns were found during the Commons' 2016 survey.

In addition to the W10 classification of the Commons' woodland, the 2016 NVC report also recognised other woodland areas which did not fit into the NVC classification. These areas included planted lines of trees adjacent to main rides or roads around the Commons, small areas of broadleaved plantation, coniferous plantations and natural hedging. In general, planted lines of trees around the perimeter of the Commons have historically included London plane, horse chestnut, lime, poplar species and occasionally oak. Coniferous plantations have included Scots pine and Austrian pine and the only native hedging that has been planted on the Commons can be found encircling the REMPF Memorial Garden, a small section of ground near to the London Scottish Golf club 1st tee and a small area outside of the Manor Cottage fenceline.

Although woodland is found in most areas of the Commons', there is little woodland found on Putney Lower Common and the NVC report suggests, that which does exist has a low conservation value as much of it originates from recent planting.

To summarise, according to the Commons' 2016 NVC report, almost two thirds of the area that was surveyed on the Commons has been classified as woodland, scrub or underscrub communities. Most of the woodland is oak dominated with local areas of birch dominance. Turkey oak, sycamore and Norway maple are three non-native species that contribute significantly to the woodland area, especially in the woods in the northern half of the site. Other non-native species are much less frequent and are scattered throughout the site. Some of these species include horse chestnut, sweet chestnut, holm oak, London plane and Austrian pine. The shrub layer is generally species poor often dominated by species of saplings in the canopy with locally dominant areas of holly. Yew and wild cherry occur frequently whilst hazel and hawthorn are occasionally present.

In some areas recreational pressure in combination with a dense canopy has created areas of almost bare ground. Small gaps in the canopy occur across the site, often as a result of trees dying, falling over or of localised management. Otherwise, there are few woodland glades.

Additional areas of mixed woodland were planted on Putney Lower Common during 2016 as part of the Oasis Academy development work.

2: Significance

Historical Context:

As written by Oliver Rackham (1976), “The woodland history of the British Isles is the sum of thousands of histories of individual woods, everyone different from every other.” While there remains varying opinions about the actual extent of woodland that may once have covered the British Isles, the history of British woodlands should really begin approximately 12,000 years ago when the last ice age receded and the warming climate provided suitable opportunities for tree growth.

Providing readily available materials for building and for the expansion of settled societies, the history of woodland around the British Isles has been one of ongoing management where woodlands have been exploited for the resource which they are able to supply. As far back as 1086, the Domesday book which was commissioned by order of King William I as a detailed survey and valuation of landed property in England and part of Wales recorded that even at this time, England was not very wooded. As noted by Rackham (1976), at this time, woodlands in England were part of the cultural landscape where every wood belonged to some person or community and every woodland, in some way, was used for the products which they yielded.

Following the survey of 1086, a steadily expanding population increasingly put pressure on the land and consequently, over many centuries, woodland gradually decreased until, by the end of the First World War, it covered little more than 5% of the English countryside. While the expansion of agriculture has been cited as the single biggest factor for the destruction of native woodland in the UK, another important cause for its demise has been through modern forestry practices. Following the end of the First World War, the FC was established to help restore forests and woodland in the UK which had become badly depleted as a result of the large-scale felling that had taken place during the previous four years of war and during late and mid-century conflicts.

Purchasing large amounts of land during the 1920’s and 1930’s, by 1934, the FC had control over 900,000 acres of land. While this land was considered as essential for the nation’s economic well-being, especially in the eventuality of war, one of the ongoing criticisms that has been directed towards the early years of the FC has been towards its reliance on the planting of non-native conifers which, when compared to a native broadleaved woodland, provide very little benefit to the biodiversity of the area which they cover. Fortunately, in more recent years, recognition of the importance of native broadleaved woodlands has increased. Technology too has changed with little demand for woodland products in the context of modern warfare. Climate constraints and poor soil conditions also mean that domestically grown softwood timber is often unsuitable for structural purposes.

As noted in the State of Nature Report 2019, “With growing recognition of the conservation value of native woodland, many new woods and re-plantings now use diverse tree mixtures or allow natural regeneration and follow sustainable management practices, in accordance with UK Forestry Standard”.

Perhaps the largest forest and woodland creation project to have recently been initiated in the UK has been the creation of the National Forest. Covering an area of approximately 200 square miles around the midlands of England, according to the National Forest website (2022), to date, 8.9 million trees have been planted across parts of Derbyshire, Leicestershire and Staffordshire which in their words have literally turned the previously industrial landscape from 'black to green'. With the aim of linking the two ancient forests of Charnwood and Needwood, the aim of the National Forest is to create a forest for everyone with facilities for recreation and providing homes to a thriving population of plants and animals. Although the landscape of the National Forest encompasses many different habitats, the planting of 8.9 million native trees is clear evidence of the importance that native woodland holds for both the people and the wildlife of this nation.

Although extremely small in comparison to the National Forest, the woodland that is found on Wimbledon and Putney Commons is of equal importance to the local residents, visitors and wildlife of this area and for this reason, our commitment to conserving and enhancing this precious habitat remains paramount within our management plans.

Cultural and Aesthetic context:

Throughout world history, where trees have appeared, they have often formed an important part of the cultural landscape. As noted by Miles (2006) 'synonymous with strength, resolution, dependability and endurance', for the people of the British Isles, oak trees in particular and the woodlands in which they are found have featured in many different facets of cultural life including religion, song, poetry, stories, place names and even the names of pubs. According to Harris (2003) there are also 736 oak trees that have been named across the country with some of the most famous of these being the Major Oak in Sherwood Forest and the Bowthorpe oak in Lincolnshire.

While the oak tree has played a very special part in the cultural history of the British Isles, trees and woodlands in general, also offer a very tangible link with nature. As suggested by Rackham (2006), 'many woods, whether nature reserves or not, are in effect public places and therefore woods are now appreciated, though not yet fully understood, as never before.' Set up in 1952, the Woodland Trust is the UK's largest woodland charity which helps to protect over 1000 woodlands around the country. Over the past 50 years in which this conservation charity has been in existence, its core aims of planting, restoring, protecting and caring for woodlands have increasingly resonated with the British public. By 2022, the Woodland Trust had attracted approximately 500,000 members or supporters and had managed to plant more than 50 million trees and according to the charity's website (2022), over the course of the next five years, they are aiming to plant another 50 million trees.

In addition to the cultural and aesthetic value of woodlands, in recent years, woodland environments have increasingly been recognised as places of learning. Through the advent of forest schools and nature-based learning activities, woodlands have become increasingly popular destinations and we are very proud

that our woodland on the Commons now host groups of school children and forest schools almost on a daily basis.

While the value of woodlands has become increasingly recognised in the education of children, over recent years, it has also become increasingly apparent that woodlands and visits to nature in general, provide significant benefits for mental health and a sense of well-being. Although academic research in this area of healthcare is still at the early stages in the UK, according to McEwan et al (2021) controlled trials of forest bathing have recently been carried out in the UK, demonstrating an increase in heart variability which means the body is better able to tolerate or recover from stress. In addition to this, exposure to the natural environment is also thought to provide improvements in positive emotions, nature connection and compassion.

Forest bathing is a concept that emerged in Japan during the 1980'S as Shinrin-yoku, which literally means forest bath and while there is no standardised approach to what is fully involved in this discipline, the practice of using one's own senses to become immersed in the woodland environment is certainly something that we should all be encouraged to participate in. According to Farrow (2019) a review of field experiments on the effects of forest bathing on anxiety and heartrate variability found that "practising forest bathing was found to lower blood pressure and heart rates, introduce positive mood and reduce anxiety levels.

The majestic oak has captured the imagination and formed part of national culture for hundreds of years. for centuries.

Ecological context:

Broadleaved woodlands provide Britain's richest and most diverse habitat. Although woodlands are in a continual state of change, they are home to a wide range of flora and fauna including some of Britain's rarest birds, invertebrates and mammals.

According to the W10 (oak-bracken-bramble woodland) classification which has been ascribed to the majority of the Commons' woodland, the pendunculate oak, otherwise known as the English oak or common oak, is by far the most common tree that is found on this site. Supporting a greater variety of wildlife than any other native tree species found in the British Isles, the two native species of oak, English oak and sessile oak, provide food and shelter for wildlife throughout all stages of their very long life.

While these two native oaks will often exceed 500 years, according to the Woodland Trust (2020), there are at least 117 oak trees in England that are aged between 800 and 1,000 years old. In terms of longevity, the only other native tree species which regularly exceeds the lifespan of the oak is the yew tree which can occasionally live for up to 3,000 years.

According to the Sherwood Forest website (2022), the Major oak is aged between 800 and 1100 years old. It is the biggest oak tree in Britain, with a canopy spread of 28 metres, a trunk circumference of 11 metres and an estimated weight of 23 tonnes.

According to Miles (2006) it has been estimated that almost 500 invertebrate species are reliant on oak trees and when added to the number of birds and bats that feed, nest and roost on these trees, the importance of the oak tree within the woodland setting becomes abundantly clear.

The oak is however not the only tree which is of benefit to wildlife. Using information that was initially researched by Southwood (1961) which is based on tree foliage eaters, the following table is nonetheless a very good indicator of the importance that a number of common trees and shrubs that are found within British woodlands have for invertebrates.

Tree or shrub	Associated Insect species
Oak (penduculate & sessile)	284 (423)
Willow species	266 (450)
Birch (silver & downy)	229 (334)
Hawthorn	149
Blackthorn	109
Poplar species	97
Crab apple	93
Scots pine	91
Alder	90
Elm	82
Hazel	73
Beech	64 (98)
Ash	41
Spruce *	37
Lime	31
Hornbeam	28
Rowan	28
Field maple	26 (51)
Juniper	20
Larch *	17
Fir *	16
Sycamore*	15
Holly	7 (10)
Sweet chestnut *	5
Horse chestnut*	4
Yew	4
Walnut *	4
Holm oak *	2
Plane *	1
Rhododendron *	0

*Introduced species * Figures in brackets include mite species as well as insects*

Sourced via www.countrysideinfo.co.uk a few important cautionary notes are however pointed out:

No single tree will host all of the insect species that have been noted at any one time.

No single wood is likely to contain all of the associated species.

Species diversity is not the same as biomass.

The value of a tree for wildlife depends upon its age.

The geographic location of a tree will result in different associated fauna

A healthy woodland should contain the full range of structures in balance which would provide a ground layer, field layer, shrub layer and canopy. Although not all these layers are sufficiently present in most British woodlands, a well- structured woodland provides the most suitable conditions for wildlife to thrive. From the fallen leaves found in the ground layer to the leaves that grow high up in the canopy, every part of the woodland structure provides habitat and food for an important assemblage of wildlife. With a mature English oak producing approximately 700,000 leaves each year and in a bumper year, each tree can produce up to 50,000 acorns from spring through to early autumn the oak woodland is simply alive with feeding wildlife.

Although trees are clearly the most obvious component of any woodland, areas of open space are also vital to enhancing the wildlife value of any woodland site. By providing openings within the woodland canopy and therefore allowing light to penetrate to the woodland floor, the provision of open space provides the opportunity for the growth of nectar bearing shrubs and flowering plants which are so vital for the development of invertebrate variety and biomass. On a sunny day, open spaces that have been created through open rides and woodland glades should attract large numbers of insects including woodland butterflies such as speckled wood, purple emperor, red admiral, comma and painted lady.

Speckled wood photographed in a woodland clearing on the Commons

In addition to the assemblage of invertebrates that are attracted to woodland, the multi-structure that is provided within this habitat also attracts a wide range of bird life which use the woodland as a place to roost, nest and feed. Some species that can be found within the Commons' broadleaved woodland include tawny owl, jay, greater spotted woodpecker, nuthatch, treecreeper and buzzard.

Deciduous woodlands also support a diverse range of mammals. On the Commons, these include badger, fox, weasel, wood mouse, grey squirrel, vole and at least eight out of the 17 species of bats that can be found around the British Isles. As stated within the FC document entitled woodland management and bats (2005), 'all of Britain's 17 species of bat are found in or around woodlands, but some species are woodland specialists as woodlands provide good feeding grounds for bats due to the high availability and diversity of invertebrates'. These species include Bechstein's bat, Barbastelle bat, Natterer's bat, Noctule bat, Lesser horseshoe bat and Brown long-eared bat. Of these six species, two have been recorded on the Commons within the past decade and these are Brown long-eared bat and Noctule bat. To avoid disturbing any roosting bats on the Commons, all woodland tree work is carried out during the winter and outside of the period when females are gathered in roost trees to have their young. Even when trees need to be felled in the woodland as part of the Commons' management programme, all trees which could support bats are checked before any work is carried out. Checks are made to ensure that

any trees that have been targeted for coppicing do not contain woodpecker holes, rot holes, cracks, splits or loose bark, all of which could be used by bats for roosting.

According to the Woodland Trust (2022) “Our most powerful weapon in the fight against climate change are trees. Trees are the ultimate carbon capture and storage machines. Like great carbon sinks, woods and trees absorb atmospheric carbon and lock it up for centuries. They do this through photosynthesis. The entire woodland eco-system plays a huge role in locking up carbon, including living wood, roots, leaves, deadwood, surrounding soils and its associated vegetation.” It is also proposed by the Woodland Trust that for each hectare of woodland, 400 plus tonnes of carbon can be locked up in the trees, roots and soils that can be found on the surrounding ground.

While organisations such as the Woodland Trust fully acknowledge the important role that other non-wooded habitats play in combatting climate change, to help reach the UK government’s 2050 target of becoming carbon net zero, it is considered that the coverage of woodland in the UK should increase from 13% to at least 19%. This would mean that 1.5 million hectares of additional woodland would need to be planted in the UK. According to the Tree Council (2007) depending upon the size of the tree, one large beech tree could produce sufficient oxygen for ten people.

In terms of biodiversity, helping to fight climate change and promoting human health and well-being, the value that is provided by trees and woodlands is immense. It is therefore our duty on the Commons to conserve and enhance the trees and woodland that are found on this site for wildlife to thrive and for future generations of people to enjoy.

3: Condition

According to Rackham (2006) ‘in general, woodlands in Britain are more shady than they have been for thousands of years’. While historically, almost all woodlands around the British Isles were actively managed for the natural resources which they produced, the woodland that is currently found on Wimbledon and Putney Commons had for many years been allowed to develop with very little human intervention. As a result, large areas of the Commons’ woodland are now formed of closely grown trees which has resulted in a structural imbalance that is dominated by a dense canopy. This has reduced the amount of light which can reach the woodland floor and has suppressed the development of any layers which may develop beneath.

While this situation has been addressed in recent years through the Commons’ involvement in various management agreements with the FC and Natural England (NE), there is still a great deal of work that is required to raise the Commons’ woodland to the best possible condition for both ecological and human requirements. Like other areas of the Commons’ SSSI, the Commons’ woodland is assessed against the six conditions that are listed below. All SSSI’s are divided into units (although some sites may only have one unit). Each unit is then assessed separately and this can often result in a mixture of ‘Favourable, Unfavourable and Destroyed units across one SSSI. At the current time, the woodland that is found on Wimbledon Common and Putney Heath is classified as:

unfavourable recovering.

Condition assessments for SSSI's

Favourable **-** The SSSI is being adequately conserved and is meeting its 'objectives'.

Unfavourable recovering **-** Often known simply as 'recovering', SSSI units are not yet fully conserved but all the necessary management measures are in place. Provided that the recovery work is sustained, the SSSI will reach favourable condition in time.

Unfavourable no change **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to the site management or external pressures. The longer the SSSI unit remains in this poor condition, the more difficult it will be, in general, to achieve recovery.

Unfavourable declining **-** The special interest of the SSSI unit is not being conserved and will not reach favourable condition unless there are changes to site management or external pressures. The site condition is becoming progressively worse.

Part destroyed **-** Lasting damage has occurred to part of the special conservation interest of a SSSI unit, such that it has been irretrievably lost and will never recover. Conservation work may be needed on the residual interest of the land.

Destroyed **-** Lasting damage has occurred to all the special conservation interest of the SSSI unit, such that it has been irretrievably lost. This land will never recover.

Information taken from Department of Environment, Food and Rural Affairs – condition assessment for SSSI's

4: Management of the Commons woodland

Despite being classified in terms of a specific habitat type, no two broadleaved woodlands are the same and therefore 'conservation should be based on practical observation rather than unstable theory' (Rackham: 2006). To help protect and enhance the Commons' woodland, over the past two decades there have been a number of important management plans in place which have been jointly agreed by the Wimbledon and Putney Commons Conservators, FC and NE.

In general, the management objectives for these agreements have included the following conditions:

Management Objectives:

No	Objectives (include environmental, economic & social considerations
1	To create a more varied range of tree age & to ensure good succession
2	To maintain & enhance Hazel coppice
3	To reduce the dominance of Holly in the understorey
4	To increase open areas within woodlands
5	To remove invasive non-native species
6	To retain non- intervention areas
7	To retain veteran trees and dead wood both fallen & standing
8	To improve wetland areas and ponds
9	To encourage a wider range of native species
10	To foster resistance against disease & pests
11	To maintain & improve amenity
12	To encourage recreation and education on the Commons
13	To obtain grants where available

To promote a clearer understanding about what some of these objectives actually mean in practice and why their delivery is so important to the continued health of the Commons' woodland, a brief explanation is provided below for some of the most significant elements of woodland management that is carried out on the Commons.

1 To create a more varied range of tree age and to ensure good succession:

As much of the Commons' woodland has developed through a process of natural succession, the result has been the establishment of large areas of even-aged trees that are tightly spaced together and which therefore prevent the growth of new trees and a well-developed woodland structure. To create a more diverse age structure within the Commons woodland, there is a need for tree thinning to be carried out in heavily shaded areas. One way to achieve this would be to reduce the number of non-native invasive trees which are currently found on the Commons and these predominantly include species such as turkey oak, sycamore, holm oak and rhododendron. While some woodland thinning has been carried out over the past few years, in general, the Commons' woodland would be significantly improved as a result of further tree thinning being carried out.

2 To maintain and enhance hazel coppice:

As noted in the Commons' 2016 NVC report, 'there is a distinct variation in the occurrence of hazel on the Commons' with much more of this understorey shrub recorded in the woodland to the south and west of the site, whilst it is only rarely recorded in the woodland east of the Inner Windmill Road and Windmill Ride South.

Wherever a significant number of hazel are found on the Commons, they are managed by WPCC staff and volunteers on a rotational basis where it is generally re-coppiced every 5-7 years. While coppicing is one of the oldest woodland management techniques that is still in use, its implementation is fairly straight forward and simply involves cutting the vertical shoots back to the tree stump or stool. By the following spring, new shoots will have emerged which provide an indefinite crop which in the past was harvested for a wide range of uses including fencing and wooden handles for tools. Today, all coppiced materials are used to create dead hedges or if requested at the correct time of year, they have also been supplied to local artists and even to local groups of Morris dancers.

Although produced by artificial means, coppiced woodland helps to provide a variety of structure in a woodland setting which is of great benefit to sun loving invertebrates and other wildlife.

Coppice stool on the Commons photographed after one year of growth

3 To reduce the dominance of holly in the understorey

Over the course of many years, large areas of the Commons' woodland have become dominated by holly. While holly is a valuable native species, providing both nesting opportunities for birds and a source of nectar and pollen for a wide range of invertebrates, in areas where it has become dominant, heavy shading has significantly restricted the development of other trees and plants.

To maintain a balanced distribution of holly on the Commons, wherever thinning is carried out, approximately 10% of the existing holly coverage in each hectare is retained.

There are however certain areas on the Commons where holly will be left uncut and these areas are located around the edge of the Commons where they have formed a useful visual and sound barrier from the surrounding urban landscape. In other locations on the Commons, holly is also left uncut where it has formed dense thickets around badger setts as this reduces the amount of footfall and potential disturbance around these important wildlife sites.

Areas of the Commons' woodland where holly thinning has been carried out allow for the development of a wider range of ground flora.

4 To increase open areas within the woodland

Although trees arguably form the most important part of a woodland, there are also other important components which are highly beneficial to the conservation of a healthy woodland. These include glades, wide rides, and open habitats such as meadows and ponds. According to the Forestry Commission (2005), open spaces within a woodland ‘are one of the most important mechanisms for enhancing the biodiversity of the woodland and have a particular value for birds and invertebrates, especially where structural diversity is lacking’. These areas are also very important for the natural regeneration of canopy species to occur and the potential for a more variable aged woodland to become established.

While there is still more work to be carried out, as part of the Commons’ involvement in successive woodland management agreements with the FC and NE, an increased number of open areas within the woodland have been created. These have mainly included woodland glades and the creation of wide open rides.

While glades may sometimes go largely unnoticed by many visitors to the Commons, the work that has been carried out along rides such as the Upper and Lower Gravelly rides has been far easier to see. As a result of a lack of historic management taking place along many of the Commons’ network of rides, large trees, often native, now grow close to edge of these areas. Where this has been the case, these trees have been left untouched as the removal of these important natural habitats can rarely be justified. Where non-native trees or low quality native trees have occurred along the edge of a ride, these have been coppiced and we have aimed to create a ride which is approximately 1.5 metres wider than the height of the surrounding trees. This work has been carried out to reduce shading and to allow increased light to reach the woodland floor which in turn will lead to the development of a long interface between a dense scrub edge and other open nectar sources which are vitally important for invertebrates and other wildlife.

In all areas of the Commons where woodland rides have been suitably managed, a programme of periodic cutting is carried out on a rotational basis which will ensure the ongoing presence of a range of age classes of scrub, that will provide an ongoing source of nectar, fruit, seeds and nesting areas around the site.

As part of the Commons programme of ride management, wherever possible, small ephemeral pools have been created to provide yet another area for the use of wildlife.

5 To remove invasive non-native species

Ensuring that a healthy woodland environment is maintained on the Commons involves both the removal of invasive non-native trees and plants and where possible, the management of invasive non-native fauna such as OPM.

While covered in section 1.8 of the Commons' Land Management Report, it is important to provide a brief reminder as to why invasive non-native species can present such a large problem within a healthy woodland. According to the Woodland Trust (2013), invasive non-native species are defined as 'species whose introduction and/or spread threaten biological diversity or have other unforeseen impacts. They are one of the most serious global threats today, along with habitat destruction and climate change.'

As native trees and wildlife have evolved together over many thousands of years, it is important that native species are protected from the encroachment of other competing invasive non-native species. If allowed to spread, the presence of non-native species could result in an imbalance within the natural setting which in many cases has led to the loss of various native species from their natural environment.

It is therefore part of the Commons' ongoing woodland management plan that the removal of non-native species forms the basis for much of our felling and thinning

work. Where possible the removal of non-native invasive species should also help to provide additional small openings/glades in the woodland.

Tree of Heaven or Ailanthus altissima was introduced to the UK from China during the beginning of the eighteenth century. Valued for its rapid growth, the tree of heaven can become an invasive pest. It releases chemicals into the ground that inhibit the growth of other nearby trees species. Wherever this tree is found on the Commons, it is removed as was the case on Putney Lower Common (above).

6 To retain non-intervention areas

One beneficial result that has arisen from a lack of historical woodland management on the Commons is that in some areas, the development of a dense screen of trees and shrubs has provided a welcome barrier to the surrounding urban environment. In this case and where dense cover surrounds important wildlife habitats, a policy of non-intervention has been adopted.

7 To retain veteran trees and dead wood both fallen and standing

While the management of veteran trees has been covered in section 1.8 of the Commons' Land Management Report, another very important element of our ongoing woodland management programme, is the retention of both fallen and standing deadwood across the whole site.

In Britain, approximately 1000 different animal species have been recorded as living in dead wood and according to Dunn (1984), 'it has been estimated that a tidy woodland, free of deadwood may be impoverished by up to a fifth of its fauna'. Also, according to the Forestry Commission (2005) 'deadwood is a fundamental base to the woodland ecosystem with dead and rotting wood providing nest sites for birds and a very high level of insect biomass.

As many dead-wood dependent invertebrates feed on nectar, we are mindful to ensure that as much deadwood as possible is left close to rides and therefore within close proximity of the nectar bearing plants which occur along these open spaces. In other cases, deadwood is usually left as close to the area where it either fell or stands to ensure that both the flora and fauna that depend on it experience as little disturbance as possible.

As deadwood should account for approximately 1/3 of the total timber volume found in a healthy woodland, some of the methods that we use on the Commons to maintain this balance include the careful management of monoliths (standing dead wood), the creation of log piles, burying wood under the surface of the ground which is especially beneficial for species such as stag beetles and through ring barking non-native tree species that would otherwise need to be felled. Ring barking, alternatively known as girdling, involves the complete removal of a section of bark from the entire circumference of a tree trunk which in time will result in the death of the tree. This process has commonly been used on the Commons when managing species such as turkey oak and sycamore.

Managing standing (monolith) and fallen deadwood on the Commons

8 To improve wetland areas and ponds

The management of the Common's ponds is covered in Objective 4 of this Land Management Report. Needless to say, ponds often form another important open area within or close to a woodland. They provide an important habitat for many species of invertebrates, amphibians, birds and mammals and all the Commons' ponds are managed with this in mind.

(Insert: photograph of a bat walk at Queensmere)

9 To encourage a wider range of native species

As previously noted, at the current time, much of the Commons' woodland is heavily shaded making the natural regeneration of young trees difficult. Where areas of woodland have been thinned through the removal of holly in particular, the regeneration of native species such as rowan and hawthorn has been relatively quick.

Another way in which a wider range of native tree species has been encouraged has been through the planting of selective tree species such as hazel, rowan, wild cherry, hawthorn, blackthorn and crab apple. Planted as small whips, these trees have most often been planted in areas where a screen is required or in areas where additional species such as hazel would benefit the ongoing health of the woodland.

In the State of Nature Report (2019), it was reported that 'increasing deer numbers (both native species and non-native species) have a heightened impact on woodland and its dependent wildlife as they reduce natural regeneration and alter woodland structure through increased grazing and browsing.' Apart from the presence of an occasional muntjac deer which is a small and stocky non-native species, there are no other known instances of deer on the Commons. Fortunately, unlike some other species of deer in Britain, muntjac do not cause significant damage to agriculture or timber crops. The absence of significant numbers of deer on the Commons has favoured extensive woodland regeneration and spread since the cessation of grazing which previously occurred and the condition of woodland trees is far healthier than it would be f deer were present on site.

The only other mammal that is present on the Commons and capable of causing damage to trees and young saplings is the grey squirrel and fortunately despite there being a large number of these animals on the Commons, the site's 2016 NVC report stated that squirrel damage was rarely seen.

Muntjac caught on camera by James Copeland in 2021. Fortunately, deer are very rare on the Commons and therefore present a very low risk to the regeneration of native tree species.

10 To maintain and improve amenity/ to encourage recreation and education.

As stated by the Forestry Commission (2005), public enjoyment of woodland is crucial to conservation as it derives appreciation and support for management. In recent years, the Commons have increasingly played host to a number of outdoor learning groups and as ever, all areas of the Commons' woodland are open to informal recreational activities such as walking, running, playing and in certain areas, cycling.

When utilizing a very limited and precious resource such as the Commons 291 hectares of woodland, open access does however require that users of the Commons woodland behave in a responsible fashion which causes no harm to the natural environment. As suggested by Star (2013) 'while in many European countries open access is the norm, this tends to be accompanied by a greater cultural understanding of woodlands and an increased awareness of the sensitivity of such areas to disturbance.' With this in mind, it is surely time that education played a much higher role within the management and conservation of the Commons' woodland area. This would involve the provision of way-marked trails and interpretation displays all of which would help many visitors to enjoy and care for the Commons woodland in a much healthier way.

CS Woodland Management Programme 2024 to 2028:

Activity	Year 1 (2024)	Year 2 (2025)	Year 3 (2026)	Year 4 (2027)	Year 5 (2028)
Open space management	Coincides with holly thinning	Coincides with holly thinning	Coincides with holly thinning	Brickfield	B.Brook towpath.
Creation of deadwood habitats	Ring barking Turkey oak & via tree safety work	Ring barking Turkey oak & via tree safety work	Ring barking Turkey oak & via tree safety work	Ring barking Turkey oak & via tree safety work	Ring barking Turkey oak & via tree safety work
Ride management	Robin Hood Ride (upper)	Bluegate Ride	Warren Farm Ride	Robin Hood Ride (lower)	Jerrys Hill
Management of successional scrub	Upper Gravelly Ride	Lower Gravelly Ride	7 Post Pond wood	Scio Pond wood	Robin Hood Ride Upper
Release veteran trees from competing growth	X	X	X	X	X
Hazel coppicing	Warren Farm ride (50%)	Upper Gravelly Ride	Lower Gravelly Ride.	Warren Farm ride (50%)	Robin Hood Ride
Holly thinning	Stag Ride	Jerry's Hill	Queensmere	Queensmere	Casswell's Cavern
Woodland thinning	Carried out through removal of non-native species	Carried out through removal of non-native species	Carried out through removal of non-native species	Carried out through removal of non-native species	Carried out through removal of non-native species
Monitoring	Y		Y		Y
Encourage recreational activities	New woodland Trail: Queensmere		New woodland Trail: R.Hood ride		New woodland trail

					Putney Heath
Pest control	OPM	OPM	OPM	OPM	OPM
Tree planting	TBC	TBC	TBC	TBC	TBC

5: Vision

The Commons woodland management plan sets out a programme of work for the future management of the woodland that is found on Wimbledon and Putney Commons. The program is based on managing the woodlands to increase the conservation value and biodiversity of the woodlands and to enhance the enjoyment of visitors to the site.

Much of the work will involve the removal of undesirable invasive non-native species such as turkey oak, sycamore, norway maple and holm oak and in certain targeted areas the large scale thinning of holly will also be carried out to provide additional open space within the woodland. As noted in the Commons' 2016 NVC survey, as sycamore, norway maple and turkey oak are all frequent species in the canopy, their whole scale removal would be impractical though ring barking and reducing the saplings of these species would, allow more recruitment of common oak, birch, hornbeam and beech into the canopy.

The management requirements of the stag beetle, for which the site has been designated as a Special Area of Conservation (1986), will also be strongly considered throughout all phases of woodland management to ensure the ongoing survival of this species on the Commons. The stag beetle requires old trees and fallen timber both of which are encouraged and protected within the Commons' woodland management plan.

As previously noted, according to the Woodland Trust (2022) 'trees are one of our most powerful weapons in the fight against climate change' and for this reason, it will be our aim to protect the Commons woodland and to only remove trees where this will be of definitive benefit to the overall ecology of the site.

Woodland needs light, space and flexible edges to accommodate the healthy growth of the next generation of trees and to provide the best conditions for all the associated woodland flora and fauna to thrive. When trees are planted on the Commons in the future, it will be a case of planting the right types of trees in the right types of places. This means that native species will be selected over non-native species and this will help to make our woodland more genetically diverse and more resilient against pests, diseases and the possible effects of climate change.

In addition to all of this, the Commons' woodland will be a place which visitors can enjoy, play and learn from.

Our vision is to make the Commons' woodland a healthy place for wildlife and an accessible place for people to visit and enjoy.

6: Monitoring assessment (management targets)

To monitor the Commons ongoing woodland management programme, indicators of progress are checked at regular intervals. The method of assessment is based on a structured walk around the woodland with a series of observation stops made along the way. These stopping points will be placed in a location that will provide a reasonable coverage of the area that is to be assessed.

The monitoring of the Commons' woodland will follow the principles that have been provided by the Joint Nature Conservation Committee's (JNCC) publication: 'Common Standards Monitoring Guidance for Woodland Habitats' (2004). The Common Standards Monitoring Guidance is applicable to all British woodland habitats in both lowland and upland situations.

Contained within the guidance of the JNCC publication is clear indication that assessing the condition of a woodland is largely reliant on the observations and judgement of the person who is carrying out the survey as opposed to any form of statistical sampling process. It is therefore of great importance that the surveyor involved has a very good understanding of the distinctiveness of the site that is being monitored.

As noted in section 3 of the JNCC guidance, to ensure that woodland surveying is as objective as possible 'the approach to target setting that has been proposed for woodland reflects what is considered necessary to cover its structural complexity and variability. The five attributes that are used are 'extent, structure and natural processes, regeneration potential, tree and shrub composition and indicators of local distinctiveness.

Extent – includes the extent and where appropriate, distribution of woodland features across the site.

Structure and natural processes – includes the balances between canopy and shrub layers; the importance of old trees versus open space on a site, the level of deadwood present, the extent to which we wish the structure to be determined by natural processes rather than defined by a management regime.

Regeneration potential – includes the level and distribution of saplings and young trees we expect to see; extent of regrowth from coppice or pollarding and what limits there may be on planting. The emphasis is on potential since there are circumstances where we would not expect to see any actual regeneration, for example because the wood consists of a young dense canopy layer.

Composition (trees and shrubs) includes the level of native trees and shrubs we expect to see overall; any minimum requirement s to maintain particular species; plus (in most cases) a target to alert us to rapid declines in native trees and shrubs, for example as a consequence of a new disease coming in.

Indicators of local distinctiveness – includes (usually) the broad ground flora composition (as indicated by NVC type or typical common species), but also no more

than four other features that are particularly important about a wood, that contributed towards its selection as SSSI/SAC.

JNCC (2004)

In December 2016, a Definitions of Favourable Condition for designated features of interest was prepared by NE for Wimbledon Common SSSI. These conditions are used by NE to determine if a site is in favourable condition. These standards for favourable condition have been developed and are applied throughout the UK.

The broadleaved woodland of NVC type W10 *Quercus robur-Pteridium aquilinum - Rubus fruticosus* which is the common type found on the Commons is a designated interest feature within the Wimbledon Common SSSI.

In Table 2 of the report (Habitat Extent Objectives), the estimated extent of the woodland that is found on the Wimbledon Common SSSI is approximately 203 hectares. The site-specific target for this area states there should be "no reduction in the overall extent of woodland". It should be noted however that in this case, 'woodland' means long-established woodland with a canopy dominated by oak or alder not woodland which is clearly of recent origin such as that dominated by birch or willow. However, as stag beetles may utilise such areas, this should be considered when assessing site suitability for that species.

In Table 3 of the report (Site Specific Habitat condition objectives), to maintain the lowland broadleaf woodland habitat at Wimbledon Common in favourable condition, this will be defined at this site by the following site-specific standards.

Attribute	Site specific targets
Composition	At least 95% of cover in one layer of site – native or acceptable naturalised species Destruction or replacement of native woodland species through effects of woodland fauna or unnatural external factors not more than 10% in areas in a five- year period.
Structure	Ground flora present over at least 80% of each stand. Canopy cover present over 75-90% of total stand area. Understorey (2-5m) present over 20-75% of total stand area. Dead wood frequent.
Indicators of local distinctiveness	At least 80% of ground flora cover should be referable to W10. Populations of locally uncommon plants maintained: Frangula alnus (alder buckthorn). Suitable habitat conditions maintained for stag beetle: Large diameter fallen dead wood and/or rotting stumps present throughout.

Regeneration potential	Signs of seedlings growing through to saplings to young trees at sufficient density to maintain canopy cover (or equivalent re-growth from coppice stumps).

Wimbledon and Putney Commons Land Management Plan:
Objective 4: Pond Management

1: Discussion

Rushmere: 2021

A pond is commonly defined as any water body that is between 1m^2 and 2 hectares in area and holds water for at least four months of the year (Pond Conservation Group 1993). As all the Commons' ponds are smaller than 2 hectares, this broad definition will be used throughout this chapter to describe all nine permanent and semi-permanent bodies of water that can be found on this site.

Although ponds have been in existence throughout our history, over the years, the quality and the number of ponds found in the UK has steadily declined. Through actions such as drainage and infilling, it has been estimated by the Freshwater Habitats Trust (FWHT:2010) that approximately 75% of the ponds that were present in the UK at the beginning of the 20th Century have been lost. Alongside these, there are also many examples of ponds which have significantly suffered from the damaging effects of pollution.

A survey of ponds in Greater London (Langton, 1984) showed some areas had lost over 90% of water bodies mapped on the 1860, 25 inch to mile Ordnance Survey edition. Substrate type importantly influenced pond distribution with 30 ponds per

square km on London Clay but many fewer found on River Terrace gravels. There will have been many losses over the subsequent 40 years though some gains will have occurred particularly in the form of small garden ponds.

While the shape and design of ponds can take many different forms, each one, whether natural or man-made is able to provide a wide range of habitats that are of vital importance to wildlife. According to The Wildlife Trusts (2019) 'more than 4,000 species of freshwater invertebrates are known in the UK and almost all of these are found in ponds.

As all nine of the Commons' ponds are largely the outcome of human design, it should be noted that according to the FWHT (2010), 'both man-made and natural ponds support plant and animal communities that are essentially the same'. In short, although many of the Commons' ponds are the product of historic gravel extraction or have been created through the damming of wet areas around the site, what remains, provides an essentially natural environment around which, wildlife should be able to thrive.

According to the FWHT website (2022), together, ponds provide:

- A unique biodiversity resource
- An important part of our history and culture
- A visual focus in many landscapes
- An amenity for many communities

In addition to these four points, there are also two other very important areas that should also be noted concerning the importance of ponds. As suggested by Bradbury (2021), ponds are undoubtedly good for us with recent studies showing that being in, on, around or near ponds is of great benefit to individual well-being and mental health.

Ponds also provide another important means of helping to fight climate change. According to Howard (2019) 'ponds remove carbon from the atmosphere at about 20-50 times the rate at which trees are able to capture carbon'. This, suggests Howard, would mean that ponds may be capable of collecting from the atmosphere an average of 142g of carbon per square metre each year compared with the 2-5g of carbon that is collected per metre of woodland or grassland during the same timeframe.

Unfortunately, during the long history of Wimbledon and Putney Commons, while there have been certain ponds around the site which have been greatly cherished, it appears that other ponds did not receive the care or attention which perhaps they deserved. Although one new pond (Ravine Pond) was created in 1998, to our knowledge, at least five other small ponds on the Commons have long since disappeared from the landscape. These include two ponds that were located on Putney Heath (north of the A3), The Silent Pools (located just south-east of the REMPF War Memorial), a curling pond located opposite North View and a small pond that was located at the current Brickfield site.

As a result of recent scientific research, the enormous value of ponds is now better understood than at any other time within recent memory. It should therefore be the duty of the custodians of these precious Commons to ensure that a greater understanding is achieved about the Commons ponds and that a suitable programme of management is set in place that will help to maximise the potential value of these very important areas of the Commons.

The Silent Pools, one of the Commons' 'lost' ponds - 2021

2: Significance

(2a) Historical Context:

Ponds, natural or otherwise, have formed an important part of our landscape for millions of years and it has been suggested by some researchers that prior to the advent of settled society and the subsequent drainage of much of the natural landscape, approximately one quarter of the British Isles was covered by some form of wetland habitat. With the advance of settled agricultural societies, the landscape of the British Isles was changed forever with human activity producing both positive and negative results.

Although it is very difficult to know how many ponds may have once existed around the British Isles, in his classic work on the history of the British countryside, Rackham (1986) estimated that in 1880, in England and Wales, there were approximately 800,000 ponds which was approximately 14 ponds per square mile. While Rackham noted that the number of ponds varied enormously around different areas of both countries, the 1880 figure was said to represent the climax of both natural and man-made ponds in these two areas.

Since Anglo Saxon times (410 AD -1066 AD), Rackham also noted that throughout the countryside, most settlements were dependent upon the water source that local ponds provided. Once again, whether natural or man-made, historically, ponds have provided a wide range of uses including a source of drinking water for animals, a resource to farm fish as well as providing opportunities for industrial and leisure activities.

Although we have some knowledge about the history of the ponds that are or were formerly on Wimbledon and Putney Commons, without some dedicated research being carried out, the information that we currently have for these areas is sketchy to say the least. With most of the Commons' ponds being at least 150 years old or very much older in the case of Rushmere which has long been regarded as the village pond, each one of the Commons' ponds which are still in existence should be seen as a historic feature in the story of the Commons stewardship under the Wimbledon and Putney Commons Board of Conservators. As suggested by the FWHT (2010), 'any conservation work undertaken on a pond of historic interest should take account of both the pond and its overall setting.'

It is the recommendation of this report that further research is carried out on the history of the Commons ponds to gain a clearer understanding of the importance these areas have played in the history of the Commons. This research could involve a detailed review of the various Minutes that have been produced over the years from the Conservators regular Board meetings to the taking of pollen records or other sedimentary records from individual ponds and their surrounding areas.

Queensmere, when swimming was included as part of the attraction. (date unknown)

(2b) Cultural and Aesthetic context:

"A pond is fun. It's where you'll be drawn to as you wander around, where you will sit and contemplate the world. It's where you will spot things you've never seen before, marvel at the wonder of metamorphosis and gasp at the cruelty of nature, red in tooth and claw. It's magic, that's what it is. Magic and awe. What is a pond? Why it's the best, thing ever" (Kate Bradbury: 2021)

As noted by Howard (2019) in recent years, social scientists are beginning to put value on ponds and other natural settings for the range of mental health benefits they can bestow on people. It seems undeniable that there is something alluring about the presence of ponds that manages to attract people back to them time and time again. It could be that ponds offer something visually unique in the landscape or it could simply be that ponds offer numerous possibilities for relaxation and enjoyment.

Looking to the Commons' own nine ponds, over the course of their long history, some of the activities for which they have been enjoyed have included: skating, curling, sailing model boats, paddling and swimming, netting for newts and feeding ducks. They are also great places sit back, relax, and practice the subtle art of doing absolutely nothing at all.

But, located within the hidden depths of ponds, is another world that is teeming with life that goes largely unseen by all but the keenest of observers. Ponds therefore provide the perfect accessible environment in which to help educate both adults and enthusiastic young amateur naturalists. Caring for these areas should not be an onerous task and as noted by The Wildlife Trusts (2019) a pond is a habitat that should need little management. As ponds are so clearly cherished within the landscape and popular culture, perhaps in the future, these areas of the Commons could, where practical, be increasingly cared for by local volunteers who are interested in protecting their local environment and developing the skills and knowledge that are required to correctly carry out this task.

Pond dipping platform at 7 Post Pond

(2c) Ecological context:

"Ponds are busy communities. They are submerged natural cityscapes. One habitat, tens of thousands of opportunities" (Howard: 2019)

Ponds, in various forms, have been part of the landscape for millions of years. Providing a wide variety of niches and microhabitats, all ponds provide a natural type of habitat that can attract a diverse range of species including both plants and animals. As previously noted, there are approximately 4,000 species of freshwater invertebrates in ponds, including many rare and endangered species. According to FWHT (2010), the British Red Data Book also lists approximately 300 threatened freshwater invertebrate species, over two thirds of which are found in ponds. And, in addition to this, ponds also provide an important habitat for many different species of fish, amphibians, reptiles, mammals and plants.

According to Pavlis (2021), creating a wildlife pond is simple: "all you need to do is provide a hole in the ground and some water and then wait for the magic to happen". While this suggestion provides simplicity itself, it is after all the method in which most if not all the Commons' ponds were originally created during the 19th Century and apart from those ponds that were infilled, all nine remaining ponds on the Commons still provide a valuable home for wildlife.

Wildlife:

Fish: Freshwater fish are often considered to be a natural part of the fauna of most ponds and large bodies of fresh water. While it can be interesting to catch a glimpse of any fish that are supported by a particular pond, in high densities, fish can be detrimental to ponds as they will eat vegetation and wildlife such as frog spawn and tadpoles. High numbers of fish can also be responsible for causing a nutrient overload in a pond that will often result in unwanted algal growth.

Of the nine ponds on the Commons, only five of these are known to support fish and these ponds include Scio Pond, Kingsmere, Queensmere, Rushmere and Ravine Pond. Drakeford (2000) reported that nine species of fish (native and non-native) were present in these ponds during the late 1990's. Species included: pike, perch *(Perca fluviatilis),* common carp *(Cyprinus carpio),* koi carp *(Cyprinus carpio),* goldfish *(Carassius auratus gibelio),* rudd *(Scardinius erythrophthalmus),* roach *(Rutilus rutilus),* tench *(Tinca tinca)* and three-spined stickleback *(Gasterosteus aculeatus).* There is currently a need for an updated fish survey to be carried out in all five ponds that are known to currently contain fish.

Amphibians and reptiles

There are seven native amphibian species in the British Isles and all of them are pond specialists. Species include: natterjack toad *(Epidalea calamita)*, common toad *(Bufo bufo),* common frog *(Rana temporaria),* pool frog *(Pelophylax lessonae),* great crested newt *(Tritus crisatus),* smooth newt *(Lissotriton vulgaris),* palmate newt (*Lissotriton helveticus)*.

At the current time, three of these species can be found on the Commons and these include common frog, common toad and smooth newt. While each species will spend varying amounts of time on dry land, like all of Britain's native amphibians, the common frog, common toad and smooth newt all need to lay their eggs in water. As a result, the still waters that are provided by the Commons' ponds provide a vital habitat for the ongoing survival of native amphibians on this site.

Common frog: Preferring to spend much of their time among the bankside vegetation of moderately shallow ponds, as part of an annual survey that is carried out by the Commons' Conservation and Engagement Officer, frog spawn is often found during the beginning of March in seven of the Commons' ponds. These have generally included Rushmere, Hookhamslade Pond, Bluegate Gravel Pit, Ravine Pond, 7 Post Pond, Kingsmere and Scio Pond.

Although common frogs can sometimes be found away from the water during the summer months, during the colder months of the year they will often return to the water where they will remain below the surface, inhabiting the mud layer at the bottom of the pond. During this time of year, they will enter a period known as brumation where they remain inactive, lowering their heart rate and stop eating, drinking, urinating or defecating.

Frog spawn photographed at Bluegate Gravel Pit (2022)

Common toad: Often found in woodland or under the shade of logs or rocks, common toads generally prefer deeper water in which to breed and long strings of spawn are laid during the spring. Being largely nocturnal, common toads are often seen returning to ancestral breeding ponds during the night where they are known to follow long established migration routes.

On the Commons, breeding toads are usually found in some of the deeper ponds on site which include Queensmere, Scio Pond and Kingsmere.

In addition to seeking shelter under logs, common toads have also been found in the watering pipes of recently planted trees on the Commons (2022).

Smooth newt: Despite the annual eDNA testing of three of the Commons' ponds (Rushmere, Bluegate Gravel Pit and Hookhamslade Pond) by FWHT for the presence of great crested newts, unfortunately, the only known species of newt that is currently known to be on this site is the smooth newt.

Entering the water to breed during April and May, smooth newts will remain in the water for three to four months of each year and by August, most smooth newts will have moved into the surrounding area where they can often be found under the shade of stones and logs. In recent years smooth newts have been recorded in Bluegate Gravel Pit, 7 Post Pond and Curling Pond. Perhaps the most spectacular report was made in 2018 when 41 smooth newts were recorded in Curling Pond at the same time. Out of season they have also been found in a variety of wooded and garden locations around the site.

Smooth newt photographed close to the edge of Bluegate Gravel Pit.

Reptiles

Of the six native species of reptile, only the grass snake *(Natrix helvetica)* is aquatic and therefore likely to be found within a wetland setting. Feeding on fish, newts, frogs, toads and even tadpoles, grass snakes are known to be widespread across much of the UK but unfortunately, they are now extremely rare on the Commons. In past years, a grass snake was seen in Scio Pond on Putney Heath, a shed skin was found near the neighbouring Fishponds Wood and a live grass snake was found in November 2021 close to Holy Trinity Primary School which is located on the edge of the Commons near to Roehampton.

Like many other native wildlife species, amphibian and reptile numbers have been impacted by loss of habitat and particularly through the loss or degradation of suitable breeding ponds. All future management planning involving the Commons remaining ponds or the creation of any new ponds will take the conservation of amphibians and reptiles on the Commons into consideration.

Invasive non-native species:

Unfortunately, similar to many other areas of the UK, over the past few decades, some of the Commons' ponds have become home to a variety of invasive non-native reptiles which have included various species of terrapin and turtle.

All these species have been released on to the Commons, without permission and by persons unknown to the management team of the site. The management of these species is covered in Objective 11 which deals with the management of invasive non-native species on the Commons.

Terrapin photographed in Queensmere (2021)

Invertebrates:

According to the FWHT website (2022), "a good pond might have over 100 of the larger invertebrate species (such as beetles, dragonflies, snails and caddisflies) while exceptional ponds could support over 150 species". It was also suggested that there are likely to be a similar amount of micro-invertebrates at each site as well. Unfortunately, without the assistance of a detailed survey of each of the Commons' nine ponds, it is very difficult to know which invertebrate species are currently supported by these areas and consequently how each area should be looked after in the future to help protect them.

This said, through the ongoing activities of some of the Commons' regular volunteers, we have been able to gather some excellent data about the different

dragonfly species that are currently found on site. Through the data that has been collected by recorders such as Simon Riley as prior to this, Bill Budd, we know the Commons support breeding populations of twenty dragonfly species, which is really excellent news.

With a wide variety of different ponds on the Commons, all of differing sizes, depths and settings, in theory, the Commons' should have a complex diversity of habitats that are important for the survival of aquatic and semi-aquatic invertebrate species. Viewed as a whole, the various different environments that are provided by the Commons nine ponds include important features such as the presence of rotting wood, bankside trees including submerged root systems and vegetation.

One concern however that has been raised many times over the years is the fact that certain ponds on the Commons' repeatedly dry out during times of drought as a result of their very shallow depths. Of particular concern to many visitors to the Commons has been Bluegate Gravel Pit, Hookhamslade Pond, Curling Pond and Scio Pond. According to FWHT (2010), not all pond habitats are immediately obvious and one persistent myth about ponds is that water levels should be stable throughout the year and any fluctuations can be damaging. Known as the drawdown zone, the seasonal fluctuation of a pond's water level is an event that is entirely natural and one which provides a rich habitat for many species of plants and animals. Exposing the area of ground between water and dry land, the drawdown zone can be comprised of a mixture of features including bare ground, mud and vegetation such as tall rushes and sedge. This area is often favoured by egg laying dragonflies and many other semi-terrestrial animals including beetles, spiders, snails and bugs. It is for this reason that perhaps those ponds on the Commons that often fluctuate in water level or even dry out should be looked at a little more favourably in the future for the benefits which they provide to invertebrate life. The fact that an apparently dry pond is of such value to wildlife will certainly be considered in any future management suggestions that might indicate a need to create areas of deeper water.

Mammals:

Apart from visiting ponds to drink and occasionally forage, ponds are not considered to provide a major habitat for British mammals. On the Commons, the most likely signs of mammal activity around ponds is through the nocturnal activities associated with bats. In 2013, eight different species of bat were recorded on Wimbledon Common. These included soprano pipistrelle *(Pipistrellus pygmaeus),* common pipistrelle *(Pipistrellus pipistrellus),* nathusius pipistrelle *(Pipistrellus nathusii),* daubenton's bat *(myotis daubentonii)*, brown long-eared bat *(Plecotus auratus),* noctule bat *(Nyctalus noctula),* natterer's bat *(Myotis nattereri)* and leisler's bat *(Nyctalus leisleri).*

From these eight bat species, it is however most likely that one of the pipistrelle bats and the daubenton's bat will be seen or at least recorded through a bat detector flyig over the Commons' ponds. In recent years, Queensmere has been a particularly good pond to view these two species of bat as they hunt for small flies such as midges, caddisflies and mayflies over the still water of this pond.

All UK bat species are protected by European and UK legislation: the Conservation of Habitats and Species Regulations 2010 and amendments and Schedule 5 of the Wildlife and Countryside Act 1981. This affords complete legal protection to all bats and their roosts. To help protect the continued existence of bats on the Commons, it would be very useful if an up-to-date comprehensive bat survey was carried out for the whole site.

Birds

The Commons ponds support a wide range of bird species, providing valuable habitat that offers not only food and refuge, but also places to breed. Most of the more common waterfowl including moorhen *(Gallinula chloropus*), coot *(Fulica atra)*, mallard *(Anas platyrhynchos),* tufted duck *(Aythya fuligula*), Egyptian goose *(Alopochen aegyptiaca)*, mandarin duck *(Aix galericulata),* grey heron *(Ardea cinerea)* and mute swan *(Cygnus olor)* are resident, but each pond's distinct character and ecology yield different species at each setting.

Bluegate provides some of the best wetland habitat for birdlife, particularly breeding little grebe *(Tachybaptus ruficollis)* which thrive on the supply of aquatic invertebrates but it has also hosted wigeon *(Anas Penelope)*, green sandpiper *(Tringa ochropus)* and Snipe *(Gallinago gallinago)* in recent years. Where water levels are maintained in the early summer, other unusual species can be attracted, most notably a pair of breeding pochards *(Aythya farina)* in 2013.

Rushmere is also a valued pond, particularly for its insect hatches that provide a vital food source for our locally breeding swifts *(Apus apus).* Rushmere also used to provide mud for nesting house martins *(Delichon urbica)* which sadly no longer visit but the pond does afford some of the best views one can have of common tern *(Sterna hirundo)* as they circle round looking for smaller fish. The shoreline also attracts good numbers of pied wagtails *(Motacilla alba)* with reed bunting *(Emberiza schoeniclus)* frequenting the nearby bushes. Occasionally Rushmere throws up much scarcer species such as whooper Swan *(Cygnus cygnus)*, arctic tern *(Sterna paradisaea)* and more recently black-tailed godwit *(Limosa limosa)* and little ringed plover *(Charadrius dubius).*

Queensmere, perhaps, has the greatest quantity of the more common waterfowl, including a pair of breeding mute swans which have been a particular success story. This pond is also favoured by tufted duck and mandarin but pochard and gadwall *(Anas strepera)* which used to be regulars, visit much less now.

The turbidity at Kingsmere probably dissuades many species but it has always been the favoured spot for wintering shoveler (*Anas clypeata)* and more occasionally teal *(Ana crecca)* while cormorants *(Phalacrocorax carbo),* grey heron and little egret *(Egretta garzetta)* can be found fishing here.

The smaller ponds such as Hookhamslade, Scio, 7post, Curling and Ravine support a smaller cast but will all be frequented by grey wagtails *(Motacilla cinerea)* and the occasional kingfisher *(Alcedo atthis).*

Plantlife:

Wetland plants are one of the most important elements of any pond. They provide a vital habitat for wildlife, they remove excess nutrients and they increase oxygen levels in a pond. According to the FWHT website (2022), ponds provide a home to 'most of Britain's larger wetland plants (approximately 400 species) and about half of the most threatened wetland plants in the UK are also found within this habitat.

Wetland plants can be found in two main groups: those that are submerged or float on the surface of the water and marginal plants which are found growing in the drawdown zone or in very shallow areas of water. Wherever plants are located in or around a pond, they are of vital importance to wildlife. They provide sites for egg laying and emergence, a source of food, areas to overwinter and protection from predators such as fish. As noted by FWHT (2010), in terms of vegetation, high value ponds are those which contain a complex structure of submerged and emergent plants and which to the casual onlooker, may appear as overgrown.

3: Condition

Despite eight of the Commons' nine ponds falling within the area covered by the Commons' SSSI and SAC designations, there is currently very little information available to ascertain the condition and wildlife value of each pond. It is for this reason, that a comprehensive survey for all nine ponds should be carried out before any major course of management is carried out in the future.

4: Management of the Commons' Ponds

There are currently nine ponds on the Commons of differing depths, sizes and settings. Five of the Commons' ponds are located on Wimbledon Common and four on the contiguous area of Putney Heath. There are no ponds at the separately located Putney Lower Common.

Wimbledon Common's ponds: Rushmere, Bluegate Gravel Pit, Hookhamslade Pond, Ravine Pond and Queensmere (above)

Putney Heath's ponds: Curling Pond, Kingsmere, 7 Post Pond and Scio Pond

Rushmere:

Rushmere is approximately 0.91 hectares in area and is located very close to Wimbledon Village. It is the oldest pond on the Commons with origins stretching back to Medieval times. Rushmere is partly spring fed and therefore, within living memory, it has never completely dried out even though its water level can drop considerably during very dry summers.

During its very long history, Rushmere has largely served as an amenity pond and over the years, recreational activities have included paddling and use by local model boat clubs.

The area surrounding Rushmere is heavily used and remains a very popular destination for visitors throughout the year with especially large numbers of people gathering around this area during the summer.

In terms of the conservation value of this pond, over recent years, soft rush *(Juncus effusus)* has increasingly colonized the west and north-west edges of the pond and a small number of alder and willow have also become established in the same area. Apart from this, vegetation is very sparse around most other areas of the pond with little more than an open expanse of water on view.

Rushmere is known to support various species of carp which, over the years, have been introduced to the pond by persons unknown.

Past management at Rushmere has included the treatment of New Zealand pigmyweed *(Crassula helmsii)* and floating pennywort *(Hydrocotyle ranunculoides)* both of which are highly invasive non-native species. Unfortunately, New Zealand pigmyweed remains present along the edge the pond although it has not spread dramatically as has been the case in other ponds such as 7 Post Pond and Curling Pond. As a result of the active management of floating pennywort by an external fisheries contractor, this invasive non-native species pennywort was completely eradicated from this pond.

Hookhamslade Pond

While the origins of this pond are largely unknown, the most dramatic account that is available for this area dates back to 1911 when the pond was temporarily drained to create a bonfire in celebration of the Coronation of King George V. Fortunately, the area has recovered since these celebrations took place and Hookhamslade Pond can now be found nestled within a small woodland clearing that is surrounded by silver birch *(Betula pendula),* and other secondary woodland.

Hookhamslade Pond is approximately 0.14 hectares in area and is fed by rainfall and surface water run-off. At the current time, Hookhamslade Pond, is fairly well vegetated with dense areas of soft rush and yellow flag iris (*Iris pseudacorus)* that cover the pond during various times of the year. There is also abundant branched bur-reed *(Sparganium erectum)* found around the edges of the pond and white water lily (*Nymphaea alba*).

As a result of its propensity to dry out during very dry summers, Hookhamslade Pond does not contain any fish but this area is known to attract common frog, smooth newt and various dragonfly species.

Past management at Hookhamslade Pond has included the partial clearance of silt and accumulated debris and the removal of the highly invasive non-native species known as Parrot's Feather *(Myriophyllum aquaticum).*

After many years of displaying public notices around the Commons' ponds which asked for visitors to keep their dogs under control around the ponds during the annual bird nesting season (1 March to 31 July), during 2021, it was agreed that signage alone had not worked in preventing dogs from entering ponds and causing damage to both the flora and fauna of the site. As a result, one area of Hookhamslade Pond was surrounded by temporary fencing to allow vegetation to recover and provide wildlife with a protected area in which to seek cover. A similar course of action was also followed at Scio Pond and additional ponds will also be protected with temporary fencing whenever it is considered necessary in the future.

Bluegate Gravel Pit:

Formed by gravel extraction during the 19th Century, Bluegate Gravel Pit is approximately 1 hectare in area and is formed of two main sections that are connected by a narrow channel. Located close to the edge of Parkside, Bluegate Gravel Pit is fed by rainfall and surface water run off but as a result of the shallow

nature of this pond, it is fairly common for it to become almost completely dry during long periods of warm weather.

Bluegate Gravel Pit is well vegetated with dense areas of soft rush located around various areas of the pond.

With reference to the Commons' 2019 monitoring report, there is some evidence of garden invasive species, Michaelmas daisy (Symphyotrichum novi-belgii) on the island areas. On the south side of the pond with the gentle gradient there is sphagnum moss over the pond bed and Trifid bur-marigold *(Bidens tripartite)* carpets much of the exposed pond bed. Marsh pennywort *(Hydrocotyle vulgaris)* was also widespread with carpets of yellow flag iris found on the northern side of the pond. There are no fish in this pond but common frogs, smooth newts and various dragonflies and damselfies have been recorded in this area.

Past management has included the removal of soft rush from the central and southern sections of the pond and the central channel of the pond has been deepened. During the mid-2000's, areas of silt were also removed from this pond and shallow pools were created around various areas of the pond.

Ravine Pond (also known as Millennium Pond)

Ravine Pond was created in 1998 by the Wimbledon and Putney Commons Conservators to celebrate the arrival of the forthcoming millennium. The pond is

approximately 0.08 hectares in area and was created in a valley that is approximately 400 metres from Queesmere.

Ravine pond is fed by surface water run-off, a natural spring and by overflow water from Hookamslade Pond. The over-flow which is located towards the northern end of the pond takes surplus water towards Queensmere. Apart from the initial creation of this pond and the periodic coppicing of nearby trees, there has been very little recent management carried out in this area.

Both common frogs and smooth newts have been recorded in this area and there are a small number of carp in this pond that were introduced to the Commons by persons unknown.

Queensmere:

Queensmere was created on an area of flat marshy grassland (formerly known as Cardigan Glen) to mark the Diamond Jubilee of Queen Victoria in 1897. It is approximately 0.75 hectares in area and is located approximately 400 metres west of the Windmill Car Park. Surrounded by established secondary woodland, Queensmere is fed by water directed to the pond from the surrounding slopes, from the overflow of Hookhamslade Pond and subsequently Ravine Pond and by a natural spring.

During the long history of Queensmere, for many years, this pond acted as a swimming lake but since the mid 1980's, this activity has no longer been permitted at this site.

Today, Queensmere is home to a rich assemblage of fish including pike, perch and tench as well as common toads, various waterfowl and foraging bats. Unfortunately, Queensmere is far from reaching its full potential as a good wildlife pond with wooden toe boarding and concrete embankments providing a wholly artificial surrounding to this pond.

Past management has largely involved electro fishing to remove predatory pike from the site. Following the loss of young waterfowl on the pond, in 1993, electro fishing carried out by the National Rivers Authority removed 48 pike from Queensmere with the largest individual weighing 22 pounds. Since this time, other pike have been removed from Queensmere whenever large numbers of young waterfowl have been taken by this predatory species. In addition to this work, other management activities that have taken place at Queensmere have included the dredging of silt in the late 1990's, the introduction of floating platforms to protect waterfowl during the early 2000's and similar to the other ponds on the Commons, notices are displayed around the site during the bird nesting season that request visitors to keep their dogs on lead and out of the water. Queensmere attracts nesting moorhens *(Gallinula chloropus)*, coots *(Fulica atra),* mallards *(Anas platyrhynchos)* and mute swans *(Cygnus olor).*

Curling Pond

Although there were originally two ponds created on the Commons for the sport of curling, the only site that still remains is located at the top of Jerry's Hill which is fairly close to the junction of the A3 and Roehampton Lane.

Th Curling Pond is extremely shallow and has a tendency to dry out during most warm summers. The Curling Pond and its surrounding area does however provide an important site that is known to support a high population of smooth newts.

Covering an approximate area of 0.06 hectares, recent management at Curling Pond has included the removal of New Zealand pigmyweed and the reduction of non-native Turkey oaks that formed a dense stand around the edge of the pond.

Kingsmere

With an area of approximately 1.06 hectares, Kingsmere is the largest pond on the Commons. Located very close to the edge of the busy A3, Kingsmere is positioned approximately half-way between Tibbet's Corner and the junction with Roehampton Lane.

Having been created through the historic extraction of gravel, Kingsmere is a fairly shallow pond although there are some deeper pockets of water which are located close to the pond's outlet. Water for this pond is provided via rainwater and surface run-off. Unfortunately, while Kingsmere is screened from the busy A3 by a thick belt of trees, this does not shield the area from the almost constant noise of passing traffic.

There is very little known about the wildlife that use Kingsmere but carp, common toads, and nesting mallards have all been recorded in this area.

In terms of past management, during the 1990's, Kingsmere was partially dredged under an agreement with Natural England. To avoid causing unnecessary harm to wildlife, this work was carried out over a few years and the silt that was gathered from the pond was used to create the small island that can now be found close to the centre of the pond.

Other more recent work at Kingsmere has included the creation of two floating platforms which have been moored in the deeper area of the pond to the west of the island and two duck tubes have been located around the edge of the island to provide additional protection for nesting ducks.

7 Post Pond:

7 Post Pond is approximately 0.10 hectares and is located adjacent to Parkside where it is approximately 250 metres south of Tibbet's Corner.

Historically, this pond was created during the 19th Century through gravel extraction and it was subsequently used as a water splash by waggoners needing to expand the wooden wheels of their carts.

Interestingly, in Wimbledon Common and Putney Heath, A Natural History (2000), it was commented that, "of all the ponds on Wimbledon Common and Putney Heath, the one that has the greatest biotic variety also seems to have the greatest number

of factors against it.” At the time of publication, it was remarked by Drakeford and Sutcliffe, that 7 Post Pond ‘is a sight of great beauty’. It was reported that this pond was favourable for molluscs, counting at least six different species as well as providing a suitable habitat for Common frog, smooth newt and even grass snake.

What was also noted in 2000 however was the recent establishment of New Zealand pigmyweed which, despite regular clearances and attempts to eradicate this weed from the pond had become well entrenched in this particular area of the Commons.

Despite the ongoing presence of New Zealand pigmyweed at 7 Post Pond, common frog and smooth newts are still recorded there annually and flag iris and reed mace *(Typha latifolia)* can still be found in the pond. Unfortunately, this pond now also supports a variety of terrapins and turtles which should be dealt with as part of the overall control of invasive non-native species on the Commons.

In terms of the past management of this area of the Commons, in 2000, permission was given by Natural England for the Commons to build a dipping platform along the western edge of 7 Post Pond. This work was undertaken by WPCC staff.

Since this point, additional work at 7 Post Pond has included tree thinning and coppicing around the edge of the pond and the management of invasive non-native species, most aggressive of which has been New Zealand pigmyweed.

Scio Pond

Scio Pond is the only pond on the Commons that is located on the northern side of the A3 and it is situated approximately 50 metres from the busy Roehampton Lane. It is approximately 0.10 hectares in area and is largely surrounded by woodland.

In 2000, Drakeford noted that Scio Pond was stocked with a variety of fish including: roach, carp, perch and even pike. It was also home to unwanted terrapins that had been dumped in the pond. Little is currently known about the fish that can be found in this pond but large numbers of dark coloured carp can often be seen close to the surface during periods of hot weather. There is no evidence to suggest that pike remain in this pond.

With regards to the management of this pond, in recent years, a small number of trees were coppiced along the edge of the pond and temporary fencing was positioned along part of the northern edge of the pond in 2022 to help protect wildlife and promote the growth of aquatic flora.

Management considerations:

Having looked at each one of the Commons' nine ponds, the next step is to determine how they should be managed in the future. As previously noted on page 12 of this chapter, prior to any future large scale restoration project taking place in or around any of the Commons' ponds, a comprehensive survey must be completed that will help to inform us about the wildlife that each pond supports and consequently what damage could result through any sudden change or mis-management taking place in these areas.

There are however some general considerations that can be discussed prior to the completion of a full survey that may help to guide the future direction in which the management of the commons' ponds may take place. According to the FWHT website (2022) there are many myths and misconceptions that exist about how ponds function and how they should be managed.

According to the FWHT, these include:

- Ponds must be managed to keep their wildlife value.
- Drying out is disastrous for pond wildlife.
- Ponds should be at least 2 metres deep.
- All pond zones, from deep open water to shallow margins, should be created and maintained in every pond.
- The bigger the pond the better.
- Ponds should not be shaded by trees.
- Ponds should be dredged to prevent them from being choked with vegetation.
- New ponds need to be planted up because natural colonisation is too slow.
- Pond water-level fluctuations should be minimised.
- Ponds need an inflow to prevent them from becoming stagnant.
- Ponds are 'unstable' because of their small volume and area.
- Ponds are entirely self-contained systems, isolated 'islands' in a sea of dry land.

Taking into consideration the points mentioned above, one course of action for the future management of the Commons' ponds could be to allow each one of these areas to age and perhaps eventually dry out with the involvement of very little human intervention. According to Biggs et al (1994), the process of pond succession, during which ponds progressively fill with sediment to become wetland and perhaps in the long term, dry land, is an entirely natural process. Although this can often be seen as undesirable by land managers, all stages of pond succession are of great value to wildlife.

This said, the Commons' ponds provide far more than wildlife habitats alone and as discussed earlier in this chapter, all the ponds that are found on Wimbledon Common and Putney Heath are also very important for the historic, cultural, and aesthetic role which they provide to this area.

As a result, while the creation of additional ponds on the Commons should not be ruled out in the future, it is important that we do our very best to protect and, where practical, to enhance the ponds that are already present on site.

As noted by FWHT (2010) 'there is a common belief that pond management is about action, pulling out vegetation, dredging sediment and cutting back trees, whereas in reality, good pond management is more considered." With caution in mind, the FWHT website provides a number of precautionary principles which should be followed in any future considerations concerning the management of the Commons' ponds.

The main priority of these principles "is not to fundamentally change the pond and to retain a good proportion of all the different existing habitat types.

Examples cited by FWHT include:

- Don't deepen seasonal ponds to make permanent water
- Don't destroy any habitat type completely
- Don't remove more than a quarter of the pond's sediment over a three-year period.
- Don't remove more than a quarter of the vegetation as a whole, or of an individual plant species, in a three-year period.
- Don't cut down more than a quarter of trees in or around the pond over a three-year period.
- Don't link ponds to drains or streams.
- Don't steepen the water's edge profile or reduce areas of the drawdown zone.

According to the FWHT's advice on risk assessing each pond, all the Commons' existing ponds would be regarded as high-risk ponds. As a result of their own findings, the FWHT have suggested that 'the riskiest ponds to manage are those found on semi-natural habitats such as woodland, scrub, marshland, heathland and un-improved grassland'. Therefore, when planning any future restoration projects to any of the Commons' ponds, the following specific issues will be considered prior to the onset of any work taking place.

Managing the surrounding land.

According to FWHT (2010), 'the most important predictor of a pond's wildlife value is its surroundings. While two of the Commons' ponds (Kingsmere and 7 Post Pond) are located close to busy roads, all nine ponds that are located on the Commons are still fringed, in part, by various natural environments including woodland, heathland and grassland habitats.

As many semi-aquatic species will use the land that surrounds a pond during at least part of their life-cycle, the presence of these habitats means that in effect, the size of the ponds ecosystem is extended beyond the pond itself. Apart from Rushmere which is located within a grassland setting, all the other ponds on the Commons are largely surrounded by woodland. Over the years, work has been carried out around some the Commons' ponds to reduce the amount of shade that had been created in the pond by the dense canopy of the surrounding trees. Whenever this work was carried out, those involved in each operation were always careful to retain at least some shaded areas around each pond as surveys have shown that shaded habitats are able to support specialised and uncommon species that may not be found at more open sites. To summarise our approach to the management of trees around pond sites, the unwritten policy has always been to take things slowly and then monitor the results of our work.

Apart from providing an important visual focus in the landscape, trees provide warmth and shelter in exposed locations and important habitats for a wide variety of different wildlife. In areas such as Queensmere and Hookhamslade Pond for example, the presence of alder around the edge of the pond also provides a web of submerged roots which provide valuable food and shelter for many species of invertebrates and amphibians. All future pond management work will continue to take into account the importance of retaining suitable numbers of trees around each pond.

As noted by Biggs et al (1994) 'there is no doubt that ponds are intimately connected to their surroundings'. On the Commons, these surroundings are well used by humans and their pets as well as by wildlife and for this reason, careful consideration will need to be made between protecting the needs of wildlife and those of the visiting population. Ponds have always been enjoyed on the Commons for their amenity and aesthetic value and therefore all work that is carried out should aim include this requirement. In the example of Queensmere, which is possibly one of the most regularly visited ponds on the Commons, footpath restoration should be a top priority in order to direct visitors around the pond while at the same time providing the opportunity for marginal vegetation to recover.

Temporary fencing will almost certainly be required at various different ponds during any restoration project but this should not be at the total expense of visitors or their dogs. It is therefore suggested that while the protection of wildlife should be a key driver to the restoration of a pond, another consideration should be to provide small areas where dogs on lead and under control can enter the water to cool down during the warmer months of the year.

As illustrated above, sustained visitor pressure at Queensmere has resulted in a great deal of damage to the land that surrounds the pond.

Managing plants

Plants are an important part of any wildlife pond. They provide an important visual component in a pond, they remove excess nutrients, increase oxygen levels and provide food, shelter and breeding opportunities for many invertebrate species. The presence of a good variety of native plants is therefore of vital importance in helping to support a wide range of different species at each pond.

According to FWHT (2010), planting up a pond is usually unnecessary as species will often find their own way to a pond. This advice has been largely followed on the Commons, and rather than planting, we have chosen to fence in targeted areas of certain ponds to reduce disturbance and help plants to colonise areas of otherwise bare ground or open water. The most recent examples of ponds where temporary fencing has been used are Hookhamslade Pond and Scio Pond.

The only exception to this general policy of non-planting in and around the Commons' ponds which may occur in the future would be the planting of reed beds.

Any additional management of aquatic and semi-aquatic plants on the Commons will be the targeting of invasive non-native species but this will be more fully discussed in Objective 11 which covers the management of invasive non-native flora and fauna on the Commons.

Temporary fencing was installed around one part of Scio Pond during the beginning of 2022

Managing wildlife:

In general, the management of habitats has always been the main focus of the conservation work that has been carried out on the Commons and it has always been accepted that if the conditions were right, then suitable wildlife would arrive.

In terms of the Commons' ponds, things may not however be quite so straightforward. Although it may be generally accepted that fish form a natural part of the fauna for all ponds, without fish being intentionally introduced into a body of water, it is quite likely that most ponds would be without them.

On the Commons, there are five ponds that currently hold fish. All these ponds have an area smaller than 2 hectares and in the case of Queensmere, Kingsmere and Scio Pond, it is likely that these areas are all currently overstocked with too many fish. Scio Pond which is heavily silted and often gets very close to drying out during warm summers, contains a large number of carp which can sometimes be seen close to the surface where oxygen levels are presumably higher than can be found within the confines of the pond. As a non-native species, it is debatable whether carp should even be in the Commons' ponds and therefore the continued presence of this species on the Commons in the future should be discussed in due course.

While it is unknown how many fish are in the Commons' ponds, large carp are also seen just beneath the surface of Kingsmere during the Summer and in Queensmere, the pike grow so large that they often predate on young waterfowl, which during some years has cleared the entire pond of any mallard *(Anas platyrhynchos)* ducklings and to a lesser degree mute swan *(cygnes olor)* cygnets. In addition to this, approximately 50% of all pond species will not thrive alongside fish.

Where carp are present in a pond as they are in Kingsmere, Scio Pond, Ravine Pond and Rushmere, not only will invertebrate populations be affected but the feeding habit of large carp and other species such as tench and bream which involves sifting and unsettling the mud/silt results in turbidity which often prevents aquatic plant growth from occurring. In any future programme of work occurring to ponds on the Commons that currently support fish, a survey must be undertaken to discover what fish species can be found in each pond and subsequently what measures should be taken to ensure that the right species remain in each pond and that overstocking should not occur again in the future.

Another issue that should be addressed is where large numbers of waterfowl gather around a single pond. According to Howard (2019) this can result in heavy grazing of water plants, trampling of the ponds margins and water that is severely polluted by duck faeces. It is also stated by Howard that in very large numbers, the presence of waterfowl on a small pond can 'provide one of the most severe impacts experienced by a freshwater ecosystem'. While asking visitors to stop feeding the ducks may be the sensible course of action, it's unlikely that it will be a popular one. Clear and informative signage should however be displayed close to ponds in the future which explains the perils of over feeding waterfowl and the negative impacts that can result from carrying out such actions.

Managing pollution

In addition to forming an important part of a pond's ecosystem, the land which surrounds a pond also forms part of the catchment area that provides its water supply. According to Biggs et al (1994) 'polluted water is one of the most significant factors limiting the nature conservation value of ponds' and sources of polluted water can include urban run-off, polluted rainfall, litter, animal faeces and high numbers of fish. As many of the Commons' ponds are largely surrounded by semi-natural vegetation, and in some cases are supplied by water from natural springs, within an urban context, they should be relatively free of most pollutants.

As noted by the Ponds Trust (2001) knowing where a pond's water comes from can however help to control or eliminate any pollution that may affect that area. Apart from the issues that are presented by waterfowl and the overstocking of fish, one of the main problems that surely affects certain ponds on the Commons is the fact that many of them are stream or ditch fed ponds which often fill very quickly with sediment and potentially polluted water. There are four ponds on the Commons that receive at least some of their water via ditches (Queensmere, Ravine Pond, Kingsmere and Scio Pond) and all four ponds contain large deposits of silt.

As a preliminary to the Bushy Park Fishers Pond restoration project that was carried out during 2021 an ecological survey of the four main ponds in the park found that, as is probably also true for some of the Commons' ponds, some of the waterbodies contained large amounts of silt and were nutrient enriched and poorly oxygenated.

As reported on the Bushy Park website (2022) the results clearly showed that the biodiversity value of the ponds ecosystem was in a very poor condition which would in fact only support a very limited community of invertebrates.

Even without the benefit of an up-to-date ecological survey of the Commons' ponds, it would seem a sensible course of action to suggest that de-silting, at least in part, some of the worst affected ponds on the Commons would help to improve the wildlife value of these sites. If this work is carried out, the next step will be to ensure that the original source of the pollution is dealt with, which in this case would be the supply of water to the ponds from nearby ditches. It is hoped that the commissioning of a hydrology report for Wimbledon and Putney Commons will help us to better understand how water on the Commons can be better used in the future but if it is not possible to get rid of certain ditches, then all practical measures should be taken to at least reduce or localise pollutants reaching the pond.

One suggestion that has been raised by Biggs et al (1994), would be to 'polish' the incoming water supply by running it through soil or vegetation before it reaches the pond. The use of reedbeds is one form of natural filter that may help prevent certain types of pollutants from reaching the pond as well as providing additional habitats for wildlife. It is suggested that reedbeds could be introduced to Queensmere, Scio Pond and Kingsmere in particular.

Water surging into Queensmere during a heavy period of rainfall

Management of Invasive non-native species

As noted by Pavlis (2021), the goal for a natural pond is to maintain a balanced ecosystem where no single organism is allowed to become so dominant that it takes over a pond.

The management of invasive non-native species on the Commons will be covered in detail in Objective 11. Under the Wildlife and Countryside Act (1981), it is however illegal to plant in the wild, or cause certain non-native plants to grow in the wild. Those associated with water include, Japanese knotweed (Fallopia japonica), water fern *(Azolla filiculoides)*, water lettuce *(Pistia stratiotes),* parrot's feather (Myriophyllum aquaticum) floating pennywort *(Hydrocotyle ranunculoides)*, New Zealand pigmyweed *(Crassula helmsii)* and curly waterweed *(Lagarosiphon major).*

Floating pennywort photographed in Rushmere during 2008

Legal Issues:

There are many Biodiversity Action Plan species that are associated with ponds in the UK. BAP species are by definition rare or threatened plants and animals that require protection. While a full list of species can be found on the JNCC website, some familiar BAP species that have been recorded on the Commons include common toad, grass snake, soprano pipistrelle and brown long-eared bat. If BAP species are recorded at a pond, it is important to check the law which protects these species and adhere to any legal requirements that may be involved.

As noted on the FWHT website (2022) if there are protected species in or visiting a pond (i.e. species listed on Schedule 5 or 8 of the Wildlife and Countryside Act), then

the relevant statutory consents must be obtained to ensure that any work will not harm the species concerned'. If this situation should occur, Natural England will need to be contacted for a licence to carry out any work.

Species included under the Wildlife and Countryside Act 1981 include the common toad, common frog, natterjack toad and some species of newt. Where an animal is protected under the Wildlife and Countryside Act (1981), it is a criminal offence to intentionally kill, injure or move the animal in question.

It is also a criminal offence under the Wildlife and Countryside Act (1981) to intentionally or recklessly:

- Damage or destroy any structure or place which an animal protected under the Act uses for shelter or protection.
- To disturb any such animal while it is occupying a structure or place which it uses for shelter or protection
- To obstruct access to any structure or place which any such animal uses for shelter or protection.

It is also a criminal offence under the Wildlife and Conservation Act (1981) to release or allow to escape into the wild certain animals set out in the Act. This includes any animal which is non-native or a regular visitor to the UK in a wild state.

Pond Management proposals: 2023 to 2028

Rushmere:

- Ecological survey
- Monitoring
- Temporary fencing for the protection of flora and fauna around the western edge of the pond.
- Duck tubes to be trialled within the fenced area.
- Management of New Zealand pigmyweed

Bluegate:

- Ecological survey
- Monitoring
- Coppicing (willow and birch around the immediate edge of the pond – every 5 years)
- Temporary fencing for the protection of flora and fauna (where?)
- Deeper pools – as Bluegate gravel pit dries out most years a very small number of deeper pools may help to keep water for longer. (location?)
- Vegetation management – monitor the spread of soft rush, Michaelmas daisy and trifid bur-marigold within the pond.

Hookhamslade pond:

- Ecological survey
- Monitoring
- Temporary fencing – this was installed in 2022 but could be moved
- Coppicing – occasional coppicing of silver birch required around the perimeter of this pond.
- Plant management – monitor the spread of soft rush and branched-bur-reed.

Ravine Pond:

- Ecological survey
- Monitoring
- Temporary fencing (mind the golf balls)
- Coppicing – on the slopes of the pond
- Removal of fish
- Management of Duck potato

Queensmere:

- Ecological survey
- Monitoring
- Fish management – no idea of stocking rates (note dangers of too many fish especially Pike)
- Silt removal – especially at the in-flow end of the pond
- Temporary fencing – at the inflow end of the pond
- Coppicing – coppicing required for the alder near the outlet.
- Floating platforms/duck tubes -
- Removal of wooden embankments
- Removal of non-native lilies
- Planting – there is very little marginal vegetation in this pond.
- Tree thinning -
- Path restoration

Curling Pond:

- Ecological survey
- Monitoring
- Tree thinning – mainly Turkey oak
- Tree planting – British species such as Rowan.
- Coppicing – Willow at the ? end of the pond
- INNS – control of New Zealand pigmyweed every 4-5 years.
- Temporary fencing

Kingsmere:

- Ecological survey
- Monitoring
- Path restoration
- Tree thinning (end towards outlet)
- Planting (reed bed) more infor…found within river notes – will help to clean water entering Scio Pond
- Fish management – no idea how many fish are in this pond.
- Temporary fencing – towards outlet end to protect flora and fauna
- Coppicing – outlet end…
- Floating platforms/ducktubes

7 Post Pond:

- Ecological survey
- Monitoring
- Coppicing (mainly willow at what end?)
- Temporary fencing
- Path restoration
- INNS – Crassula helmsii every 4-5 years

Scio Pond:

- Ecological survey
- Monitoring
- Fish management – no idea of the amount of fish in this pond but carp are seen suffering when water level drops during the summer.
- Temporary fencing – completed in 2022
- Silt removal – the silt in this pond is waist deep making management and access very difficult.

Suggested new ponds/pools on the Commons:

- Putney Lower Common although public consultation would be required for this project.
- Small ephemeral ponds created along woodland ride edges and fed by rain water and surface run-off.

Suggested timetable for Pond Management on Wimbledon and Putney Commons (this list is subject to the completion of an ecological survey)

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Management of the surrounding land/coppicing	Curling Pond & Kingsmere	Bluegate	Hookhamslade	Ravine Pond	7 post Pond
Temporary fencing	Kingsmere	Rushmere	7 Post Pond		
Planting (reed bed or trees)	Kingsmere (outlet)		Queensmere (inlet)	Curling Pond	
Fish management		All ponds with fish			
Path restoration	7 Post to Kingsmere	Queensmere			
Silt removal		Scio Pond & Queensmere	Scio Pond & Queensmere	Kingsmere	Curling Pond
Removal of vegetation					
Control on INNS	7 Post Pond & Ravine Pond	Queensmere	Curling Pond	Rushmere	
Creation of new ponds and pools	Woodland edge (TBC)		Woodland edge (TBC)	PLC (?)	Woodland edge (TBC)
Floating platforms & duck tubes		Rushmere & Queensmere			
Removal of artificial embankments		Queensmere			
Ecological Survey & Monitoring	All ponds (including fish survey)	All ponds	All ponds	All ponds	All ponds
Creation of monitoring platform			Queensmere		

5: Vision

The vision for the future of the Commons' ponds is one where all nine permanent ponds on this site provide a healthy environment for wildlife and an accessible location for education and the enjoyment of visitors to the Commons. For some of the Commons' ponds, restoration may require a great deal of work while for others, a far smaller amount of attention may be considered enough. One thing however that is for certain, is that ponds, both large and small, provide a huge amount of value, both ecologically and culturally to the landscape in which they are found. For this reason, apart from the need to preserve the ponds that are currently found on the Commons, there should also be an aspiration to create, where possible, a network of additional ponds around various other parts of the site.

In recent years, the FWHT launched an initiative called The Million Ponds Project. The goal of this extensive project is to create a network of clean water ponds across the UK that will benefit the survival of freshwater wildlife. As noted on the FWHT website (2022), 'ultimately, the aim of the project is to reverse a century of pond loss, ensuring that once again, the UK has over a million countryside ponds'. As many ponds in the UK are now affected by various forms of pollution, restoring the Commons' own ponds will help to provide additional areas of clean water but with adequate resources, the co-operation of the public and a will to succeed, there is potentially more that can be done to provide additional areas of clean water ponds on the Commons.

At a basic level, pond construction can be as simple as digging a hole in the ground and this, to a small degree is exactly what we have been doing over the past few years as part of the Commons' ongoing programme of woodland management. Where rides have been widened to reduce shading and allow increased levels of light to reach the woodland floor, small ephemeral or temporary pools have been created along the woodland edge.

Temporary pools created as part of the Commons' woodland management work

As noted by Grey (1988), temporary ponds are distinctive and predictable habitats as they dry out, not at irregular intervals but annually. Prior to extensive historic land drainage that took place around the British Isles, it is likely that small temporary pools would have been widespread around the British landscape but despite the gradual decline of these small waterbodies, recent evidence suggests that these often uninviting and overlooked wetland sites provide important habitat niches for a diversity of fauna. One reason for the success of these temporary pools in attracting invertebrates could well be the absence of fish which can have a devastating effect on invertebrate populations.

As discussed by Pond Action (1994), the result of the Oxford Pond Survey (1988 - 1991), found that depth was the single most important factor in determining the composition of pond invertebrate communities. It followed, that shallow ponds, many of which were temporary and would seasonally dry out, supported a collection of invertebrates that was very distinct from those supported by permanent ponds. To help provide additional temporary ponds around the Commons, the creation of these areas will form a regular part of our ongoing work.

Another method of providing additional ponds on the Commons could be to simply construct one or more ponds, perhaps similar in size to Curling Pond at various points around the Commons. One method of achieving this could be to investigate the feasibility of re-establishing some of the Commons' lost ponds such as the Silent Pools or Grantham Ponds on Putney Heath.

Alternatively, in areas where the existing vegetation type is extensive and uniform and the creation of a pond would not be to the detriment of existing flora or fauna, perhaps an entirely new pond could be created. It seems unfortunate that at the present time, eight out of the nine ponds on the Commons are all located on Wimbledon Common with only one pond (Scio Pond) situated north of the A3 and no ponds on Putney Lower Common at all.

To contribute to the Million Ponds Project, FWHT (2022) have stated that three criteria need to be followed. These are that ponds should have a clean water source, be left to colonise naturally and be left to thrive without undue disturbance. While it may not be popular with all visitors to the Commons, this would mean that any newly created pond should, at least to begin with, be fenced off from direct contact by visitors or their dogs. This situation can obviously be reviewed as the pond becomes better established within its new setting.

In addition to the creation of additional ponds on the Commons, another important part of the vision for the Commons' ponds is the aim to increase visitor involvement within these areas. As suggested by the Wildlife Trusts (2019), a pond is a place for wildlife, a place for fun, a place for learning and a place for memories.

Where possible, the Commons' ponds should try to fulfil all these objectives and although, once established, most ponds shouldn't require a great deal of active management, perhaps in the future, much of what is required could be carried out by local groups of volunteers.

If enjoyment can be combined with the attainment of new skills and knowledge, perhaps the stewardship of the Commons ponds will be better safeguarded into the future.

6: Monitoring assessment

"a field particularly suited to the activities of the amateur, whose humble pond hunting, if carried out systematically and carefully, may result in valuable contributions to science" (James Clegg, sourced from the Northumbria University website).

At the current time, we have very little information concerning the wildlife that can be found in and around the Commons' ponds. It is anticipated that accompanying the completion of a comprehensive ecological survey of these areas, a base-line will be provided which will help us to move forward with any required restoration work that may be required in the future.

When the ecological survey has been completed, there will however still be a requirement for periodic monitoring to take place that will help to ensure that our knowledge of the flora and fauna of the Commons' ponds remains up-to-date and that any future management is based on the correct wildlife requirements of each pond. In terms of monitoring wetland habitats, the FWHT are undoubtedly one of the most experienced organisations in this field and it is suggested by this group that a range of pond survey methods are available that will suit people with different interests and levels of experience.

While entering into some form of partnership with the FWHT via volunteer surveys such as the 'PondNet survey' could be a step in the right direction, in the long term, it may be more advantageous for the Commons to follow a survey that is largely based on the FWHT's Big Pond Dip Invertebrate Study'. According to the FWHT website (2022), 'the Big Pond Dip invertebrate survey is a simple biological quality assessment method, designed for use by the wider public, which assesses the overall 'naturalness' of ponds". Originally designed for use in garden ponds, the Big Pond Dip Survey method can be applied to any pond or lake up to 5 hectares in area and would therefore be ideal for use on the Commons ponds.

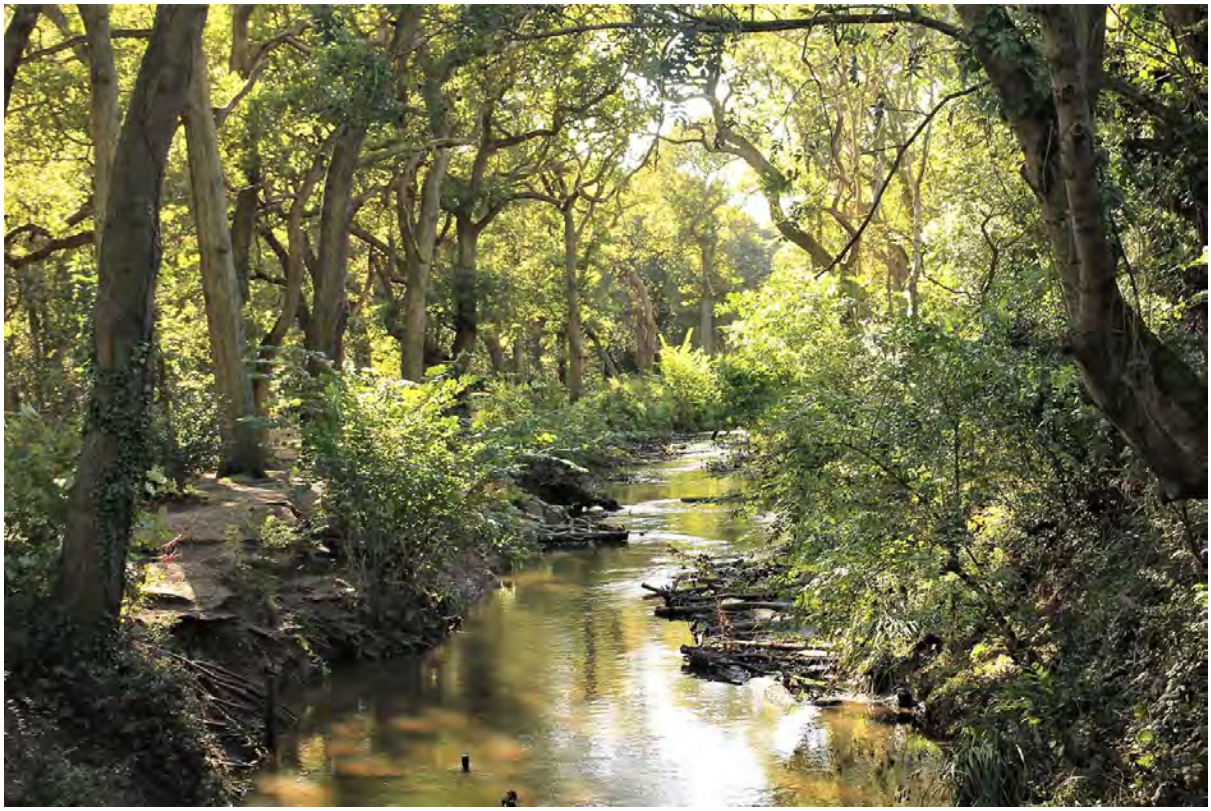
In brief, a selection of different animal species is chosen and scored according to their pollution sensitivity. When the results are added together, a high score on the Big Pond Dip will indicate that a pond is of high water quality and a lower score will reflect a pond that is in poorer condition as a result stressors such as pollution, poor habitat structure or high fish densities.

This fairly straightforward method of surveying the Commons' ponds would be ideal for volunteer involvement and if carried out annually, preferably between May and August, the results that are yielded will help to provide a regular 'health check' for the Commons ponds.

Wimbledon and Putney Commons Land Management Plan:

Objective 5: River Management

1: Discussion



According to Dobson and Frid (1998), “a river is a channel of flowing water, whose movement is determined by gravity and is therefore downhill. Some rivers may cease to flow and may even dry up completely. The vast majority of rivers are, however, continuously flowing, though discharge and rate of flow will be variable. Their linearity and unidirectional flow are of fundamental importance in determining their structural and biological features as are the volume of water present and its quality.”

Rivers are therefore incredibly complex linear systems with each one formed by a unique set of factors which in their natural state, help to create and constantly re-shape a wide range of different habitats along their course.

Unfortunately, over the course of British history, as has happened across the world, many rivers have been dramatically altered from their original form by human activity and become separated from their floodplain wetlands. In many cases, the wildlife that originally thrived in these areas has been hunted and persecuted to near or actual extinction and habitat loss has reduced opportunities for many species. Many rivers have become choked by the presence of invasive non-native species (INNS) that have been deliberately or accidentally released into the wider landscape.

Rivers have become polluted through a combination of household, industrial and agricultural chemicals. Major stream modifications such as dames and weirs have

severely impacted on migratory fish species and patterns of siltation' use of water courses for trade and touristic transport have contributed to the spread of INNS as well as generating polluted discharges.

While the historical use and exploitation of Britain's rivers has often resulted in quite devastating consequences for the health of these waterways, in more recent times, laws have been enacted which have gone some way to protecting Britain's rivers from further damage and in some cases, species that had become extinct in the UK have been successfully returned into the wild. Wildlife conservationists have worked hard to protect Britain's waterways and their intrinsic wildlife value is now better understood and appreciated alongside their social benefits in terms of flood management, water resources, and wider use in industrial processes.

In this chapter of the Commons' Land Management Plan, the historical, cultural and ecological context of rivers will be examined alongside the current management and the vision that we have for the two sections of the Beverley Brook that are located on Wimbledon Common and Putney Lower Common.

2: Significance

(2a) Historical context

Prior to the settlement of Neolithic farmers (approximately 6,000 years ago) wild rivers would have been a natural feature of the British landscape. As population numbers rose and society developed many changes occurred but as Holes and Raven (2014) note, 'the total length of rivers in Britain has decreased relatively little, but their shape and behaviour have changed dramatically' and in some cases beyond all recognition.

Accompanying a steady rise in human population and the effects of both agricultural and industrial revolutions, artificial changes to natural river flows and to systems of land and water management have resulted in considerable damage being inflicted to Britain's waterways. Rivers have been harnessed for the power they are able to provide in operating machinery and they have been diverted to supply canals, to irrigate crops and to provide drinking water.

From accounts in the Domesday Book (1086) we know there were 5,624 water mills south of the Trent during this time and it has been estimated that by 1300, there were more than 10,000 water mills in operation around the entire country. By 1600, large scale draining of flood plains was being carried out under the auspices of Queen Elizabeth I and by the early 18th Century, the length of navigable rivers had increased from 1,000km in 1660 to 1,900km in 1720. As summarised by Holmes and Raven (2014) rivers all around the British Isles "have, at various times, been re-routed, straightened, widened, dammed, piped, polluted, pumped almost dry and their floodplains drained, as mankind has remorselessly used and often abused them".

For many modern Londoners, it may come as a surprise that once upon a time, in addition to the river Thames, there were also a considerable number of other rivers that could be found across the capital city. As noted by Talling (2011) in his book

entitled ‘London’s Lost Rivers’ approximately 30 rivers, streams, brooks and canals that once ‘graced’ the capital’s landscape have now largely disappeared into obscurity. Many of them were covered over and converted into sewers as part of a Victorian feat of engineering designed to reduce water related pollution and therefore improve health and save the lives of countless Londoners. While the creation of London’s sewage system was without doubt a great triumph of human ingenuity, the fate of some of London’s major rivers such as the Tyburn, Fleet and Effra, which was said to be 12 feet wide in parts and with a name derived from the Celtic word for torrent, to little more than underground sewers does however seem a little mournful to say the least.

While the Romans were most likely the first settlers in the British Isles to begin the process of controlling rivers and floodplains, it was during the 20th Century that the near destruction of many of Britain’s waterways was accelerated. Funded by Government subsidies in a drive to improve the nation’s ability to produce its own food, approximately 8,500km of rivers in England and Wales were deepened, widened and straightened through the Land Drainage Acts of 1918 and 1930. Carried out over a period of nearly 50 years, over 95% of floodplains were drained for productive farmland and urban development and according to Holmes and Raven (2014) in some places, many rivers became so polluted with agricultural and urban waste that ‘for all intents and purposes, they had become biologically dead’.

Although river pollution Acts were passed as early as 1876 and 1890, it was not until the second half of the 20th Century that a coordinated approach was made to start cleaning up Britain’s rivers. By 1978, a change in UK law obliged Regional Water Authorities to have due regard for wildlife when planning and carrying out river and drainage works and since the late 1980’s and 1990’s many of the best semi-natural rivers in the UK have been protected as Sites of Special Scientific Interest. This said, while there are many incredible projects being carried out all around the UK to help protect and enhance Britain’s rivers, as noted by Holmes and Raven (2014) many rivers ‘have, metaphorically, been to hell and back since the beginning of the Industrial revolution and therefore we still have a great deal to achieve before most of them will ever be considered as truly healthy habitats for both wildlife and people to enjoy.

Despite valiant efforts to clean up Britain's waterways, many remain extremely polluted (Beverley Brook on Wimbledon Common photographed in 2020

(2b) Cultural and Aesthetic context:

Rivers and human societies have been inextricably linked throughout history. Globally, most early human settlements originated close to rivers and as such, rivers have played a major part in the culture, wealth, theologies and mythologies of many different regions of the world. As noted by Beer (2020) "hydrolatry, or the idea of water as sacred, is ubiquitous in world religions, featuring in rituals of immersion, libation, communion, celebration, promise, thanksgiving, healing, pilgrimage and purification".

But away from any formalised religious context, perhaps our continued fascination with many of the rivers that cross the landscape can be described in the words below:

"There's a reason we can't look away. Psychologists call it 'soft fascination', the sight and sound of moving water is sufficiently stimulating to occupy the brain, but irregular enough that it does not become hypnotic or monotonous. It holds attention without dominating thought, freeing the mind to swim elsewhere. It is highly conducive to reflective thought and a powerful pull to what Veronica Strang (The meaning of water) calls 'secular hydrolatry', the sanctification of water without the burden of religious dogma". (Beer 2022)

In 1929, Trade Unionist and MP, John Burns famously described the river Thames as “Liquid history”, but this could also be said for so many of the other great and lesser rivers of the world. Within the British Isles, rivers have provided the inspiration for the poetry of writers such as Keats, Wordsworth, Tennyson and Brooke as well as providing important backdrops for classic stories by Thomas Hardy, Richard Adamson and of course, Kenneth Graham. More recently, the Beverley Brook itself (or herself) has even featured as a regular character in Ben AAronovitch’s urban fantasy novels, the Rivers of London.

But, however we portray our association with rivers, the inescapable historical fact is that we, humans, have often treated our rivers appallingly. In 2017, the International Union for Conservation of Nature (IUCN) recognised in its Bellagio Principles on Valuing Water, that water does indeed possess multiple values to the many different stakeholders which are affected by it affirming that ‘there are deep interconnections between human needs, economic well-being, spirituality and the viability of freshwater ecosystems that must be considered by all”. As noted by the IUCN (2022) “nowadays, the spiritual and sacred value of water tends to clash with the perception of water as a resource at the disposal of society that can be used for economic development”.

Accompanying the high value that has once again been placed on the multiplicity of values that are provided to societies by rivers, there has been a concerted effort by conservationists and activists to protect rivers by attempting to award them legal personhood. As reported by Barkham (2021) in a Guardian newspaper article entitled ‘Should rivers have the same rights as people? It was reported that in a first for Canada, in 2021, the Magpie River (known as the Muteshekau-shipu by local indigenous people) which winds through Quebec, was granted legal personhood by local authorities, and given nine rights, including the right to flow, the right to be safe from pollution and the right to sue. Also noted in the same article for the Guardian newspaper is the fact that the Magpie River (Muteshekau-shipu) is just one of a growing number of rivers around the world to be recognised as a living entity which in law would give them either legal personhood or at least, the right to flourish.

While the protection of rivers is a very complex issue and one that will need to overcome a multiple of hurdles before it can be considered a complete success, there is undoubtedly a rising awareness among many people of the important role that rivers and the rights of nature can play in our daily lives. Although most European countries lag far behind the commitments that have been shown in other parts of the world to protect nature, in 2018, Frome Town Council attempted to pass a byelaw that, if successful, would provide at least part of the river Frome in north Somerset with the status of a person in law. While ultimately unsuccessful, this would have provided at least a section of the river Frome with the right to exist, flourish and thrive and for the river to flow freely. As noted by Kaminski (2021) although the bye-law had been turned down in 2020, the fight to give Britain’s rivers rights continues today.

Away from the legal battles that are required to provide greater protection to Britain’s rivers, in recent years there has been a growing movement from within various

sections of British society that has seen grassroots organisations and many thousands of volunteers coming to the rescue of our precious waterways. Apart from the work that we and other landowners such as the Royal Parks and local Borough Councils have been carrying out in and around our various waterways, other organisations such the South East Rivers Trust (SERT) and Thames 21 to name just two, have also been involved in some great projects, many of which are ongoing, to help protect the health of our rivers.

Working with local communities, these organisations have been involved with projects such as removing litter, controlling INNS, creating wildlife habitats, reporting pollution incidents, recording wildlife, educating the public and campaigning for better protection of our rivers. Working alongside anglers, boaters, naturalists, and the many other people who enjoy spending time on (and in) our rivers, it may be that the cultural appreciation of Britain's rivers will, through the work of these groups, return to a more benevolent position than appears to exist today.

SERT volunteers working along the Beverley Brook on Wimbledon Common during 2019.

(3b) Ecological context

Even in a relatively small landscape such as that covered by the UK, a variety of different types of rivers can be found. These are largely determined by the geology of the area through which a river travels and therefore each different type of substrate (clay, sandstone, chalk or limestone) will have a direct influence on the water and the flora and fauna which each river is able to support.

In addition to this, the range of natural habitats that are found in rivers is also greatly influenced by fluvial processes which involves the physical interaction of flowing water and the effects this has on the natural channels of a river. As noted by Holmes et al (2001), in its unconfined state, a river will contain a series of different habitats from the flowing main channel to aquatic, semi-aquatic and terrestrial environments. These features may include backwaters that are away from the main flow of the river and provide an important refuge for many different types of flora and fauna. Riparian woodland which provides a valuable interface between terrestrial and freshwater ecosystems and woody debris in all shapes and sizes which can improve water quality and benefit wildlife such as invertebrates and fish. Whatever type of river is being looked at, if unconstrained, each river forms a dynamic system which is continuously adjusting and re-shaping the habitats along its length in relation to the ongoing flow of water and sediment that is deposited along its course.

Unfortunately, there is strong evidence to suggest that les than 15% of lowland river channels and only 25% of upland Britain are entirely free from the effects of regulated flow or artificial re-shaping and reinforcement (Holmes and Raven: 2014) and therefore it is hardly surprising that so many of our rivers remain so depleted in terms of the flora and fauna they are currently able to support.

In a ‘natural’ state, rivers and their surrounding areas are however of immense importance to wildlife.

Fish:

Perhaps for obvious reasons, fish are inextricably linked with the presence of rivers. Habitat requirements vary between different fish species and at different stages of their life cycle which illustrates the importance of having a variety of habitats along the course of each river. A major source of food for most species of freshwater fish consists of terrestrial invertebrates. This demonstrates the importance of ensuring that each river contains a high level of vegetation both in-stream and along the edges of the water course in which invertebrates can breed, feed and unfortunately, for the invertebrates involved, fall into the river, and provide food for the fish.

According to the Fresh Water Habitats Trust (2022) ‘there are approximately 42 native species of freshwater fish in the UK and a number of marine species that venture into mainland waters for breeding purposes including the Atlantic salmon *(Salmo salar)* and European eel *(Anguilla Anguilla)’*. While most fish prefer clean, well oxygenated water, many will also survive in less than perfect conditions.

Over the past 20 years, there have been two known fish surveys carried out along the Wimbledon Common section of the Beverley Brook. The first survey was carried out by the Environment Agency (E.A) in June 2010 and the second survey was carried out by the SERT in 2018. Both surveys were completed prior to any restoration work being carried out along this section of the Beverley Brook.

In 2010, the E.A’s fishery comments were:

“The site has a good population of coarse fish dominated by chub (Cousius plumbeus) and dace (Leuciscus leuciscus). Dace were the most abundant species,

with three distinct year classes and several very large individuals were present. Chub were present across a range of size classes, indicating multiple successful spawning years. Chub were present to 3 pounds and dace to 12oz. Other species captured in low numbers were gudgeon (Gobio gobio), European eel, roach (Rutilus rutilus), rudd (Scardinius erythrophthalmus) and three-spined stickleback (Gasterosteus aculaeatus). Fish surveys probably represent 'moderate' to 'good' status."

In 2018, the SERT fish survey reported the following information:

"Happily no shortage of small fish in the Beverley Brook. 500 plus fish, mainly roach, dace, gudgeon and chub but also eels, one tench (Tinca tinca) and one fat goldfish (Carassius auratus auratus) were found. A good range of age cohorts, except for the gudgeon who were all large".

Although water quality will always be an issue in improving the fisheries potential of any river, given the fact that extensive restoration work was carried out along the Wimbledon Common section of the Beverley Brook during 2018/19, it would be very interesting to commission another fish survey along this section of the brook over the coming years. Of particular interest, would be whether any European eels can still be found along the Beverley Brook. Although once prolific in many British rivers including the river Thames, the European eel is now categorised as Critically Endangered on the Red List of the IUCN and according to Jacoby and Gollock (2014), 'the number of glass eels arriving in European waters every year has fallen by more than 90% from 1980's levels. According to Hatchwell (2020) in terms of the number of eels that are illegally traded, the European eel has become the most illegally trafficked species in the world.

Invertebrates:

The availability of habitat diversity along the length of a river is necessary to support a rich and varied invertebrate fauna. Habitats may include emergent vegetation and plant stems as well as sediment-based habitats such as pools, gravel bars and islands. As noted by Holmes et al (2001), of the estimated 30,000 British species of terrestrial and freshwater invertebrates, over 1,000 of these can be found along the water's edge and approximately 3,500 spend all or part of their life cycle in fresh water. Although most of the invertebrates that are associated with rivers and other freshwater habitats remain largely hidden from view, the diversity of these species is incredible with herbivores, scavengers, predators and parasites all forming part of the invertebrate fauna of these areas.

Unfortunately, at the current time, there is very little information available on the different invertebrate populations that can be found along the Commons' two separate areas of the Beverley Brook and this is something that should be addressed in the future. Some volunteer work has been undertaken using 'Riverfly' methodology, a citizen science pollution indicator scheme, but no wider systematic ecological surveys are available to date.

Mammals & Birds:

Although a wide variety of different mammal species may occasionally visit rivers, few depend wholly on them. In Britain, there are four mammals that are particularly associated with these areas and these include the otter *(Lutra lutra),* water shrew *(Neomys fodiens),* water vole *(Arvicola amphibious)* and the recently re-introduced European beaver *(Castor fiber).* None of these species are 'currently' found on the Commons.

Unfortunately, hunting, pollution, loss of habitat and the introduction (legal or otherwise) of invasive non-native species such as the American mink (*Neovison vison)*, have historically had a devastating effect on many of Britain's native mammal species. Introduced to UK fur farms in 1929, imported North America mink soon escaped into the wider countryside where feral populations first bred along the River Teign in Devon and subsequently moved throughout the wider landscape. With approximately 700 mink farms in operation in the UK by the 1960's, various releases led to the devastation of the native water vole. As noted by Holmes and Raven (2014) between 1990 and 1998, the British water vole population had declined by 90% (approximately 6 million individuals) which was largely the result of predation by American mink but also habitat loss.'

One group of mammals that are known to frequent the Beverley Brook on Wimbledon Common are bats and from the five species that are associated with watercourses - daubentons *(Myotis daubentoniid),* whiskered bat (*Myotis mystacinus),* natterers bat *(Myotis nattereri),* noctule bat (*Nyctalus noctule*) and pipistrelle *(Pipistrellus pipistrelle*), daubentons and, pipistrelle's have been reported on the Commons. In 2013, it was also suspected that one or more natterer's bat *(Myotis nattereri)* may have travelled along a part of the Beverely Brook whilst foraging between Richmond Park and Wimbledon Common.

In the UK, there are approximately 20 bird species that regularly breed or feed along rivers. Feeding mainly on invertebrates and fish, among the many different birds that can be found along the Beverley Brook on the Commons are Kingfisher (*Alcedo atthis*), grey heron *(Ardea cinerea)* and grey wagtail *(Motacilla cinerea).* In addition to these, there are also occasional reports of little egret *(Egretta garzetta)* and slightly more common wetland species such as the mandarin duck (*Aix galericulata),* mallard *(Anas platyrhynchos)* and moorhen *(Gallinula chloropus).*

Following the restoration work that was carried out along the Beverley Brook during 2018 and 2019, Kingfisher have become a regular sight on Wimbledon Common.

Riverside plants and trees:

Plants associated with rivers can be found growing under the water, floating on the surface, or growing along the nearby embankments. The abundance and variety of plant life that can be found growing along each river will depend on a range of factors including geology, water quality, the velocity of the flow and past management. Where plants grow, they provide many important functions to ensuring the health of a river. Both submerged and emergent vegetation provides shelter and food for invertebrate and fish species as well as being of use to some birds and mammals. Submerged plants may also act as important oxygenators.

Along the edge of the river, trees also play an important role in adding to the ecological value of the landscape. Protecting trees along the river ensures that riverbanks are stabilized, and food is provided to the fish below by means of invertebrates dropping off branches and leaves and into the water. Trees also provided areas of shade, nesting and roosting opportunities for birds and bats and they often enhance the attractiveness of the landscape. Even when trees may eventually fall into the river, they continue to provide important habitats for wildlife and features that continue to bring life to the river.

Invasive Non-Native Species (INNS):

While the management of INNS on the Commons will be covered in Objective 11 of Land Management Plan, INNS have been extremely successful in colonising the UK's waterways. Able to reproduce quickly and often without any natural predators, INNS often outcompete native species denying them and species which depend on them, suitable access to food, space and light. According to the Rivers Trust (2022), some of the main INNS that are encountered along the UK'S waterways include floating pennywort (*Hydrocotyle ranunculoides),* Himalayan balsam (*Inpatiens glandulifera),* signal crayfish *(Pacifastacus leniusculus),* Japanese knotweed *(Fallopia japonica)* and American mink. Unfortunately, there are more besides.

Over recent years, on the Commons, we have been involved with the control of Himalayan balsam and Japanese knotweed from the banks of the Beverley Brook. Despite our vigilance and the ongoing management that we carry out on these invasive plants, the two sections on the Beverley Brook which pass through the Commons are both located downstream from a very busy urban catchment area. Although we will continue to do our very best to control the spread of INNS along the Beverley Brook, this work must be seen as a collaborative effort that is carried out by all riparian landowners along the entire length of the brook. If the removal of INNS is not carried out by each landowner, the spread of these undesirable species will continue to blight the landscape in this part of London.

Removal of Himalayan balsam along the Wimbledon Common section of the Beverley Brook.

3: Condition

Since 2013, the ongoing health of the Beverley Brook has been under the watchful eye of the Beverley Brook Catchment Partnership. Hosted by SERT, this group consists of various stakeholders and organisations including the E.A, water companies, local councils, landowners, community groups and environmental charities, that have an impact on the health of the river and whose efforts are instrumental in helping the Beverley Brook to thrive again. Using data and evidence to assess the main pressures that impact on the health of the Beverley Brook, such as water quality, channel modifications and INNS, this information is then used by the Beverley Brook Catchment Partnership to identify and prioritise future projects that will benefit the health of the river.

While up to date information is available on the SERT website, at the current time, the Beverley Brook is failing its target of 'Good Ecological Potential' under the Water Framework Directive (2000/60/EC)

The information below Has been sourced directly from the SERT website (2022)

"The Water Framework Directive (WFD) is a legislative framework designed to protect and improve the quality of all water resources within the UK and European Union. To monitor, progress and drive improvement, individual chemical and biological elements are assessed and classified. Ecological elements such as fish and invertebrates are scored as High, Good, Moderate, Poor and Bad, whilst chemical elements such as hazardous substances are classed as either Good or Fail. The aim is to bring all waterbodies up to Good status by 2027.

For the purpose of the WFD, THE Beverley Brook is classified as a Heavily Modified Waterbody, having been substantially changed in character by human physical modifications. The target is therefore for the Beverley Brook to reach Good Ecological Potential (GEP) and not Good Ecological Status (GES).

The Beverley Brook is currently considered to be of Moderate Ecological Potential, with phosphate concentrations and fish populations classed as Poor and Bad respectively. The date also highlights that invertebrates and macrophytes (aquatic plants) are both classified as below good status.

It is important to note that WFD classifications are not always a true representation of reality, often based on limited sample sites with few repetitions. Considering local knowledge and other evidence is therefore key in understanding the catchment".

It should also be noted that according to a 2019 assessment of the state of English rivers that was carried out by the E.A and Natural England, only 14% of rivers were considered to of 'Good' ecological status which illustrates that the deplorable state of our rivers is not only a local problem but also a national disgrace.

4: Management of the Beverley Brook

(Restoration of the Wimbledon Common section of the Beverley Brook: 2018/19

As reported on the Thames 21 website (2022), excluding the river Thames there are 600km of river in London and over the past 20 years, river restoration initiatives across the Capital have carried out a great deal of hard work to reverse years of environmental decline through integrated solutions and community engagement. Since 2000, approximately 39km of London's rivers have been restored reconnecting communities across the Capital to the ecological, cultural and heritage value of their waterways (Thames 21: 2022).

Included within the restoration of London's rivers has been the regeneration of various sections of the Beverley Brook. Rising in Worcester Park and travelling north for 14.3km until it finally reaches the Thames just past Putney Lower Common, the Beverley Brook catchment covers an area of 64km2 and according to SERT has an approximate population of 880,000 people. While 66% of the Beverley Brook catchment area is largely urban and suburban, the brook also travels through many important greenspaces including Wimbledon Common (SSSI/SAC), Richmond Park (SSSI /SAC/National Nature Reserve), Barnes Common (Local Nature Reserve and Site of Interest for Nature Conservation) and Putney Lower Common. There are also two tributaries which join the main section of the Beverley Brook near New Malden and these are the Pyl Brook and the East Pyl.

With reference to the land which is administered by the Wimbledon and Putney Commons Conservators, there are two sections of the Beverley Brook that fall within this area. This consists of approximately 2km of the Beverley Brook on Wimbledon Common and approximately 400 metres of the Beverley Brook that passes through Putney Lower Common.

According to Haldane (2000), historically, the Beverley Brook on Wimbledon Common has undergone several transformations. There is a brief reference to it being deepened during the 1880's and there is also an account from 1936 that reported that the brook was 'widened and straightened and the banks built up using the dredging's'. Walter Johnson, in an article written for the Journal of the Wimbledon Natural History Society in 1937, entitled 'Wimbledon Common – a Retrospect 1888-1937, stated "The reconstructed Beverley (Brook) no longer meanders, no eyots dot its course, no fish dart about its waters, no voles burrow in its banks.' From other records we also know that during 1952, a section of the Beverley Brook than runs parallel to the REMPF was widened and the banks raised to reduce the risk of flooding to the nearby playing fields.

Referring to the 'river improvement' and land drainage schemes of the 20th Century, where riverbeds across the country were lowered and banks excavated to form geometrically uniform lengths of river which converted many rivers into little more than open, treeless drainage channels, Holmes and Raven (2014) have described this as 'habitat destruction on an industrial scale'. Unfortunately, the legacy of this type of work for the Beverley Brook meant that until 2018, the section of the Beverley Brook on Wimbledon Common remained clearly in its channelised and confined state. This consisted of wooden toe boarding and in localised areas concrete, lining the entire 2km length of both sides of the brook that is found on Wimbledon Common.

The channalised Beverley Brook on Wimbledon Common prior to the start of restoration work in 2018.

In a report that was written by SERT in 2018, the following description of the Beverley Brook was made:

> "The channel throughout the waterbody tends to be over-wide with very littler variation in width, depth or flow being heavily modified for either land reclamation reasons or perceived flood alleviation measures. Most of the Beverley Brook has little or no sinuosity. In no part of the watercourse is pool and riffle development considered to be high or even moderate. In its present condition, little of the channel exhibits any geomorphological response to hydrological or catchment changes and few natural features can develop. Most of the river is still heavily constrained and due to the low energy of the flows this means that full natural recovery is unlikely in most locations without intervention. Due to the low stream power and uniformity of the channel significant quantities of sediment, primarily sand, drops out and smothers the gravel bed. This reduces the habitat quality for plants and invertebrates, inhibits the successful reproduction of fish that lay eggs in gravel (which require water to flow freely through the gravels to oxygenate the eggs) and can directly damage fish. It is suspected that fish passage through the river is restricted due to habitat deficient stretches which act as a barrier to their movement. Furthermore, the uniform nature of the river creates bottlenecks at various stages of the fauna, therefore reducing the presence of species and increasing the vulnerability of those which are there. The catchment is very flashy in nature with large peak flows experienced during and after fain events. This rapid response regime is due to the natural geology and the extensive urbanisation in the catchment where there are significant amounts of hard impermeable surfaces. This in combination to the channelised nature of the river, the lack of habitat diversity, backwaters, and refuges results in the downstream displacement of fish, in particular juveniles."

For Wimbledon Common this meant that, in essence, the Beverley Brook had become too straight, too wide, too dark and was bereft of a suitable volume of in-stream woody materials. As a result, in 2018, a restoration project was carried out along the Wimbledon Common section of the Beverley Brook that involved WPCC and SERT and was funded by Viridor Credits and the Environment Agency. This was preceded by consultation with all relevant stakeholders and permission was received where necessary. These groups included the E.A, NE, WPCC and Merton Council.

With approximately 14% of the total area of the Beverley Brook located on Wimbledon Common, the enhancements that were carried out to the brook during the 2018/19 restoration project involved the following aspects:

- Increased geomorphological diversity
- Improved public awareness about river environments
- Improvements to the visual amenity value of the brook.
- Improved habitat and species diversity
- Improved opportunities for more natural channel adjustments.

In short, the project was designed to restore natural processes which, in the words of SERT, would enable the river to 'self-heal'.

In practice this work involved:

- The removal of 2000 metres of toe-boarding
- Tree works along the surrounding area of the brook.
- The installation of 60 pieces of large woody material into the river.
- The creation of 43 woody berms.
- Planting of marginal vegetation.

Toe-board removal:

Wooden toe-boarding was removed from both sides of the Beverley Brook on Wimbledon Common to encourage natural adjustment of the channel and provide a transitional habitat between the riverine and terrestrial habitats. All toe-boarding was removed from the Commons and disposed of by a waste haulier.

Removal of toe-boarding during 2018

Tree works:

By 2018, extensive areas along the Beverley Brook on Wimbledon Common had become heavily shaded due to extensive tree cover. By carrying out tree thinning work along the edge of the brook, additional light could reach the river and ground below providing enhanced opportunities for the development of in-stream macrophytes and other ground flora. As part of this work, a chartered ecologist was hired by SERT to assess whether any negative impacts could arise from this work and as a result, it was agreed by the ecologist and Natural England that significant tree thinning along the edge of the brook could proceed.

WPCC staff involved in bankside tree thinning works. All materials were incorporated into the restoration project.

Introduction of large woody material:

Prior to the restoration work that took place during 2018/19, there were very few large pieces of wood present in the Beverley Brook. The installation of this material was designed to provide additional riparian habitats, provide cover and refuge for wildlife and create geomorphological variation along the watercourse which leads to the creation of in-channel features such as islands, bars and berms.

Introduction of large woody material into the Beverley Brook during 2018/19

The creation of woody berms:

Using brash and treetops arising from the tree works that were carried out close to the Beverley Brook, this material was compacted and secured with untreated wooden stakes along various sections of the brook. Forming dense stands of branches, these structures were created to catch sediment which would subsequently become trapped and, in time, form naturally appearing islands and banks along the river. Along many parts of the river, these berms have helped to narrow areas of the channel that were previously excessively wide which has helped to provide a variety of flow types e.g., meanders, riffles and pools, that were previously missing from this part of the Beverley Brook.

Creation of berms along a section the Beverley Brook located close to the 'Wooden Bridge'

Planting of marginal vegetation:

While this work was not caried out by SERT until Summer 2020, by this time, it was concluded that enough sediment had accumulated in some of the berms that had been constructed during the 2018/19 restoration project, that planting of marginal plant species could be caried out. In total, 5000 plants were planted along the edge of the brook as part of this work.

These species included:

- Yellow flag iris *(Iris pseudacorous)* 1250 plants
- Branched-bur-reed *(Sparganium erectum)* 1250 plants
- Brooklime *(Veronica beccabunga)* 350 plants
- Greater pond sedge *(Carex riparia)* 500 plants
- Lesser pond sedge *(Carex acutiformis)* 500 plants
- Marsh marigold *(Caltha palustris)* 350 plants
- Common water-plantain *(Alisma plantago-aquatica)* 300 plants
- Water mint *(Mentha aquatica)* 500 plants

Path and bridge restoration along the Beverley Brook

Since the completion of the first phase of restoration along the Wimbledon Common section of the Beverley Brook during 2018/19, there have been two additional projects carried out in this area by WPCC that deserve mention.

The first project, which was carried out during Summer 2020 involved the resurfacing of approximately 800 metres of footpath along the Beverley Brook between the areas of the REMPF pavilion and the Brook Cottage Bridge. The path is a multi-purpose route that is suitable for pedestrians, cyclists, wheelchairs, pushchairs etc but as with all designated cycling routes on the Commons, pedestrians have priority and cyclists are expected to travel at a safe speed and give way to others. This work cost approximately £80,000 and was funded by the Southern Western Railway's Customer and Communities Improvement Fund and the Friends of Wimbledon and Putney Commons.

Path restoration alongside the Wimbledon Common section of the Beverley Brook (2020)

The second major project that has been completed along the Wimbledon Common section of the Beverley Brook has been the renovation of the narrow wooden bridge which is located by the corner of the REMPF. Having steadily decline over the years, The Thames Hare and Hounds running club took on the task of fundraising for a new wider bridge. In September 2022, contractors arrived on site to dismantle the old

bridge and begin work on the steel beams and timber rails. By October, the new bridge had been completed.

The new bridge has been designed for use by non-vehicular traffic and connects pedestrian users of the commons with the playing fields and Commons' nearby woodland. Funds for this project were raised by the Thames Hare and Hounds running club, Wimbledon Foundation, London Marathon Charitable Trust, Run-Through, Thomas's London Day Schools and other generous donors who helped to raise £40,000 for the new bridge.

The 'Wooden Bridge' renovated in 2022

In addition to these major projects, other work that has been completed along the Wimbledon Common section of the Beverley Brook has included the installation of several wooden benches which will help visitors to rest and enjoy the view of the brook, the management of INNS along the edge of the brook and regular volunteer litter picking sessions that are carried out along the brook every three weeks.

Volunteer Litter picking along the Beverley Brook on Wimbledon Common

While a great deal of work has been carried out along the Wimbledon Common section of the Beverley Brook over the past few years, unfortunately far less has been achieved along the almost 400 metres of the Beverley Brook that is located on Putney Lower Common. While far less constrained than had been the case for the Beverley Brook on Wimbledon Common, unfortunately, at the current time, the brook on Putney Lower Common remains largely overshadowed by a thick canopy of trees and for much of this stretch of the river, deep pockets of silt make it extremely hazardous to negotiate. As a result, this section of the Beverley Brook remains in great need of restoration.

The refurbished 'Bill's Bridge' on Putney Lower Common.

At the current time, the management for this area of the Beverley Brook involves the treatment of INNS (Japanese knotweed & Himalayan balsam) along the edges of the watercourse and in September 2022 the narrow footbridge located in the north-west of the Common was fully restored. Thanks to donations from local visitors and community groups, including Wandsworth Borough Council, Alexandra Nash, The Miles Trust, the Putney Society and the Friends of Wimbledon and Putney Commons, in August 2022, the main repairs to the footbridge had been completed.

The heavily shaded Beverley Brook on Putney Lower Common (2022)

Current Management Programme for the Beverley Brook on Wimbledon and Putney Commons:

Wimbledon Common:

Activity	Timing
Litter picking	Every three weeks January to December (volunteer activity)
Management of INNS 1. Himalayan balsam 2. Japanese knotweed 3. OPM	Timing 1. Manual removal in June to prevent seed dispersal. 2. Apply herbicide through stem injection during late summer. 3. Manual removal from June to early August

Putney Lower Common:

Activity	Timing
Management of INNS 1. Himalayan balsam 2. Japanese knotweed 3. OPM	Timing: 1. Manual removal in June to prevent seed dispersal. 2. Apply herbicide through stem injection during late summer. 3. Manual removal from June to early August

5: Vision

According to Holmes and Raven (2014) 'most of our rivers are poor relics of their former selves'. Despite all the incredible work that continues to be carried out along many areas of the Beverley Brook, when considering that the entomology of the word Beverley associates this river with the historical presence of the European beaver, it seems all too clear that the health of this watercourse has declined considerably over the passing years. While it can't be ignored that approximately 66% of the 14.3km of the Beverley Brook passes through a largely urban catchment area and is therefore subject to all this brings, the fact that there are so many valuable green spaces along its route should nonetheless, provide cause for celebration and hope that so much more can be done to enhance the health of this river in the future.

Unlike so many of London's other rivers, the Beverley Brook has not been lost and it has not been entirely boxed in by concrete walls or encased in underground pipes and therefore much of it remains on public view and available for all to enjoy.

As a result of the restoration project that was carried out on Wimbledon Common by WPCC and SERT during 2018/19, only 1300 metres from a total length of 2km received the benefit of having tree thinning works carried out, the installation of large woody material or the creation of woody berms.

While nothing should be taken away from the hugely positive work that was carried out as part of the restoration project or the fact that toe-boarding was successfully removed along the whole length of the Common's brook, it does mean that approximately 700 metres of the Beverley Brook on Wimbledon Common remains very shaded and in need of additional restoration. This situation is largely mirrored along the almost 400 metres of the Beverley Brook that is located on Putney Lower Common leaving a very dark and unappealing stretch of river towards one end of the site. A similar situation can also be found downstream of the Putney Lower Common section of the Beverley Brook on land that is the responsibility of Wandsworth Borough Council.

With a total extent of approximately 1100 metres of the Beverley Brook under the control of the Conservators on Wimbledon Common and Putney Lower Common and as yet, un-restored, consideration should be given to carrying out the following work in the future:

- Bankside tree thinning works to allow additional light to reach the ground below.
- Installation of large woody material along key locations of the brook.
- The creation of woody berms to form islands and narrow the channel.
- Planting of marginal vegetation
- Bank re-grading to provide publicly accessible points along the various sections of the brook.
- Temporary fencing to protect areas in need of recovery
- Work with other Beverley Brook stakeholders.
- Re-wilding

Re-wilding:

Of all the various management options that are available for the restoration of the Beverley Brook, and indeed other areas of the Commons as well, the subject of re-wilding is certainly something that stimulates the imagination.

According to the wildlife charity, 'Rewilding Britain' (2022), in their view, rewilding is defined as:

"The large-scale restoration of ecosystems to the point where nature is allowed to take care of itself. Rewilding seeks to reinstate natural processes and, where appropriate, missing species – allowing them to shape the landscape and the habitats within. It's focused firmly on the future although we can learn from the past."

With more than half of the UK's species in decline and 15% threatened with extinction, this leaves Britain as one of the most wildlife depleted countries in the world, placing it in the bottom 10% globally for biodiversity. To help reverse this situation, according to Re-wild Britain, rewilding would aim to restore the natural

processes that support life (grazing, natural woodland regeneration, species reintroductions etc) which would help to complement existing conservation efforts that are already being carried out around the UK.

Examples of the benefits of re-wilding have been cited by Re-wild Britain as:

- Provides additional environments for carbon storage
- Helps wildlife adapt to change
- Reverses biodiversity loss
- Supports associated economic opportunities
- Improves health and wellbeing.

Examples of rewilding projects have included:

- Restoring wetlands and introducing beavers
- Bringing back missing species
- Reducing high populations of grazing animals from sensitive landscapes
- Removing dams that impede the free movement of fish
- Reconnecting rivers with floodplains
- Connecting habitats and providing wildlife bridges
- Setting aside large areas for nature
- Creating wildlife friendly gardens

But how could the Commons fit into the overall project of re-wildling? Reconsidering the Beverley Brook's past association with beavers, could or even should beavers ever return to the Commons? Although largely hunted to extinction in Britain by the 1600's, through a programme of various controlled and uncontrolled releases from private collections, the first officially wild beavers re-appeared in 2009 when they were released in Knapdale Forest which is in Argyll, Scotland.

Writing on behalf of the 'Beaver Trust' wildlife charity, Bishop (2021) noted that 'we have been inspired by the efficiency of the beaver created wetlands in slowing spreading and storing water as it moves through the landscape, reducing flood and drought risk, filtering out pollutants, increasing biodiversity and sequestering carbon'.

Measuring up to 1 metre in length, with a 50cm tail and weighing up to 30kg (which is approximately the size of a Labrador), the beaver is the second largest rodent behind the capybara of South America. According to the RSPB website (2022) beavers undoubtedly provide a positive effect on the landscape through their behaviour. By coppicing trees, they provide a variety of different habitat niches for other wildlife species and the wetland environments they create provide a nature-based solution to improving the health and function of river catchments.

While there is a legal requirement under the EU Habitats Directive and the Bern Convention to protect beavers and even consider restoring them to their former range, it cannot be ignored that we live in a very different world to that which existed even 400 years ago let along when beavers may have once frequented the Beverley Brook. As discussed in a magazine article written for the Countryfile website (2022),

while beavers may help to restore rivers in many areas of the UK, one of the main concerns against the release of this species is the risk they might pose to infrastructure. According to Mark Lloyd, Chief Executive of the Angling Trust (2022), evidence from North America and Germany shows that beavers, in the wrong location, can pose a considerable risk to infrastructure and flood defence assets, causing millions of pounds worth of damage to both public and private assets. As noted by Lloyd, “the problem with beavers is they are very secretive and mainly nocturnal, and they don’t stay put, so they will spread from rural areas to villages and the edges of towns and cities.”

This said, since 2021, the wildlife and rewilding charity, Citizen Zoo’s London Beaver Working Group has been involved with some very serious discussions on the potential of having beavers return to the Capital. As noted on the Citizen Zoo website (2022), after centuries of persecution by humans, at the current time, there are successful beaver populations co-existing with humans in towns and cities in Bavaria as well as in Stanley Park, Vancouver.

So, while the Commons may not yet be ready for the re-introduction of beavers, perhaps, as a vision, projects such as this may be worth further discussion, at least, at a further date. In the words of Rewild Britain, “Rewilding is a journey, where change happens at nature’s pace and unfolds over years, decades and even centuries. It exists on a spectrum, where people are starting to make changes that will benefit nature at one end, and large-scale functioning ecosystems — a flourishing of wild nature on its own terms — sits at the other.”

In terms of rewilding on the Commons, one missing species that should however be seriously considered is the water vole. Water voles are the largest species of vole in Britain and one of the most loved but unfortunately, according to the People’s Trust for Endangered Species (2022), through loss and degradation of natural habitat and predation by American Mink, water voles have undergone one of the most serious declines of any wild mammal in Britain during the 20th Century. Between 1989 and 1998, the population fell by almost 90%.

To help with the protection of this charismatic species, in August 2022, Citizen Zoo released 101 water voles back into the Hogsmill River in Kingston Upon Thames. Having carried out years of hard work prior to the release of the water voles in 2022, the last official sighting of this species in the Hogsmill had not be since 2017. Therefore, helping to rewild this very urbanised river should give a great deal of hope to other similar areas of the country, including other built up urban and sub-urban environments such as the Beverley Brook.

Unfortunately, any serious discussion on species introductions on the Commons would need to consider the extremely flashy nature of the Beverley Brook which, at times, can see water levels rise and fall at an incredible rate.

6. Monitoring assessment

If you own land alongside a river, stream, ditch, culvert, or pipe that forms part of a watercourse, you are legally termed a riparian owner of that section of watercourse and if your land boundary is next to a watercourse, you own and are responsible for the land up to the centre of the watercourse. Wimbledon and Putney Commons therefore have a duty to not only manage the riparian land on the Commons but to also monitor how successful our management has been.

Although the two sections of the Beverley Brook that flow through Wimbledon and Putney Commons only form a relatively small part of the 14.3km length of this river, they are nonetheless incredibly important areas that require ongoing monitoring. As noted by Holmes and Raven (2014) ‘people who care about rivers quickly notice change, for better or worse’ and therefore public participation needs to be at the heart of monitoring and ‘if you want a society that respects rivers, you must give its people an opportunity to know them’ (Beer: 2022).

To assess the ongoing health of the Beverley Brook and other rivers in the Southeast of England, in addition to running practical events such as litter clean-ups and invasive species management, SERT also organise a range of monitoring opportunities.

Opportunities include:

- Becoming a river guardian which involves adopting a stretch of river and reporting pollution incidents.
- Riverfly monitoring is a national citizen science scheme that trains volunteers to monitor river flies (aquatic invertebrates) as an indication of water quality.
- Outfall safari trains volunteers to survey the length of a river and identify misconnected outfalls that pollute our rivers.
- River Rangers involves trained volunteers monitoring INNS and recording how well management efforts are controlling them.

As riparian owners, we will continue to support organisations such as SERT wherever possible and help with any practical tasks that will be of benefit to improving the health of the Beverly Brook on Wimbledon Common and Putney Lower Common.

With help from the Commons' team of volunteer wildlife recorders, we will also need to collect all possible informal anecdotal or systematic data that is available for the Beverley Brook. This will help us to see how successful our management work has been in providing a range of habitats for both flora and fauna along the Commons' two sections of the Beverley Brook.

To support this work, it is suggested that an ecological river invertebrate survey is carried out by a professional ecologist as well as a fish survey which could be carried out every five or ten years.

Wimbledon and Putney Commons Land Management Plan

Objective 7: Putney Lower Common

1: Discussion

Putney Lower Common is separated from the main body of the Commons by a distance of just over one mile and is approximately 20 hectares (50 acres) in size. The semi-natural landscape of Putney Lower Common includes large open areas of grassland, woodland, a short section of the Beverley Brook and sporting facilities which include a cricket pitch, bowling club and a small tennis court.

Located in the north-west corner of the London Borough of Wandsworth, Putney Lower Common is approximately ½ mile west of Putney Town Centre while Barnes Village is a similar distance to the west and the River Thames is only a very short distance to the north of the Common.

Combined with the surrounding area of Putney Lower Common Conservation Area, which includes houses along Lower Common South, Egliston Mews, Putney Common Road and Commondale, this particular area of South-West London has managed to retain a rural village atmosphere which has often led to it being referred to by local visitors and residents as a slice of the countryside within the town.

Putney Lower Common (north arrow to be placed on map)

2: Significance

Historical context

While there is archaeological evidence to suggest the Romans had a settlement in Putney until the 5th Century AD, the first public record of the existence of an area known as Putney Village was made in the Domesday Book in 1086. It is therefore assumed that the village of Putney would have possessed common fields and what was known as the 'waste of the Manor' of which Putney Lower Common would have formed part.

The earliest indication that is available for the original size of Putney Lower Common originates from a detailed survey of Putney that was made in 1636 by Nicholas Lane. At this time the size of the Common was recorded as 47 ¾ acres (approximately 19 hectares).

While there had been very little change to the area of the Commons as a whole until the middle of the 18th Century, during the 19th Century, substantial areas of this land were enclosed with permission from the Lord of the Manor.

As noted by Gerhold (1994):

"In the 19th century, the Commons were more vulnerable to large scale enclosure than ever before. The number of tenants (copyholders) exercising common rights had declined, while the increasing local population and building activity exacerbated the problem such as the taking of gravel and clay and the dumping of rubbish. It also gave the Commons value as building land."

On Putney Lower Common, the first example of the encroachment of housing on to the land was on the area that is now occupied by the Spencer Arms Pub and the houses that are located to the immediate south and east of this property.

Apart from granting permission for the owners of some of the larger houses around the edge of the Commons to extend their grounds on to the Commons, across the whole area of Wimbledon and Putney Commons, some of the larger acts of enclosure that were carried out during the nineteenth century included the following:

- Extra land for the Telegraph on Putney Heath (1821)
- Schools in Roehampton (1836 & 1854)
- Resevoir on Putney Heath (1852)
- Lower Common cemetery (1858)
- All Saints Church (1870)

Located on the south-east corner of Putney Lower Common, All Saint's Church stands on approximately 1 acre of land that was provided by Earl Spencer in 1870. The church was built between 1873 and 1874 and was consecrated on St Mark's Day, 25th April 1874.

While the transferal of the ownership of the Commons from the Spencer family to the Wimbledon and Putney Commons Board of Conservators is covered in Part 1 of the Commons' Land Management Plan, for Putney Lower Common, the events that followed the passing of the Wimbledon and Putney Commons Act on 16 August 1871, require some further attention. Of all the fragments of information that are available on this subject, an article written for The Wandsworth Historian publication in October 1972 appears to provide the most concise account of the early period in which Putney Lower Common came under the control of the Wimbledon and Putney Commons Board of Conservators.

It is therefore from this account that the following information has been summarized.

On 13 December 1871, the Wimbledon and Putney Commons Board of Conservators were approached by a local barrister and Putney resident named A.E. Dryden who submitted a serious complaint about what he considered to be the deplorable state of Putney Lower Common. As part of his complaint, A.E. Dryden offered to investigate some of the worst infringements on the Commons, foremost of which were the continued Rights that were still being exercised by Commoners. Having been a member of Sir Henry Peek's Wimbledon Common committee which had organised the resistance to Earl Spencer's plans to develop the Commons, the Conservators accepted Dryden's offer of help and three months later, they received his report and recommendations on how Putney Lower Common should be improved. In brief, the report outlined the main abuses and the proposed remedies.

"Two or three dairymen turned out many cows, there were also many donkeys, geese and pigs. The cows, geese and pigs should be prohibited, the donkeys limited and charged for and sheep should be encouraged. An open ditch through the middle of the Common received drainage from the dairies and piggeries on the south, until the local Board of Works diverted it into the sewers and partly filled the ditch. Still sewage from the stables and piggeries was flowing onto the low-lying north-east corner making it a stinking swamp. On the part between the Lower Richmond Road and the north-east corner of the Common, pig dealers, donkey drivers, carriages and others stood carts and implements and dumped manure and rubbish and washerwomen dried clothes. These practices should be prohibited or, if drying were permitted, it should be confined to the north-east corner and a charge made."

It appears from the available records that the Conservators met with little opposition in their attempts to clear up the Commons and along with the help of an appointed Keeper for Putney Lower Common, where livestock were found grazing on the Common without permission, they were soon impounded and only released on payment of a fine.

Alongside all the planning and hard work that was being carried out by the Conservators and their staff during this time, the Conservators were also involved in a major campaign to prevent a railway line from being constructed across Putney Lower Common itself. Fortunately for the Commons, in June 1874, it was reported that the Bill promoted by the Metropolitan and South-Western Junction Railway Company (for a line from Kensington to Barnes) had been withdrawn.

Having dealt with the damage that had resulted from years of misuse to the Common, defeated the threat of a railway line being constructed across the site and endured the events of two world wars, during the early 1960's, the area known as Putney Lower Common actually increased in size to include all the land that is currently under the control of the Wimbledon and Putney Commons Conservators.

While a full description of the events that allowed this to happen are covered in Objective 10 which covers the management of the Roehampton Hills and the Acropolis, the increase to the area on Putney Lower Common was a direct result of the road improvement scheme that was carried out along part of the A3 and Roehampton Lane during the late 1960's.

In brief, the road improvement scheme comprised of the following work:

- The construction of a duel carriageway on the A3 route between Putney Vale cemetery and Tibbet's Corner along the line of the Kingston Road, a length of approximately 1,600 yards across the Common. One equestrian and two pedestrian underpasses are included in this section, and a new road junction with the A3.
- The construction of a duel carriageway on the A219 route along a new line across the Common between the junction of Putney Hill, and Putney Heath Lane and Tibbet's Corner.
- The construction of a three-level traffic intersection on the Commons in the area south-west of the former Tibbet's Corner roundabout.
- The closure of sections of the Portsmouth Road, Putney Hill, Telegraph Road and Wildcroft Road and the grassing over of these routes to enable their area to be returned to the Commons.

The A3 and Tibbet's roundabout: 1970's

As a result of this work, the Conservators were required to make available 14 acres of the Commons to the Greater London Council (GLC). The agreement between the Conservators and the GLC was however that the same amount of land would be given back to the Commons by the GLC albeit in the form of other areas of adjoining land.

According to the September 1964 Wimbledon and Putney Commons Conservators Board meeting, "The Clerk reported that the land on lower Common had now been conveyed to the Conservators and that possession of the land adjoining the Kingston By-pass had been given to the Ministry of Transport who were now engaged on the road improvements."

On Putney Lower Common, these exchange lands included:

- Land in the area between Putney Lower Common and Beverley Brook.
- Land on the north side of Beverley Brook adjoining Barn Elms Park
- A riverside walk north of the Beverley Brook.

While this information was presented in the Wimbledon and Putney Commons Landscape Report (1967) it is interesting to note that at the time of publication, one of the maps that shows Putney Lower Common clearly indicates the presence of two football fields on what is now the Main Field and another photograph clearly shows the presence of allotments on the Commons opposite the former Putney Hospital. Although both these aspects of land use on the Common have long since gone, both are good indicators of the changing cultural value of this area of the Commons.

Cultural and Aesthetic context:

"Ten years is a long time to walk over the same small area. I still miss the friends I made on the Common. They were a merry, gallant bunch, who braved tempests, hail and the bitterest cold rather than let their dogs go un-walked…I think even now, eighteen months after we've left Putney, I could find my way along those routes with my eyes shut, guided by the raw soapy scent of the hawthorns, or the rank smell of the elder, or the sweet elusive fragrance of the wild roses. I never got bored of the Common – each day there was something new to look at. Each day, however badly I or my dogs behaved, the Common, given the chance, would restore my sanity. Familiarity never bred contempt. I can only look back on the ten years we were acquainted with love and gratitude." (Jilly Cooper:1984)

Of all the various areas and communities that make up the Commons, throughout its history under the Spencer Family and subsequently under the control of the Wimbledon and Putney Commons Board of Conservators, Putney Lower Common has always managed to retain a very distinct sense of identity.

Despite its relatively small size, through the ongoing associations that Putney Lower Common has had with collective worship, education, sport and recreation, a comprehensive record has been made that provides a useful impression of the cultural and aesthetic value of this part of the Commons.

Churches and collective worship:

Located on the south-east corner of Putney Lower Common, All Saints Church provides one of the most prominent landmarks in the local area. Consecrated on 25 April 1874, All Saint's Church was built on approximately 1 acre of enclosed land that had been provided by the Right Honourable John Poyntz Earl Spencer on 6th December 1870 and was formerly part of the area known as Putney Lower Common. Forming part of the Diocese of Southwark in the Church of England, All Saint's Church remains at the heart of the local community where it maintains strong links with members of its congregation and with the nearby All Saint's Primary School which is also located close to the edge of Putney Lower Common.

Sports and games:

Another positive cultural aspect that has helped to shape the identity of Putney Lower Common has been its ongoing association with a variety of different sporting activities. These have predominantly included cricket, bowls and tennis.

Cricket:

According to records, the most established sport on Putney Lower Common is cricket.

As part of the report that had been issued by Dryden in 1872 to the Wimbledon and Putney Commons Conservators, one of the suggestions for improving Putney Lower Common had been to close a private road across the Common from the Lower Richmond Road to a nearby property occupied by Morrison's Dairy and level a section of ground on the southern area of the Common to create a cricket pitch. As President of the Putney Cricket Club (the late) Dryden was duly given permission to construct a cricket pitch on Putney Lower Common although this would need to be carried out at the expense of the members of the cricket club themselves.

As noted in The Wandsworth Historian journal (1972), on 21 April 1875, the Conservators were able to report on a memorial presented by the Putney Cricket Club, signed by Dryden and 21 others and illustrated by a colourful sketch map.

The recommendations accepted by the Conservators were:

- That the ground set aside for the Putney Cricket Club should remain so appropriated, except that part of their fielding space should be shared with the Alma Cricket Club.
- The Alma Cricket Club should have the adjoining land to the east, between All Saint's Church and the Lower Richmond Road.
- The Alma Cricket Club might use the Putney Cricket Ground occasionally by agreement while their own ground was in the making.

It is interesting to note that although in 1875, cricket was new to Putney Lower Common, the Reohampton Cricket Club had been playing cricket on their current pitch on Putney Heath since 1859 and a number of the larger house around Putney Heath even had cricket pitches on their own ground and fielded their own house teams.

During the long history of cricket on Putney Lower Common, the main disruption to play came as a result of two world wars. During the First World War, the ground was taken over by the local authority under the Defence of the Realm Regulations for use as allotments and it was not until 1923 when the ground was released and returned for use as cricket. According to the historical records of the Putney Cricket Club, as a result of the war, it would take another two years to get the cricket square re-laid and ready for the club to recommence play.

Unfortunately, during the Second World War, cricket was again disrupted as the ground was handed over by the Conservators for use by the local authorities for Civil Defence and Fire Service recreational activities. At the end of the Second World War, the area where the cricket ground had been located was in ruins but with generous donations provided by many local residents, the ground was eventually restored to its former glory and from 1946, cricket returned to the Commons and according to the Putney Cricket Club website (2022) ‘the club was reborn’.

Putney Lower Common cricket Field

Other organised sporting activities which have a long history on Putney Lower Common include lawn bowls and tennis.

Tennis:

According to the Minutes from the May 1923 Conservators Board meeting, a petition was read by Mr Rudkin and 16 residents requested the Conservators to make some arrangements whereby the nuisance arising from the use of a small piece of Common adjoining All Saint's Church could be controlled. The Conservators suggested the best arrangement that could be made would be to set apart the ground for tennis and suggested that the petitioners form a club to which the use of the ground could be allotted if they accepted responsibility for keeping it in order.

In May 1924, Mr Rudkin said the tennis area required a wire type fence which the Conservators could not see their way to providing but did agree to erect a chestnut fence. In June 1924, the Conservators quoted their limitations under the Commons Act but added they could license a club to protect it as fenced and also to form hard courts on the site. The tennis courts have remained on this area of the Common until the present day and at the current time the club operates under a ten-year license that has been agreed by the Wimbledon and Putney Board of Conservators.

Bowls:

In April 1933, a request was made to the Conservators that they should grant the site north of the hospital for bowling. The opening of the Green took place on 4th June 1935. At the current time, the Putney Town Bowling Club operates under a license agreed by the Wimbledon and Putney Commons Board of Conservators.

Annual fairs and The Wandsworth Borough Show:

In addition to the organised sporting events that have occupied Putney Lower Common, another traditional aspect of the site has included the presence of fairs, the circus and the Wandsworth Borough Show which occupied a large area of the site during its annual occupation of the Common. Originally named the Putney Show but subsequently re-named the Wandsworth Borough Show, this event started off as an arts fair which was held in All Saints Church. From humble beginnings, the show was jointly organised by the Wimbledon and Putney Commons Conservators and the Putney Society but as it continued to grow, control of the event was eventually taken over by Wandsworth Council.

Although the latter years of the Wandsworth show saw it move around various different open spaces around the borough, during its hay-day in the 1970's, Putney Lower Common was the chosen site of each annual event and it has been estimated that approximately 50,000 people attended the show each year. Unfortunately, as a result of cuts to public funding, after 30 years the Wandsworth show was finally scrapped in the 1990's.

PUTNEY SHOW

Sat 9 & Su 2 Ju e, 12 t 7

The King's Troop—Royal Horse Artillery

Lawn-Mower Racing

The Royal Navy & Royal Marines Commandos

Royal Artill ry Motor-Cycl Display
Heavy-Horse Show & Drive

RSPCA D g Show
Charity Stalls
& Showground Attractions

Putney Lower C mmon Lower Ri m nd Road SW15

Admission Free

Wandsworth

Display Team

2.00pm The Knights of Arkley

2.30pm The Minden Band of the Queen's Division

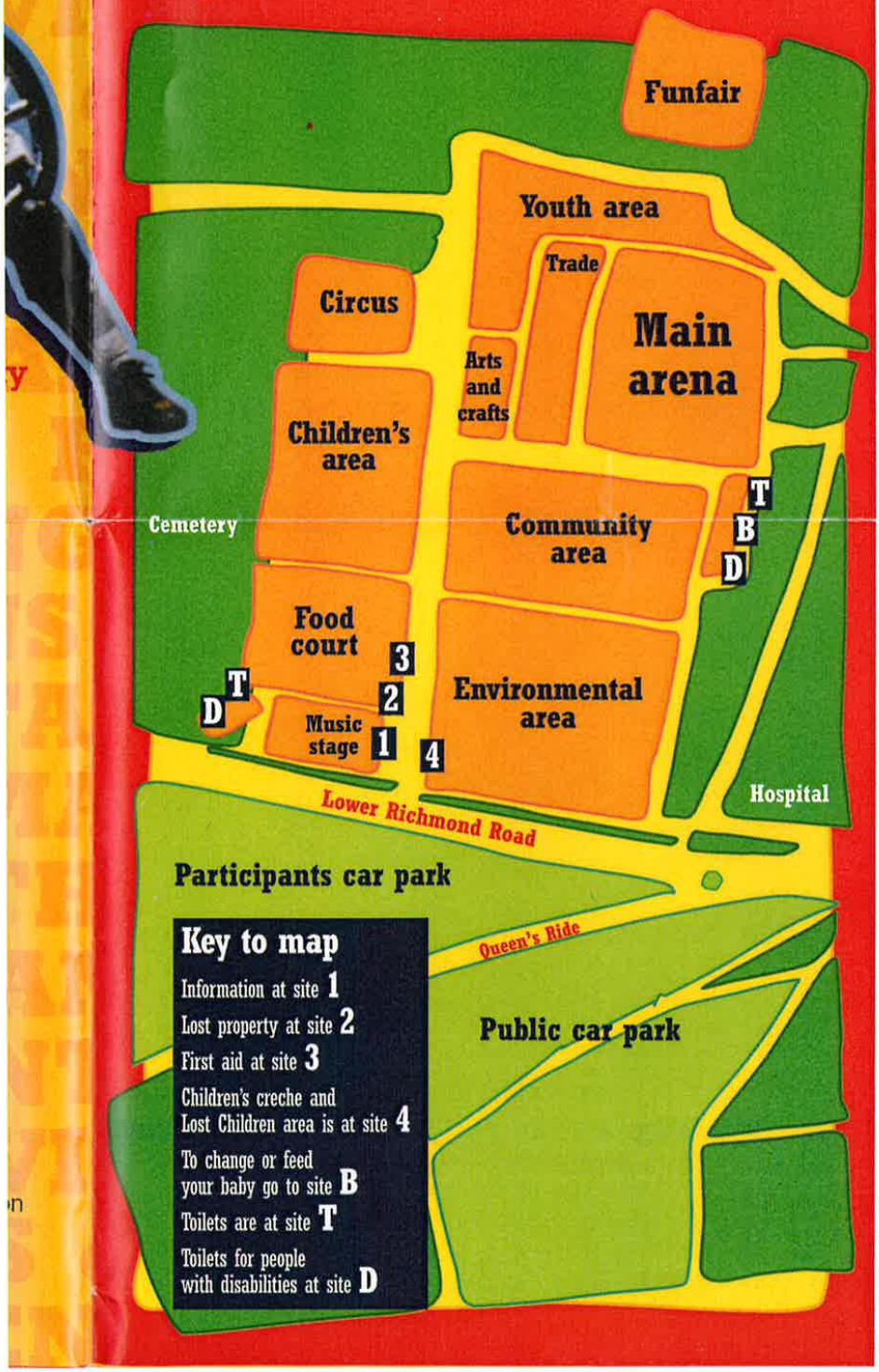
3.10pm The Rockwood Dog Display Team

3.45pm Tigers Children's Motorcycle Display Team

4.25pm John Whiteley's Sheepdog and Display Team

5.00pm The Knights of Arkley

5.30pm The Minden Band of the Queen's Division



Putney Hospital

Although the site is now occupied by the Oasis Academy and various residential apartments, for just over 100 years, one of the most important features and therefore cultural aspects of Putney Lower Common was the presence of Putney Hospital.

The origins of Putney Hospital can be traced back to a combination of benefactors which included Mr Henry Chester, Sir William Lancaster and other local donors. Chester, a businessman living close to Putney Heath, who died in 1900, bequeathed £75,000 in his will to build a new hospital in the Parish of Putney. The only stipulations were the hospital must be a general hospital and the hospital must be built within twenty years of his death, failing which the bequest would go to Guy's Hospital in London.

After considering a choice of locations where the new hospital could be built, it was decided that an area occupied by two large houses, West Lodge and The Elms, on Putney Lower Common would be ideal. Alongside a building fund that was started with local donations, Sir William Lancaster bought both West Lodge and The Elms and in 1905, he was able to offer a freehold 'greenfield' site to the trustees for their hospital. Occupying an area of approximately 1.23 ha, Putney Hospital opened in 1912 with 20 beds.

In 1933 a three storey nurses' home was built on the land to the north of the hospital and by the end of the Second World War, Putney Hospital was provisioned with 106 beds and 150 nursing staff. Despite the opening of a casualty Department at the hospital in 1960, in 1998 the closure of Putney Hospital was announced and gradually services were transferred to the nearby Queen Mary's Hospital, Roehampton. The hospital finally closed in 2002.

The Putney Hospital Nurses Stone

Ecological context:

Like other areas of the Commons, the landscape that is found on Putney Lower Common is the result of a long history of different events.

Perhaps more cultural than ecological, until 1971 large areas of Putney Lower Common were actually covered with allotments. In fact, in May 1964, it was recorded in the Wimbledon and Putney Commons Board of Conservators Minutes that during this period, there were a total of 112 allotment holders on the Common which accounted for £85 in annual rent for the Conservators.

Another historical event which dramatically altered the landscape on Putney Lower Common was the devastation that was caused by Dutch Elm Disease to the area's tree cover. Although the effects of Dutch Elm Disease were felt across the whole of the UK, in December 1975 it was noted at one of the Conservators' monthly Board meetings that across the whole area of Wimbledon and Putney Commons, 'there were at least 365 medium to large elms that were suffering from Dutch Elm Disease and required felling.'

For direct reference to the elm trees on Putney Lower Common, it is actually from the pages of Jilly Cooper's 'The Common Years' (1984) that we get a first- hand account of the effects that Dutch Elm Disease had on this part of the Commons.

"Beverley Brook is all white and bridal, choked with new cow parsley. A man on the opposite side of the bank is examining my five beloved elms. To my horror, he tells me they are all dying of Dutch Elm Disease and will soon have to come down." (April 30th 1975).

Despite all the many historical events and changes that have been experienced on Putney Lower Common, the area that is managed today remains a location that is rich in both flora and fauna. Comprising areas of grassland, scrub, woodland, orchard and one section of the Beverley Brook, the diversity of habitats on this relatively small area of ground provides food and cover for a wide range of species including stag beetles and hedgehogs.

Woodland and trees:

Although woodland only covers a relatively small area of Putney Lower Common, there are many different tree species that are located around the site. While a full list of the different tree species on Putney Lower Common is not currently available, we are fortunate that records have been kept for most of the tree planting that has been carried out on this site over the past few decades.

In recent years, the largest programme of tree planting on Putney Lower Common has involved the creation of a woodland copse that extends along the western boundary of the site and is located between the Main Field and the Oasis Academy. Although a narrow belt of trees had existed along this area since the 1970's and was used to screen the main area of the Common from the towering presence of Putney Hospital, by the time that planning permission had been granted for the construction of the Oasis Academy, the condition of the woodland in this area had become extremely poor.

With little sign of natural regeneration and dominated by non-native tree species such as Norway maple (*Acer platanoides*), Horse chestnut *(Aesculus hippocastanum)* and even Tree of Heaven (*Ailanths altissima)*, in 2014, a programme of work was carried out where poorer quality and structurally weak trees were removed. Following the completion of this work, re-planting along the edge of the woodland belt was then carried out with the aim of diversifying the species and age classes of the trees on site and thereby attain a more naturalistic feel to at least one area of the Common's woodland.

The trees that were included within the planting of the woodland copse included:

- Crab apple *(Malus sylvestris)*
- Wild Pear *(Pyrus pyraster)*
- True service tree *(Sorbus domestica)*
- Hazel *(Corylus avellana)*
- Hawthorn *(Crataegus monogyna)*
- Blackthorn *(Prunus spinosa)*

Tree planting along the edge of the Main Field 2014/15

Alongside the woodland restoration work that took place near to the Oasis Academy, a further area of planting included a native hedgerow that was located around the perimeter of the new apartment block to the north of the Oasis Academy and along one edge of the access route from Lower Richmond Road to the same block of apartments. In total, the mixed native hedgerow is approximately 200 metres in length.

Apart from the very occasional planting of a memorial tree on Putney Lower Common, another recent area of tree planting on this site has been the establishment of a small orchard. Consisting of ten British varieties of apple tree, the Putney Lower Common orchard was planted in November 2022 as part of the celebrations that marked Queen Elizabeth II Platinum Jubilee.

Located along the western edge of the Main Field, the presence of fruit trees on the Common provides another dimension to the mosaic of habitats that are currently found on this site. Orchards are priority habitats under the UK's Biodiversity Action Plan and as summarised by the People's Trust for Endangered Species (2022), they offer both food, shelter and breeding sites to thousands of species.

Grassland:

Grassland occupies approximately 11 hectares of land on Putney Lower Common. As noted in Objective 2 which covers the management of grassland and wildflower meadows on the Commons, the grassland that is found on Putney Commons is broadly categorised as neutral grassland meaning that it occurs on soils in the pH range of 5-7. While there has not been a comprehensive survey carried out on the flora and fauna of the grassland sites on Putney Lower Common, if these areas are suitably managed, grassland habitats can support a diversity of wildlife including birds, mammals, reptiles, amphibians and invertebrates.

Beverley Brook:

The Beverley Brook is the only natural water source that is currently found on Putney Lower Common which makes it a particularly important habitat for this part of the Commons. If it is in good condition, a river will provide habitats for a diverse assemblage of wildlife including mammals, birds, amphibians, invertebrates, fish and plants. For more information about the Beverley Brook, please refer to Objective number 5 which covers the subject of river management on Wimbledon and Putney Commons.

Hedgehogs *(Erinaceus europaeus)*

With reference to the fauna which can be found on Putney Lower Common, one of the most iconic species that has been recorded on this area is the hedgehog. Although hedgehogs have been recorded on Putney Lower Common for many years, in 2018, the London Hogwatch initiative, carried out a survey which placed 30 Browning Strike Force Pro camera traps around various points on Putney Lower Common and Barnes Common.

Talking place over a period of three weeks, the traps were set to trigger and take a photograph every second if an animal entered the detection zone of the camera. As

the main interest of the survey was to capture predominantly nocturnal mammal species such as hedgehogs, foxes and badgers, only photographs that were captured between 6pm and 8am were processed for the survey. During this first year of surveying, 19 sightings were captured of hedgehogs on Putney Lower Common and Barnes Common as well as other images of fox, badger, cat, mouse, squirrel , rat, dogs and humans. During 2018, it was concluded by the London Hogwatch survey that the hedgehog population on Putney Lower Common and Barnes Common was likely to be small and therefore this meant that it could be at risk, either from badgers or from other threats.

A second camera survey was carried out in the Barnes area by London Hogwatch between July and August 2019. On this occasion, Barnes/Putney Lower Common, Palewell Common, Bank of England Sports Club, Roehampton Golf Club and WWT London Wetland Centre were all included in the survey. Of all the areas included in the survey, Barnes/Putney Lower Common was the only greenspace which recorded hedgehogs, foxes and badgers and the only other area to record hedgehogs was the Barnes Wetland Centre. It was concluded during the 2019 London Hogwatch survey that the hedgehog distribution on Barnes/Putney Lower Common did not appear to have changed since the previous report.

Building upon the previous two years of surveys, during 2020, the London Hogwatch survey once again returned to the Barnes/Putney Lower Common area but also included some additional areas within South London which included Beddington Park and surrounding gardens in the London Borough of Sutton. For the Barnes/Putney Lower Common area, hedgehogs were recorded in five out of the seven survey sites and the survey reported that it was ‘encouraging to see that the known populations in the Barnes/Putney Lower Common area and the Barnes Wetland Centre were able to disperse into the surrounding area and appeared to be connected to one another.’

While the data from the three London Hogwatch surveys provides important information about the distribution of hedgehogs in the Barnes/Putney Lower Common area, it important to view this information within the wider context of hedgehog distribution around the whole of the UK. In 2022, The British Hedgehog Preservation Society and the People’s Trust for Endangered Species produced a report entitled The State of Britain’s hedgehog report. According to this report, in 2011, the first State of Britain’s hedgehogs report highlighted that a widespread loss of hedgehogs had occurred in the UK over the previous ten years. As a result, in 2020, hedgehogs, along with the water vole, were placed on the International Union Conservation of Nature (IUCN) Red List as vulnerable to extinction in the UK.

With some estimates suggesting that hedgehog numbers have declined in the UK by 46% in the last 13 years, the Sate of Britain’s hedgehog report (2022) admitted that at the current time, the reasons for the decline in hedgehog populations in the UK aren’t yet fully understood. For populations of hedgehogs in urban areas such as Barnes/Putney Lower Common, the 2022 report suggested that despite an overall decline in hedgehog numbers around the UK, urban areas with their mixture of gardens, amenity grassland and other green space are thought to provide a refuge

for hedgehogs from pressures in the wider landscape. While road mortality and loss of suitable habitats continue to provide problems for hedgehogs, suitable management for this much-loved mammal will continue to be of the highest priority in any future management plan for Putney Lower Common and indeed all other areas that fall under the control of the Wimbledon and Putney Commons Conservation Team.

Hedgehog captured on camera during the 2020 London Hogwatch survey which covers Putney Lower Common and the surrounding area.

Stag Beetle *(Lucanus cervus)*

In the UK, Stag beetles are now extremely rare and are largely restricted to the south and south-east of England with a particularly high concentration found around the London area. In the UK, the stag beetle is classified as Nationally Scarce (Hyman & Parsons 1992) and was listed on Schedule 5 of the Wildlife & Countryside Act in 1998, making it illegal to trade in the species without an appropriate licence.

The stag beetle is the UK's largest terrestrial beetle and is highly dependent on the availability of decaying wood for its survival. Spending most of its life-cycle underground, when stag beetle larvae eventually pupate, they emerge from the ground usually from mid-May onwards where they will search for a mate in order to reproduce. Most active during warm summer evenings, adult male stag beetles can reach up to approximately 7cm in length and they are fairly easily to recognise as

their large and oversized mandibles give them a formidable appearance. Females are a little more difficult to identify as they are equipped with much smaller mandibles and they rarely grow beyond 5cm in length. By the end of August, most adult stag beetles would have died.

As a result of the large volume of dead wood habitats that are found on site, all land, except the area covered by the REMPF, that is located south of the A3 and under the administration of the Wimbledon and Putney Board of Conservators has been designated as a Special Area of Conservation (SAC), in part, for the qualifying feature of the stag beetle. While Putney Lower Common falls outside of the Commons' SAC, annual requests for public sightings of this species have regularly reported that adult stag beetles have been seen on and around Putney Lower Common. For this reason, the ongoing protection and provision of habitats that are suitable for stag beetles continues be another important element in the ongoing management of this part of the Commons.

Male Stag beetles

3: Condition

As Putney Lower Common does not fall within the area covered by Commons' SSSI/SAC designation, there is no official condition assessment available for this part of the Commons. There is however an alternative indicator of success that is available for Putney Lower Common which comes is delivered through the Common's participation in the annual London in Bloom campaign.

The London in Bloom campaign is the largest horticultural campaign in London, involving hundreds of different communities from around the Capital each year. Aiming to increase community involvement, care for our environment and maintain our precious Green Spaces, in 2022, the London in Bloom Campaign entered its 53rd year of operation and the Commons are very proud to have been involved with this important event since 2009

The key aims of the campaign are:

1. To make London a greener and more pleasant place to live and visit.

2. To recognise the role of volunteers in supporting London's parks and green spaces.

3. Encourage all the community to care for our environment.

4. Work to increase biodiversity in London.

5. Develop and share best practice amongst all who work to green London.

With one or more judges visiting each site during the summer, all entries into the London in Bloom campaign are measured under the following categories:

Section A- Making way for People

- Access for all
- Signage and visitor information

Section B – Welfare of Parks Users

- staff/voluntary presence
- control of anti-social behaviour

Section C – Facilities (appropriate provision, accessibility and appearance of facilities)

- Quality and maintenance of facilities

Section D – Maintenance (including control of litter, graffiti and vandalism)

- Horticultural/formal features
- Woodlands and hedgerows
- Ponds and lakes

- Sporting and recreational facilities

Section E – Maintenance of hard landscape features

- Paths, benches, bins, hides and shelters

Section F – Environmental sustainability (Management of natural resources)

- Control of litter and graffiti and actions to control fly tipping and unwanted egress.

Section G – Conservation

- Management of natural features, wildlife and flora

Section H -Community Involvement

- Volunteers and use as an educational resource for schools

In all the years that Putney Lower Common has been entered into the London in Bloom campaign, it has scored very high in all categories and on all occasions the site has been awarded a Gold Award for all the hard work that goes into managing this part of the Commons.

Gold Award:

An exceptionally high standard demonstrated throughout. A consistent approach, which demonstrates both best practice and sustainable effort. Meets all of the judging criteria and objectives of London in Bloom and scores very highly in each section of the judge's criteria.
Outstanding – 170-200 points

(85% - 100%)

Management of Putney Lower Common:

Despite the diversity of habitats that are found on Putney Lower Common's 20 hectares (50 acres) of land, most of the work that is carried out on this area of the Commons involves the routine tasks of litter picking, maintaining good public relations with visitors to the site and ensuring that public footpaths and good access around the Common are kept to a high standard. To ensure this work is carried out, the Conservators have appointed one member of staff to work under the title of Head Ranger for Putney Lower Common.

Alongside all the routine activities that are required to manage Putney Lower Common, there are also many other tasks that must be completed at specific times of the year. While many of these tasks are undertaken by the Head Ranger for Putney Lower Common, for larger operations such as tree safety work and mowing the large areas of open ground, assistance will either be provided by additional members of the Commons' Maintenance Team or by external contractors.

Grassland Management on Putney Lower Common:

Wildflower meadow next to the Oasis Academy, one year after planting

There are eight separate areas of grassland on Putney Lower Common and these are managed for a combination of different uses including organised sport, recreation and conservation.

- The Cricket Field – 1.25 ha (sport & recreation)
- All Saints Church Field – 2.8 ha (school sports and recreation)
- PLC Fairground site – 1.29 ha (conservation)
- Main Field – 4.24 ha (conservation)
- Oasis Academy 0.3ha (conservation and recreation)
- Commondale – 0.22 ha (conservation)
- Old Polo Field – 0.71 ha (conservation)
- Small meadow to the north of the foot bridge – 0.15 ha (conservation)

PLC Grassland sites 2022

Organised Sport:

The two areas of grassland that are managed on Putney Lower Common for organised sport include the Cricket Field and All Saints Church Field.

The Cricket Field: This area of the Common is generally maintained by the Putney Cricket Club. While the main pitch and the outfield are mown as required for cricket, the club has been instructed to maintain a wide uncut boundary of grass around the edge of the field during the spring and summer months of the year. The long grass in this area is of benefit to invertebrates and hedgehogs.

All Saint's Church Field: This area of grassland has traditionally been managed for informal recreation and for organised sporting activities that are carried out by the two local primary schools (All Saints Primary School and Oasis Academy). In recent years, approximately half of this field is mown by Commons' staff during the summer

months and the other half is left unmown for conservation purposes. Towards the end of the summer, all of the field is mown by Commons' staff but as yet, there is no programme of cut and collect in place.

Recreation:

While all areas of grassland on Putney Lower Common are open and accessible for recreational activities, there are two areas that are managed primarily for this purpose. These areas include the Cricket Field and All Saint's Church Field.

Conservation:

There are six areas of grassland on Putney Lower Common that are managed primarily for their conservation value. These areas include the Putney Lower Common Fairground site, the Main Field, Commondale, the old Polo Field, the small meadow to the north of the foot bridge and the Oasis Academy Meadow. While three areas are managed by an annual programme of cut and collect (Main Field, PLC Fairground site and Oasis Academy Meadow) that is either carried out by contractors or by WPCC staff, the three other areas (Commondale, the small meadow north of the footbridge and the old Polo Field) are generally only cut towards the end of summer whereby all arisings are left on site.

For further information relating to the management of grassland and meadows on the Commons, please refer to Objective 2 of this management plan.

Cut and collect work on the Oasis Academy Meadow.

Woodland Management:

With only a very small area of woodland to manage on Putney Lower Common, it has never been considered a necessity to have an annual programme of woodland work in place for this area of the Commons. This said, a regular programme of tree safety inspections take place around the Commons (which includes periodic visits to Putney Lower Common), newly planted trees such as those included in the recent orchard planting are watered and in recent years the coverage of sycamore and the tree of heaven have been reduced on site. In addition to this, over the past few years hundreds of wildflower bulbs of native and species long naturalised in the British Isles, have been planted around the Common's woodland and the areas of native hedge are trimmed whenever necessary.

Mixed hedgerow planted near the Oasis Academy – before and after trimming in 2020

Management of Beverley Brook:

At the current time, the only programme of management that is carried out along the Beverley Brook on Putney Lower Common is the control of Invasive non-native species such as Himalayan balsam *(Inpatiens glandulifera)* and Japanese knotweed *(Fallopia japonica).* Given the steep slopes and deep silt that are present in this section of the Beverley Brook, the control of all invasive non-native species along the edge of the brook is carried out by WPCC staff.

For further information on the management of the Beverely Brook on Wimbledon and Putney Commons, please refer to Objective 5 of the Commons' Land Management Plan.

Invasive non-native species management on Putney Lower Common

The main invasive non-native species management that is currently carried out on Putney Lower Common includes the control of Japanese knotweed, Himalayan balsam and oak processionary moth *(Thaumetopoea processionea)* For additional information on the management of invasive non-native species, please refer to Objective 11 of the Commons' Land Management Plan.

Japanese knotweed found on the Putney Lower Common Fairground site

Management of specific fauna on Putney Lower Common

While all habitat management that is carried out on Putney Lower Common has been designed to benefit both the flora and fauna of this site, specific focus is placed on the particular value which this area of the Commons holds for hedgehogs and stag beetles.

Hedgehog Conservation

As noted in The State of Britain's Hedgehogs (2022), the reasons for the decline in Britain's hedgehogs are not yet fully understood and therefore to point towards individual causes will likely miss the bigger issues that may be involved. There are however certain actions that can be taken on individual sites that are known to support hedgehog population which should help to provide additional protection for this much-loved mammal.

To help with the protection of hedgehogs on Putney Lower Common, consultation has been carried out with recognised experts in the field of hedgehog ecology and research for this Land Management Plan has been greatly aided by the fantastic work that has been carried out by wildlife charities such as The People's Trust for Endangered Species (PTES) and The British Hedgehog Preservation Society (BHPS). In addition to these groups, it should also be noted that all of the hard work and dedication that has been provided by local volunteer groups such as SW15 Hedgehogs has proved to be nothing less than inspirational in helping the Commons to continue protecting the landscape of Putney Lower Common for this iconic species.

In addition to being one of Britain's favourite mammals, hedgehogs are also protected in UK law.

- They are listed on Schedule 6 of the Wildlife and Countryside Act (1981) which makes it illegal to kill or capture wild hedgehogs'
- They are listed under the Wild Mammals Protection Act (1996) which prohibits the cruel treatment of hedgehogs.
- They are considered to be a declining species and of conservation importance under Section 41 of the Natural Environment and Rural Communites (NERC) Act 2006. This Act states that each public authority, must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

For these reasons, the continued protection of hedgehogs on the Commons is of high importance to the overall aims of this management plan. According to the hedgehog ecology and land management guide that has been jointly produced by members of PTES and BHPS, 'there are three main habitat requirements to consider when managing green spaces for hedgehogs':

- A range of nesting opportunities
- High quality feeding areas
- Ensuring varied habitats are well-connected.

Over the past few years, we have actively managed Putney Lower Common with these aims in mind and at the current time some of the actions that we carry out for the ongoing protection of hedgehogs include:

- A minimal programme of mowing is carried out each year but when this work is necessary, all areas of grassland are checked prior to any work being carried out.
- As with all grass cutting on the Commons, mowing always commences from the centre of the field and moves outwards as this provide an important means of escape for any wildlife moving from the meadow into the surrounding landscape.
- Where external contractors are required to carry out mowing on Putney Lower Common, they are made aware that the area is an important refuge for hedgehogs.

- On all areas of Putney Lower Common, wide uncut margins are left around the edges of field to provide cover for foraging hedgehogs and to provide edge habitat as hedgehogs often navigate landscapes by following linear features.
- Piles of logs and cuttings have been left on site which helps to provide potential nesting sites.
- Extensive areas of natural hedgerow have been planted which provides additional cover and nesting opportunities for hedgehogs.
- In partnership with Wandsworth Council, a series of holes have been created along the wall of Putney Lower Common Cemetery to improve the connectivity between different areas of green space.
- Hedgehog hibernation boxes have been discretely positioned around various parts of the Common.
- There is no burning or use of pesticides by Commons staff on Putney Lower Common.
- There is no netting or loose wire left on site which could result in the entanglement of hedgehogs.
- Water is left outside the Rangers hut to provide an additional source of drinking water for hedgehogs.
- Public information related to various hedgehog issues is displayed on the Common's large notice boards at various times of the year.
- Communication is upheld with various local wildlife charities throughout the year.

Volunteers from the SW15 Hedgehog Group with involved with a night- time hedgehog survey on Putney Lower Common during September 2021

Stag beetle Conservation:

The stag beetle is a globally threatened species and is therefore in need of our ongoing protection. To successfully complete its life-cycle, the stag beetle requires a good supply of dead wood. As pointed out in the advice note that was produced by Natural England and London Wildlife Trust (date?) in many cases, management for stag beetles is easy as it's more of a case of 'leave alone' than doing something special. While the ideal situation is therefore to retain as much existing deadwood as possible, creating 'new' deadwood habitats can also be very useful.

The following site management recommendations have been provided in the Natural England and London Wildlife Trust advice note, all of which are followed on all areas of the Commons.

- Retain as much dead wood – logs and stumps – as possible on site – the larger the better. If possible, these need to be left in the shade to avoid desiccation.
- Leave windblown trees in situ, except where they pose a safety issue.
- Make sure most of the dead wood is lying on or close to the ground.
- Avoid stump grinding trees wherever possible.

On areas such as Putney Lower Common where there is not an extensive amount of deadwood available, additional hardwood timber has been brought on site to create artificial habitats. These have taken the form of log piles and log pyramids.

Large logs from a broadleaved tree are sunk into the ground at a depth of approximately 60cm to provide an additional habitat for stag beetles on the Common.

Annual General Management Programme for Putney Lower Common

(this section requires further consultation with the Head Ranger for Putney Lower Common).

Month	Activity
January	Litter picking (Head Ranger PLC)
February	Litter picking (Head Ranger PLC)
March	Litter picking (Head Ranger PLC)
April	Litter picking (Head Ranger PLC) Prepare selected area of the Main Field for the annual fair (cut and collect) (WPCC Maintenance Team) Position trail cameras for annual hedgehog project - regularly check but leave on site until November. (Head Ranger PLC)
May	Litter picking (Head Ranger PLC) OPM spraying Position Stag beetle notices asking for public sighting on notice boards. (Head Ranger PLC)
June	Litter picking (Head Ranger PLC) Removal of Himalayan balsam. (Head Ranger PLC/WPCC Team) Water all trees planted within 2 years. (Head Ranger PLC) Strim around benches (Head Ranger PLC) Mow paths across the Common (Head Ranger PLC) Cut sports area on All Saints Church Field (Head Ranger PLC)
July	Litter picking (Head Ranger PLC) Water all trees planted within 2 years. (Head Ranger PLC) OPM survey & removal. (C&EO/WPCC Maintenance Team)

	Prepare areas of conservation grassland for the arrival of contractors. (Head Ranger PLC) Carry out all annual survey work (CE&O)
August	Litter picking (Head Ranger PLC) Water all trees planted within 2 years. (Head Ranger PLC) Spray/inject Japanese knotweed (if necessary) (WPCC Maintenance Team). Contractors cut & collect WPCC cut & collect
September	Litter picking (Head Ranger PLC) Water all trees planted within 2 years. (Head Ranger PLC)
October	Litter picking (Head Ranger PLC)
November	Litter picking (Head Ranger PLC) Tree planting (if required) (Head Ranger PLC) Remove hedgehog cameras (Head Ranger PLC)
December	Litter picking (Head Ranger PLC)

Vision:

As displayed by its ongoing success in the annual London in Bloom campaign, Putney Lower Common already provides so much to the local community that it serves and the wildlife that is found on site. With the provision of adequate resources, there is however still more that can be done to enhance this area of the Commons.

At its heart, Putney Lower Common is a community space that provides an important resource for exercise, recreation and education. It is therefore of great importance that whatever management is carried out in this area in the future is of direct benefit to the local people and visitors who use this part of the Commons.

At the current time, there are two schools that are situated around the edge of Putney Lower Common and therefore the potential for closer engagement with these schools should be fully explored. This could be done through improvements to on-site signage, through the creation of a marked nature trail or through occasional meetings with the Head Ranger for Putney Lower Common. The educational value of the current Ranger's enclosure should also be improved as this small area could be greatly enhanced to offer horticultural and wildlife opportunities through the provision of raised beds, bug hotels, bird boxes and up to date information about the Common. As this area is essential to the running of the Common, it would however only be open to the public at times that were convenient to the running of the Common.

In the future, the Rangers enclosure on Putney Lower Common could be improved as a community and education hub for the Common

In terms of the conservation value of Putney Lower Common, while a great deal of habitat management is already routinely carried out on site, there are certain aspects of this area that could be improved in the future.

With reference to aquatic habitats, at the current time, there are no ponds on Putney Lower Common and the section of the Beverley Brook that is located on this site is in need of restoration. To help enhance the biodiversity of Putney Lower Common, it is therefore suggested that if an appropriate area of ground can be selected, a small pond should be created somewhere on this site. The pond would not need to be large but the presence of an additional source of standing water would be of great benefit to mammals such as the Common's hedgehog population, invertebrates, amphibians and birds. Given the high number of dogs that are walked on Putney Lower Common, it would be recommended that any pond on this area of the Commons would need to be permanently surrounded by some form of post and rail fencing or it would soon become overused by dogs and consequently, the wildlife value of any such wetland area would soon be seriously damaged.

Of all the natural and semi-natural habitats that are currently found on Putney Lower Common, the Beverley Brook is currently the most undermanaged. Despite the control of invasive non-native species that is carried out along the banks of the Beverley Brook, at the current time, this stretch of water is heavily shaded by overhanging branches and there is very little instream vegetation available. This has resulted in a section of river that is too dark, too cold, and lacks wildlife and habitat diversity.

The Beverley Brook on Putney Lower Common is heavily shaded and in great need of restorative work

From the experience gained through the restoration of part of the Wimbledon Common section of the Beverley Brook in 2018/19 (refer to Objective 5 entitled the management of the Beverley Brook) a major restoration project along the Beverley Brook on Putney Lower Common would involve a partnership approach and significant funding. It would also require considerable planning and the cooperation of the local community for this project to be a success.

With reference to work that was carried out on Wimbledon Common, the work that would be required to improve this section of the brook would involve the following operations:

- Opening bank side vegetation and removing excessive shading.
- Creating berms (beach like areas) along the watercourse.
- Creating small islands
- Narrowing the channel, creating pools and riffles
- Restoring the gravel river bed
- Re-grading banks.

As displayed by the work carried out by the South-East Rivers Trust on Wimbledon Common and in the neighbouring Richmond Park, the potential benefits that could occur from a programme of river restoration work would include:

- A greater diversity of habitats
- Potentially increase in-stream biodiversity (invertebrates, plants and fish)
- Potentially increase bankside biodiversity (small mammals, birds, plants, invertebrates)
- Improved vistas leading to greater public enjoyment and appreciation of the brook

With further consideration to the Beverley Brook on Putney Lower Common, another potential and very simple gain in this area would be to extend the planting of Black poplar trees along the ditch line which extends from the area near the pedestrian foot bridge towards the gate which connects the Common to the neighbouring land owned by Richmond Borough Council.

According to the Wildlife Trusts (2022) ‘the Black poplar is a large tree of floodplains, flooded gravel pits and ditches, particularly in England. Despite being an important part of our culture, it has declined massively.’ In fact, it is believed that there are currently only 7000 black poplars remaining in England, Wales and Ireland of which 600 are female. Although two of these trees were planted on Putney Lower Common in 2021, both of which have done very well, perhaps it is time that more Black poplar were planted in the same area to continue the legacy of these impressive trees on the Common.

Another woodland feature that would benefit the biodiversity on Putney Lower Common would be an additional area of mixed native hedgerow. According to the People's Trust for Endangered Species (2022), "over 500 plant species, 60 species of nesting bird, many hundreds of invertebrates and almost all of our native small mammal species have been recorded as being supported by hedgerows." Hedgerows provide shelter, nesting and feeding opportunities and therefore additional hedgerows on the Common would be of great importance to improving the wildlife value of this part of the Commons.

One possible location for an additional area of mixed native hedgerow on Putney Lower Common would be along the edge of the Putney Common cemetery wall that faces the Main Field. At the current time, this area is covered by an assortment of vegetation although it is dominated by mature trees and suckers from the highly invasive non-native Tree of Heaven. Native to China and Taiwan, the Tree of Heaven commonly known as ailanthus, was introduced into the UK in 1751. It is extremely fast growing and produces dense thickets of suckers which, if left unchecked, can soon colonize open ground. The tree is also *allelopathic*, meaning it releases chemicals into the soil that are toxic to other plant species. Ensuring that ailanthus is eradicated from the Commons should be regarded as a high priority and this can be achieved by applying a herbicide late in the growing season. Repeat treatments of herbicide may be necessary and it is recommended that herbicides with triclopyr or glyphosate are used by qualified individuals.

Ailanthus suckers growing close to the edge of the cemetery wall.

Monitoring:

With a diverse range of habitats to look after, monitoring the results of our work on Putney Lower Common can be achieved through a combination of approaches.

Grassland monitoring:

As previously mentioned on page 22 of this Objective, there are eight separate areas of grassland that are managed for a variety of purposes which include sports, recreation and conservation. For the purposes of the Commons' Land Management Report, it will be the areas that are either wholly or partly managed for conservation that will be of most interest to us. For a comprehensive approach to managing these areas on Putney Lower Common, please refer to Objective 2 which provides details on the UK Guidance on Conservation Objectives for Monitoring Lowland Meadows (Neutral Grassland). Monitoring of the grassland on Putney Lower Common will be carried out on a bi-annual basis by a suitable member of the Commons' staff or a volunteer.

Woodland monitoring:

With only a very small area of woodland on Putney Lower Common, monitoring the condition of this habitat should not be too onerous a task. While a full description of how woodland monitoring should be carried out on the Commons is available in Objective 3, in brief, the method of assessment is based on a structured walk around the woodland with a series of observation stops made along the way. These stopping points will be placed in a location that will provide a reasonable coverage of the area that is to be assessed. The monitoring of the Commons' woodland will follow the principles that have been provided by the Joint Nature Conservation Committee's (JNCC) publication: 'Common Standards Monitoring Guidance for Woodland Habitats' (2004). Monitoring of the woodland on Putney Lower Common will be carried out on a bi-annual basis by a suitable member of the Commons' staff or a volunteer.

Monitoring of Invasive non-native species:

The presence of all known invasive non-native species (INNS) on Putney Lower Common is kept on a data base. Regular standard walks will continue to be carried out either by the Head Ranger for Putney Lower Common or by the Commons' Conservation and Engagement Officer and all INNS will be reported and added to the existing data base.

Monitoring of wildlife on Putney Lower Common:

The monitoring of wildlife on Putney Lower Common is carried out through a combination of reports that are collected by WPCC staff and volunteers and through surveys that are carried out by groups such as SW15 Hedgehogs and London Hogwatch. With the addition of a small number of trail cameras, the Head Ranger for Putney Lower Common could also continue the monitoring of wildlife, especially hedgehogs, throughout the appropriate times of the year.

It is advised that notice boards around the Common are kept regularly updated by the Head Ranger for Putney Lower Common and whenever opportunities arise, these notice boards should be used to promote the wildlife interests of the Commons and make repeated requests for any wildlife sightings that may be recorded on the Commons.

General monitoring of Putney Lower Common:

As noted on page 19 of this Objective, Putney Lower Common has been entered into the annual London in Bloom campaign since 2009.

Taking a holistic approach to looking at how the Common is looked after, the London In Bloom Campaign, provides one or more independent judges whose expertise and experience allows them to recognise how well each site is being managed. Without any prior working knowledge of the site, the London in Bloom judges are able to provide us, as the land managers, with an entirely fresh point of view about what they see as working and what they consider may be improved. For this reason, the London In Bloom Campaign remains a very important element of Putney Lower Commons' annual calendar.

Scientific Monitoring at Putney Lower Common:

As noted at various points, there is no comprehensive inventory of plants, animals and fungi on Putney Lower Common. A useful objective for the next five years would be to establish a scientific baseline through a series of monitoring initiatives. Some ad hoc data are available from Wimbledon and Putney Commons bird reports, walkabouts by the Wildlife and Conservation Forum; from external organisations such as GiGL and i-record and from periodic observations by the Head Ranger for Putney Lower Common and the Conservation and Engagement Officer.

However, given the potential impacts that increasing occurrences of weather extremes, expected as a result of climate change, may have on the wildlife communities, establishing this baseline in a coordinated and readily accessible format has considerable importance for informed management into the mid- 21st century.

Year 1: Mammal monitoring

Year2: Woodland plants

Year 3: Plants of other habitats

Year 4: Invertebrates

Year 5: Birds

Wimbledon and Putney Commons Land Management Plan:

Objective 10: The Wimbledon Common Golf Course

1: Discussion

While the exact origins of golf are not clear, a game which is similar to the modern-day game of golf was first documented in Scotland during the 15th Century. While this game was originally played on the sandy links of Scotland's east coast, over time, its popularity has spread throughout much of the world.

In England, golf was first recorded in 1608 where it was played by James I with his courtiers on Blackheath in London and by the nineteenth century, the growing popularity of this game saw golf being played on many of the heaths and commons that were found in the London area. As noted by Fordham and Isles (1987) heaths and commons provided the ideal conditions for golf during these early years as they contained 'poor soils based upon gravel substrates that provided a free draining surface which supported a similar range of semi-natural vegetation as the Scottish links'.

With little or no land management required for playing golf on commons and heaths during the nineteenth century, to enable these early golf courses to appear as close

to the natural links of Scotland as possible, in some areas, sand bunkers were constructed, and turf from coastal areas was introduced. According to Fordham and Isles (1987) on Wimbledon Common, sea milkwort *(Glaux maritima)* and sea plantain *(Plantago maritima)* were planted to 'enhance' the appearance of the course.

Although, in recent years, there has been some decline in the number of people playing golf in the UK, according to information published by the Statista Research Department (2022), golf remains one of the most popular sports in the UK and England remains the number one golfing country in Europe where it is currently home to 2,270 golf courses. This is more than every other country in the world apart from the U.S.A, Japan and Canada.

Despite the continuing popularity of golf in the UK, the public perception of this activity is however one of differing viewpoints. According to Jarmo and Saarikivi (2016) the public perception of golf courses is overwhelmingly negative, but this perception depends largely on whether an individual is involved in the game or not. To illustrate this point, Grange (2003) noted that in a survey which involved 400 people in the Southeast of England during 2002, it was discovered that 80% of those questioned who played golf considered that golf courses were of benefit to the environment while among non-golfers, this figure fell to 36%. Amongst those interviewed who played golf, it was generally considered that golf courses were of benefit as they preserved areas of natural habitat while among non-players, reasons for golf courses being detrimental to the environment included habitat loss, overuse of water and chemical contamination of soil and groundwater from pesticides and fertilizers.

While the survey demonstrated there was a great deal of anti-golf feeling amongst the public, Grange also noted that at the time of the survey, there was actually very little credible research that had addressed any of these claims.

With a typical 18-hole golf course covering between 50 and 60 hectares of land, the anti-golfing viewpoint has routinely referred to these areas as green deserts which consist of highly managed areas (the greens and tees) which provide a poor use of land and require a great deal of resources to ensure their upkeep. As suggested by Sochaczewski (2016), as the prosect of extended droughts around many parts of the world become an increasing reality, the idea of golf courses sporting heavily irrigated swathes of lush green grass will very likely become socially unacceptable in future years.

With reference to golf on Wimbledon and Putney Commons, public opposition to this activity had been raised by some local levy payers as far back as 1873. In this case, it was asserted that golfers were, in fact, a menace to society. As noted by Cruickshank (1986) in his book on the history of the Royal Wimbledon Golf Club, alarmed by the numbers playing golf on the Commons, in 1880, a group of local ratepayers objected to the interference with the proper use of the Commons caused by the game of golf which according to the leader of the group, Mr Flemich:

“Requires a very extensive area of ground, the balls are struck with great violence and driven to a considerable distance and the ground or course being occupied by a constant succession of players (frequently more than 100) the result is that practically the whole length of the Course, which is upward of a mile, is monopolised for this game, and the public entirely excluded from using it”.

As suggested by Sochaczewski (2016) perception is however a powerful mental state which is often far stronger than the facts. While golf has, at various times, been placed under the environmental spotlight, not least because of the significant areas of land that it occupies, in many of the countries where it has become popular, Colding and Folke (2009), make the assertion that golf courses actually provide a huge potential to promote critical ecosystem services.

Away from the mown tees, greens and fairways, up to 70% of the land occupied by a golf course is considered non-playable and therefore able to provide a diverse range of habitats. As noted by Colding and Folke (2009) as many golf courses are not open to the wider public and therefore not disturbed by high levels of footfall, threatened flora and fauna on habitats such as lowland heathland are provided with a higher degree of protection than may be found on more open and publicly accessible sites.

In heavily developed urban areas that are increasingly common in countries such as England, golf courses provide large green expanses which may at times surpass many nature reserves in size. While public access to privately held land will inevitably provide some heated debate, the fact that many golf courses will contain large areas of mixed habitats which may include trees, heathland, wildflower meadows, wetland habitat and even dunes, means that golf courses in general are in an incredible position to support nature conservation at a landscape scale.

As noted by Hampton (2022) how golf courses are managed in the future will determine whether they become a sanctuary for wildlife or a landscape that is poor in native species and only of use to the golfers who use it. At the forefront of helping to facilitate wildlife conservation on the UK’s golf courses and therefore attempting to alter the negative perception that golf courses are detrimental to the environment has been the recent collaboration between the Royal Society for the Protection of Birds (RSPB) and the R&A which is a leading body within the world of golf. Together, the RSPB and the R&A promote best practice for greenskeepers who would like to promote biodiversity on their golf courses.

The purpose of this section of the Commons’ Land Management Plan is to provide a framework that will help to further improve the existing strong collaboration between the Commons’ management team and the team of greenskeepers who look after the Wimbledon Common golf course. One of the great advantages which the Commons’ golf course has over many other similar areas that are used for this sport is that it’s surrounded by many of the natural features which are provided by the Commons. These include woodland, heathland and acid grassland and there are many areas of the existing course that can be enhanced for the benefit of wildlife and for the quality of golf that is played on the Commons.

Punch magazine (1909) illustrating that feelings between golf and non-golf users of the Commons could, at times, become quite heated.

2: Significance

Historical context

"It is not often appreciated by those who object to the Red Shirt Brigade, that golf on the Commons started before it was a Common in the modern sense". Downs (2004)

In tracing the history of golf on the Commons, there have been many articles written on the subject but arguably, two of the most comprehensives pieces of written material that are available include John Downs' (2004) book entitled The London Scottish Golf Club and Charles Cruickshanks' (1986) book entitled The History of Royal Wimbledon Golf Club 1865-1986. Without reference to the work of these two authors, understanding the complex relationship that has existed between the Commons and the Golf Clubs that use this course would be difficult to fully comprehend. What follows is a brief account based on the work of Downs and Cruickshank of the early and often tumultuous history of golf on Wimbledon Common and Putney Heath.

While golf was likely played on Wimbledon Common and Putney Heath from the early nineteenth century, officially, the origins of golf on the Commons can be traced back to November 1864 when the Commons were the property of the 5th Earl of Spencer and home to the National Rifle Association.

Founded under the direction of Lord Elcho and members of the London Scottish Rifle Volunteers, after preliminary discussions on how golf should be organised on the Commons, by 1865 the first Golf Club had been founded on this site under the name of the London Scottish Golf Club (LSGC). Formed in part to help induce men to join the London Scottish Regiment, Downs (2004) has noted that according to a minute of the Spring General Meeting of the Club held at St. James Hall Restaurant on 6th June 1878, Lord Elcho claimed that the LSGC was intended 'simply for the London Scottish Regiment, so that they may have something to do besides rifle shooting when they come to Wimbledon'.

Originally restricted to members and honorary members of the London Scottish Rifle Volunteers, to make the club viable, by 1869 admission to the LSGC was made available to Officers of the Army, Navy, Militia and Yeomanry, members of other Golf Clubs and residents who lived within three miles of Wimbledon Windmill. As this move was not enough to ensure the LSGC remained solvent, in time, the Club opened membership to all outsiders. Despite outnumbering the military members of the Club, according to Cruickshank (1986) Lord Elcho's word was law and despite the change in the balance of power that existed within the LSGC, management of the Club remained firmly in the hands of its military members. While there can be no question about Lord Elcho's commitment to the game of golf, as a result of his uncompromising nature and dictatorial style of leadership, eventually, two Golf Clubs evolved from the original.

As noted by Downs (2004) "the LSGC became embroiled in an almighty row, between its military and civilian members. The disagreement raged from 1877 to 1880, resulting in a split within the Club – the consequence of which was the formation of two clubs, both calling themselves The London Scottish Golf Club".

The original military members of the LSGC remained at the Clubhouse which was known as the Iron House. This building was located north of the windmill but in sight of it and had since 1871 also served as the headquarters for the London Scottish Rifle Volunteers on the Common. After being ordered to leave the Iron House by Lord Elcho, the civilian members of the club moved to a new clubhouse at the other end of the Common. In April 1882, the 'civilian club' changed its name from the contested London Scottish Golf Club to The Wimbledon Golf Club which by June 1882 had become officially known as the Royal Wimbledon Golf Club.

During the long history of golf on the Commons, there have been several alterations to the shape and design of the course on which it has been played. Despite trialling an 18-hole course that was located around the outskirts of the Commons, the prohibitive costs of maintaining this area, resulted in the creation of a much smaller course of 7-holes which encircled the Wimbledon Common Windmill. This course was played with three rounds to emulate the approximate distance covered by a standard 18-hole course. During the opening months of 1871, plans were however once again in place to ensure that an 18-hole Golf Course was available on the Commons. According to Cruickshank (1986) this endeavour may well have been undertaken due to the LSGC's uncertainty about how the new Board of Conservators would view a game that was openly opposed to by many of the levy payers who were responsible, in part, for providing the funds that would pay for the upkeep of the Commons.

As referenced by Cruickshank (1986) the extended Wimbledon Common Golf Course was described in an article written by Niblick for the Field magazine in 1871 in the following words:

"The Wimbledon Links. The golfing ground of the London Scottish Golf Club on Wimbledon Common has, thanks to the skill of their professional, Dunn, been lately so improved and extended as to make it one of the finest Courses in this country. Within six miles of Hyde Park Corner there is a golfing Links equal in extent and superior in number and variety of hazards, to the far-famed Links of St Andrews"

Despite the acrimony that had accompanied the split to the original LSGC, by December 1909, a joint committee had been established to manage the Wimbledon Common Golf Course. As noted by Cruickshank (1986) by 1910, the costs for the maintenance of the course had been split three ways which included the involvement of the LSGC, The Royal Wimbledon Golf Club (RWGC) and the recently formed Wimbledon Town Golf Club, later to be known as the Wimbledon Common Golf Club (WCGC). This situation was however not to last long. In 1907 the RWGC had begun constructing a course of their own on 240 acres of Warren Farm which adjoined Wimbledon Common and in 1915, The RWGC left the Commons forever. From this point onwards, the Wimbledon Common Golf Course was dutifully maintained by LSGC and the WCGC.

Other changes that have shaped the design of the Wimbledon Common Golf Course have included the loss of four holes to the north of the Windmill in 1901, the temporary reduction due to military occupation of the course to nine-holes between 1914 and 1922 and the presence of an additional nine-hole ladies golf course that

was situated west of the long-range rifle butts. As rifle shooting was no longer a fixture on the Commons, the Conservators gave permission for the rifle butts to be levelled to provide a more open aspect and the course was completed in May 1891. This nine-hole course was subsequently lost during the First World War when the land was taken over for use as a military training camp.

Members of the Wimbledon Town Golf Club (1908)

Cultural and Aesthetic context

Any discussion of the cultural and aesthetic merits of golf and golf courses will be largely subjective and strongly influenced by an individual's involvement with golf or their perceptions on whether golf courses provide a positive or a negative effect on the environment.

One of the founding principles of the Wimbledon and Putney Commons 1871 Act is that the land known as Wimbledon and Putney Commons should remain open, un-enclosed and available for the purposes of exercise and recreation for the public and local people. While this principle does not relate solely to golf, organised sport and games have played an important historical role in the life of the Commons. Although the appearance of tees, greens and fairways on the Commons may not be to everyone's taste, the golf course, in various forms, has been part of the Commons

make-up for longer than the Commons have existed in their present form under the stewardship of the Wimbledon and Putney Board of Conservators.

In addition to maintaining many open aspects on Wimbledon Common which may help to provide an enhanced sense of security for many visitors to the area, it should be acknowledged that involvement with the game of golf also provides a range of health and economic benefits to those who are involved and to the wider community. While a walk on the Commons can be achieved without the need to play a round of golf, for some people, the involvement in an organised and social activity can make a walk seem a little more worthwhile. According to a range of sources, involvement with golf can improve both physical and mental health and as it is of low injury risk, it can be enjoyed by people of all ages.

In addition to the overall health benefits that are provided by golf and other sporting activities, according to Karl MaCartney MP (2016) golf also provides a substantial contribution to the UK's economy. As noted in his report on the importance of golf to the UK economy, he referred to a report called "A Satellite Account for Golf in the UK", which had been commissioned by the Royal and Ancient Golf Club and produced by the Sport Industry Research Centre at Sheffield Hallam University. The report highlighted that in addition to the health benefits that are brought to people who are involved with playing golf, in 2016, golf contributed just over £2 billion to the UK economy, and it employs approximately 75,000 people directly in the UK.

As mentioned by Cruickshank (1986) "Robert Burns hit the nail on the head in the context of the Royal and Ancient Game. Nothing mystifies the non-golfer more than the weekly pilgrimage from first to eighteenth. To the golfer, nothing is more divinely right".

Ecological Context

Golf courses will inevitably hold mixed value for the protection of flora and fauna. In many places, a golf course may provide a 'green' setting in an otherwise largely urban or suburban landscape and will therefore provide an important wildlife corridor or steppingstone within an area that might otherwise be largely depleted of natural features. While this may also be partly true for the Wimbledon Common Golf Course, the real strength of this area is that as it was created within a natural environment and therefore many of the natural features of the original landscape remain.

Where this is not the case, these features will have been replaced with other habitats which on the Commons generally includes secondary woodland which also provides an important range of habitat niches. Although the character of the existing golf course may not yet blend seamlessly into the surrounding landscape, there is nonetheless a great deal of potential to improve this area for the protection of wildlife. While much of this this will be discussed in the management section of this chapter, because many golf courses contain a range of natural features such as woodland, meadows, heaths and wetland habitats, invertebrates, amphibians, birds and mammals can all benefit from the sympathetic management of a golf course and the land that immediately surrounds it.

3: Condition

The Wimbledon Common Golf Course has not been included by Natural England in the overall condition assessment of the Commons.

4: Management of the Wimbledon Common Golf Course

"There is an old-fashioned air about golf at Wimbledon Common – an atmosphere of red coats and friendly foursomes made up at luncheon, which is exceedingly pleasant – nor is the actual golf on Wimbledon Common by any means to be despised. It has at least one supreme virtue that of naturalness; those great clumps of gorse were put there by the hand of nature herself, who if she be not so cunning, is at any rate infinitely more artistic than any golfing architect".

(Taken from Bernard Darwin's Historic Golf Courses of the British Isles and referenced by John Downs: 2004)

While the appearance of the modern-day golf course on Wimbledon Common is quite different from the original natural links environment of the nineteenth century, it is without doubt that the business requirements and the expectations of those who play the game will have also changed over the past 150 year. As noted by Hampton (2022), at a minimum, the requirements of the modern game of golf require fairways, tees and greens to be highly managed as a lack of active management will inevitably hinder the game for the golfer and potentially lose membership for those Clubs that are involved.

At the current time, the management of the Wimbledon Common Golf Course is undertaken by a team of three full time greenskeepers with the addition of one other member of staff who may be employed to help look after the course during the summer period. The team work on a 7-day rota and there is always one member of staff at work on the course for the first half of the day on a Saturday and Sunday. The Wimbledon Common Golf Course contains 20 greens, 18 tees and 16 approaches.

While there have been various methods of providing water to the golf course, in 1995, the Wimbledon and Putney Commons Board of Conservators gave permission for laying down a watering system that covered all the tees and greens, including the approaches up to a distance of 50 metres. This work was started on 2 December 1996 and most of the cost was met by the Wimbledon Common and London Scottish Golf Clubs. The storage tank for the watering system is located close to the Royal Wimbledon Golf Club and the fully automated system holds 12,000 gallons of water. Mains water is used on the golf course and like other sporting organisations such as football and cricket clubs, they are currently exempt from drought conditions unless the conditions become so dry that the local water board will inform the Clubs to stop watering their facilities.

From a meeting held between the Commons' Conservation and Engagement Officer and the WCGC Head Greenskeeper during November 2022, the only chemicals that are used on the course includes organic fungicides that are used on greens when

they come under stress, organic fertilizer that is used on fairways and tees between April and September and a wetting agent that is used once a month on greens to hold in moisture. All the greenskeepers who are employed to look after the Wimbledon Common Golf Course are certified in the use of all chemicals that are required on the Course.

The conditions for playing golf on the Commons have been agreed by the Wimbledon and Putney Commons Conservators and both Golf Clubs that currently use the course. This agreement includes matters of insurance, membership numbers, green fee tickets, dress, expected behaviour, playing regulations, course management and how to deal with accidents on the course. According to the agreement, in late March of each year, the secretaries of both Clubs are required to review with the WPCC Chief Executive Officer (formerly the Clerk and Ranger) the playing of golf on the Commons.

As part of this agreement 11 of the 57 byelaws that are in place to help manage the Commons, refer specifically or in part to the activity of golf on the Commons.

These byelaws include:

28: It shall be lawful for the Conservators from time to time to set apart or appropriate any part or parts of the Commons for the protection of the turf, trees or shrubs thereon, or for walking, or for cricket, football, golf, skating, sliding, or other reasonable recreation; and no unauthorised person shall drive, ride, or pass over upon horseback the parts so set apart or appropriated of the said Commons; and no person shall play at cricket, football, golf, or any other game, or skate or slide upon the parts so set apart or appropriated, except on such days, at such times and under such regulations as the Conservators may from time to time prescribe; and no person shall obstruct or interfere with or annoy any persons who are playing or have made preparations for playing at cricket, football, golf or any other lawful game, or who are skating or sliding upon the parts so set apart or appropriated. And with regards to every other part of the Common not so set apart or appropriated as aforesaid, no person shall play any game thereon so as to endanger the safety of, or injure, alarm, or annoy any person or animal.

29: No person shall play at any game destructive of, or injurious to, the surface, soil, or natural products of the Commons, except in such places and under such regulations as the Conservators may from time to time prescribe.

30: No other part of the Commons than the golf tees and greens for the time being set apart by the Conservators, and the spaces intervening in a straight line (as near as may be) between the tees and greens respectively, shall be used for playing golf.

31: Golf may be played on such days as may from time to time be authorised by notice published by the Conservators, but not on Sundays after 2pm.

32: No person playing golf shall strike or play any ball near any person walking, riding, or driving over the Commons, or otherwise play golf in such a manner as to injure, endanger, alarm or annoy any person traversing or being on the Commons for exercise, recreation or any other lawful purpose.

33: No person playing golf shall require any person crossing the Commons between any tree and any green to move away, or otherwise interfere with any such person.

34: Every person playing golf shall wear a red coat, or other outer red garment.

35: Every person playing golf must commence from either the first tee on the Wimbledon side or the first tee on the Windmill side and at no other point and must observe the rules in force upon the course.

36: Every person playing golf shall be a member, whether for the day or for a longer period, of a club recognised for the purpose of this byelaw by the Conservators and shall comply with the recognised etiquette and rules of the game and with any special rules laid down by the club.

37: No person shall ply for hire or solicit employment as a golf caddie upon the Commons unless he shall first have been licensed to do so by the Conservators, and he shall hold such licence subject to such regulations as may from time to time be prescribed by the Conservators.

38: Every person (other than a person actually engaged in playing a round of golf on the golf courses on the Commons or his caddie) who shall find any golf ball on the Commons shall forthwith deliver such ball to any Keeper or duly appointed servant or agent of the Conservators, to be dealt with as the Conservators may think fit.

The Wimbledon Common Golf Course is located firmly within the area covered by the Wimbledon Common SSSI and SAC designation and therefore forms part of a wider area of land that is of high importance for nature conservation. As with similar areas of land which contain both SSSI designation and golf courses, a set of objectives are necessary to help manage the site.

On Wimbledon Common these include:

- To manage the golf course in a way that provides a special and enjoyable location to play golf.
- To manage the golf course in ways which minimise any adverse impacts on the landscape and wider environment.
- To manage the surrounding landscape in ways that will help to protect and enhance the matrix of natural and semi-natural habitats which can be found there. Restoration of any designated features that form part of the Commons' SSSI should, where possible, be prioritized.
- To jointly review management from time to time with representatives from WCGC and LSGC to assess whether agreed objectives are having the expected outcomes.

Having walked the Wimbledon Common Golf Course with the Head greenskeeper for this site, there were a number of points raised that if correctly implemented could help to improve the ecological value of the site and, in places, help to improve the quality of golf on the Commons.

Tees and Greens:

LSGC 9th: Caesar's Well Green

Tees: The tee box otherwise simply known as the tee is a closely mown area where the golf ball is placed before the first shot of each round.

Greens: Each hole will have a green and this is where the flag and hole are located.

Tees and greens are the most critical and intensively managed areas of a golf course. To ensure the quality of golf played in these areas does not suffer, it should be appreciated that little change can be made to the routine management of these areas.

Unfortunately, because of heavy shading, some of the tees and greens on the Wimbledon Common Golf Course suffer from prolonged damp which can result in the occurrence of fungal problems on the course. Where this occurs and the tees and greens become particularly stressed, the use of fungacides are required. In areas where heavy shading is the result of the presence of invasive non-native species (INNS) such as Turkey oak *(Quercus cerris)* and sycamore *(Acer pseudoplatanus)*, removal of these species will be of benefit to the Commons native flora, helpful in the management of the tees and greens and will help to reduce the use of chemicals on the golf course.

To help replace the trees that have been removed around the tees and greens, smaller growing native species such as rowan *(Sorbus aucuparia),* blackthorn *(Prunus spinosa)* and hawthorn (*Crataegus monogyna)* should be planted nearby that will be of greater benefit to wildlife than was previously provided by INNS. Where appropriate, in areas where tees have become exposed, mixed native

hedgerows should be planted which will add another important element to the area's flora and fauna.

To help with the health and safety of Commons users, each tee should also be provided with a marker that clearly notes the name of the tee and contains the telephone number for the Rangers Office on Wimbledon Common.

LSGC 1ST: Elcho. A mixed native hedgerow has been planted on two sides of the tee but further tree reduction around this and certain other tees on the Commons would provide the opportunity to create additional native hedgerows on site.

Fairways, semi-rough and rough:

LSGC 17th: Heather (tee and fairway)

Fairway: A golf fairway is simply the grassy area that is located between the tee box and the green. The grass on this area of the course is cut short but not as short as the grass which is found on the green.

Semi-rough: This area of the golf course is located to the immediate edge of the fairway and is approximately five metres in width. The grass in this part of the course that kept slightly longer than on the fairway.

Rough: The rough is the area of grass outside of the fairway and semi-rough. The length of grass in this area will vary from course to course.

It has been agreed that fairways on the Wimbledon Common Golf Course should not exceed 20 metres in width with an additional five metres of semi-rough grassland that is mown on either side to a height of between 30-70cm.

No artificial fertiliser should be applied to either the semi-rough or to the adjacent areas of longer rough grassland. By striving to improve the extent of rough that exists alongside the Commons' golf course, acid grassland and heathland habitats can be restored. This will help to provide a visually attractive area of grassland that will also provide pollinator friendly habitats that are of such importance to many invertebrate species including the bumblebees, some of which are of high conservation importance. As suggested by the Bumblebee Trust (2022) the creation

of pollinator friendly habitats does not need to be expensive and if carefully planned, a reduction in the frequency and scale of mowing and the use of chemicals would be of benefit to wildlife and save money and time managing the course.

The woodland edge:

LSGC 6th: Sandpit

There are many fairways on the Wimbledon Common Golf Course that are bounded on either side by an abrupt and straight woodland edge. In line with the Commons' overall woodland management objectives (refer to Objective 3), to help develop a woodland edge that will increase the species diversity and the habitat structure of the Commons secondary woodland, where suitable, semi-mature broadleaved trees should be coppiced and managed on a rotational basis.

Heathland:

LSGC 10th Caesar's Camp

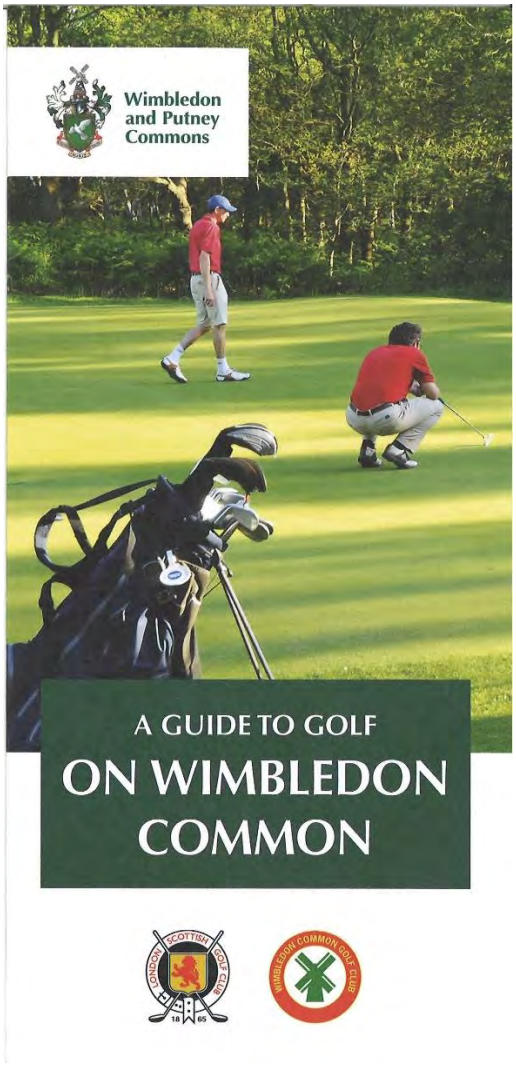
In areas where fairways are bordered by areas of heathland, every effort should be made to restore these import parts of the Commons. By coppicing scrub and gorse on a rotational basis and creating scrapes which are used for heather restoration, a heathland edge can be achieved that contains a mixture of heathland flora of different ages and structure. Where areas of the golf course have been designated for the restoration of heather, these should be enclosed with temporary fencing to prevent new shoots from either being trampled by visitors to the Commons or browsed by rabbits.

Education:

The Wimbledon Common Golf Course has been a highly visible part of the Commons landscape for over 150 years and the work that is planned around this area has been designed to clearly show that golf and wildlife can happily coexist on the same area of land.

Although the wearing of red tops provides golfers with a highly visible presence while playing golf on the Commons, to help bridge the gap between golfers and non-golfers, it is important for WPCC and the two Golf Clubs that play on the Commons to provide visitors to the site with a clear explanation of the history and our vision of how the course and the surrounding land should be managed in the future.

Through the production of promotional material, attendance at Commons' public events and regular correspondence between the Commons management team and the Commons' greenskeepers, this will help to improve the public image of golf on the Common and hopefully provide a marketable asset in terms of encouraging new members and additional income to both Clubs.



A series of leaflets such as the one above should by produced which explain the history and management of the Wimbledon Common Golf Course.

Five Year Plan of Work on the land surrounding the Wimbledon Common Golf Course

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Tree thinning around tees & greens	LSGC 1st (Elcho) Tree thinning around tee	LSGC 4th (Running Deer) Tree thinning around tee	LSGC 5th (Queensmere) Tree thinning around tee	LSGC 6th (Sandpit) Tree thinning around tee & Green	
Management of the woodland edge	LSGC 3rd (Long Butt)	LSGC 4th (Running Deer)	LSGC 5th (Queensmere)	LSGC 6th (Sandpit)	LSGC 7th (Paradise)
Tree and native hedge planting	LSCG 1st Tee (Elcho) Plant native hedge on 2 sides of tee	LSGC 4th (Running Deer) Plant native hedge on 2 sides of tee	LSGC 5th (Queensmere) Plant native hedge on 2 sides of tee	LSGC 6th (Sandpit) Plant native hedge on 2 sides of tee	
Heathland restoration (including scrapes)	LSGC 3rd (Long Butt)		LSGC 8th (Birches)		LSGC 10th (Caesar's Camp)
Education	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.
Provision of named markers at tees	All tees	Completed	Completed	Completed	Completed

Management Team meeting	Annual meeting held during March	Annual meeting held during March	Annual meeting held during March	Annual meeting held during March	Annual meeting held during March
Monitoring	Monitoring		Monitoring		Monitoring

Potential continuation to a ten-year plan of work:

Activity	Year 6	Year 7	Year 8	Year 9	Year 10
Tree thinning around tees & greens					
Management of the woodland edge	LSGC 9th: (Caesar's Well	LSGC 10th (Caesar's Camp)	LSGC 11th (Long hole)	LSGC 13th (Hope Grant)	LSGC 14th (Nest)
Tree and native hedge planting					
Heathland restoration (including scrapes)	LSGC 13th (Hope Grant)		LSGC 17th (Heather)		LSGC 18th (Windmill)
Education	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.	Annual attendance of LSGC/WCGC at WPCC Open Day Public information at all work sites around the Course Golf course operations & events to be displayed on WPCC website.
Creation of additional water features	Feasibility study for creating additional water				

	features on the WCGC				
Provision of named markers at tees	Completed	Completed	Completed	Completed	Completed
Management Team meeting	Annual meeting held during March	Annual meeting held during March	Annual meeting held during March	Annual meeting held during March	Annual meeting held during March
Monitoring		Monitoring		Monitoring	

5: Vision

The vision of this chapter of the Wimbledon and Putney Commons Land Management Plan is to improve the ecological condition of the land that surrounds the immediate area of the Wimbledon Common Golf Course while preserving the quality of golf that can be played on this site. It is likely the work that is involved in this project could span a period of up to ten years, but all possible effort will be made to complete the proposed programme of work sooner. According to Arthur and Parks (date?) it is often the attitude of the staff who carry out the management work that can have a profound influence on the wildlife potential of the course. At the current time, the Commons are extremely fortunate to have committed teams working on the golf course and around the Commons in general.

In addition to the work that we already have planned for the area surrounding the Wimbledon Common Golf Course, together, further consideration should be given to how we can make golf sustainable in the coming years. As noted on the England Golf website (2022), 'England Golf recognises sustainability as a crucial priority and acknowledges the role that golf has to play in the global sustainability effort'. The website continues: "with over 2200 golf courses across the country representing an area of over 1,250 square km which is the equivalent to the area of the Lake District National Park, we have a responsibility to work on the positive contributions that golf can have on the environment, society and economy."

The 5 reasons that England Golf have proposed for golf clubs to embrace sustainability are:

1: Long term protection (changing weather and climate change legislation will save money in the future meaning that clubs will be resilient and thrive.

2: Ecological benefits – encouraging good environmental stewardship can help a golf course to increase biodiversity, promote cleaner air and act as a watershed for urban areas.

3: Pride and reputation among staff and club members.

4: Greenskeepers can prioritise – efficiently managing the course means that greenskeepers can focus more on the areas that matter most.

5: Monitor and celebrate success – reducing resource consumption and engaging more with the community are all positive effects.

If these points are considered, it is certainly feasible that the Wimbledon Common Golf Course will not only be improved ecologically but the Golf Clubs that use it will also continue to thrive. As a result, in the future, it is suggested that in conjunction with LSGC and WCGC, environmental recognition/awards should be sought for all the hard work that has been carried out to improve the Wimbledon Common Golf Course.

6: Monitoring assessment

Monitoring whether the condition of the Wimbledon Common Golf Course has improved as a result of the work that has been proposed in this chapter of the Commons' Land Management Plan involves collaboration between WPCC, LSGC and WCGC.

Monitoring the work that has been carried out to improve the woodland, heathland and acid grassland environments will be carried out using the same methods that have been outlined in the relevant chapters of this land management plan. The method of assessment for all areas will be based on a structured walk with a series of observation stops made along the way. For the woodland habitats, monitoring will follow the principles that have been provided by the Joint Nature Conservation Committee's (JNCC) publication entitled 'Common Standards Monitoring Guidance for Woodland Habitats' (2004). The monitoring assessment for the areas of heathland and acid grassland will follow the guidelines as set out by the Commons' current CS agreement with Natural England.

Committee(s):	Date(s):	Item no.
Wimbledon and Putney Commons Conservators meeting	12 December 2022	12.22.23

Subject:	Non-Public
Public Chief Executive's report	
Report of:	**For Information**
Chief Executive, Wimbledon and Putney Commons	

NOT FOR PUBLICATION

Summary

Recommendations

(a) That the Board agrees that future General Open Meetings should be held in early November

(b) That the Board agrees the principle of placing a memorial to the suffragettes on the Common, subject to Board approval of the design and location of the memorial.

Calendar of Meetings/Events 2023

There are two proposed amendments to the Calendar for 2023:

1. Winter Talk – change of date from 14 February to 7 February 2023 to avoid Valentine's Day.

2. General Open Meeting – The Chairman and Chief Executive both consider that holding the General Open Meeting in early November worked well this year. It helped staff in that it eased the WPCC event and meeting congestion around early December and also avoided the start of the Christmas event season, hopefully giving more people to opportunity to attend.

   The Board are therefore asked to agree that future General Open Meetings be held in early November.

Conservators are asked to note (1.) and approve (2.) these amendments. If approved, the updated calendar will be uploaded to the Portal.

Suffragette Memorial

A proposal has been received from representatives of the Dorset Hall Group who are keen to place a plaque/memorial to the suffragettes on Wimbledon Common. Dorset Hall was home to Rose Lamartine Yates, a social campaigner and suffragette. Mrs Lamartine Yates was the Secretary of the Wimbledon branch of the Women's Social and Political Union, and it is understood that Wimbledon Common was regularly used for meetings and speeches as part of the campaign for women's suffrage. These meetings attracted crowds of up to 5,000. The

location for the meetings is unclear, and reports of the meetings reference both 'the Pound' and 'the Flagstaff'. Members of the Dorset Hall Group are currently carrying out further investigations in an attempt to pinpoint where on the Common the meetings were held. The importance of the Common to the WSPU is reflected in their banner, which depicts the Wimbledon Windmill. The images below show the banner and one of the meetings which took place on the Common.

Barker Langham, in their Interpretation Plan, produced as part of the Masterplanning process, identified the suffragettes as an important part of the history of the Commons which WPCC might choose to commemorate.

The Board are therefore asked to consider the principle of placing a memorial to the suffragettes on the Common. The location and design, when defined, will come back to the Board for approval. The Board should be aware that a proposal for a memorial to Rose Lamartine Yates was considered, and refused, by the Board in 2006. Below are the relevant extracts from the Board papers and minutes.

From Clerk and Rangers Report April 2006

Permanent Memorial to Rose Lamartine Yates – I have received an e-mail from Richard Evans of the Merton Cycling Campaign who are working towards the installation of a permanent tribute to Rose Lamartine Yates, somewhere in Merton. Mrs Yates was a local resident who became the first woman to be appointed to the Board of Cyclists Touring Club in 1906 but also played a key role in the Women's Suffragette Movement as Secretary of the Wimbledon branch. Many large gatherings of the Movement were held on the Commons and mention is made of Mrs Yates and these meetings in the Conservators minutes dating back to 1912. I have attached a copy of Mr Evans' e-mail as he gives a lot more information as to why he feels the Commons would be an appropriate venue for the tribute. I have explained that a statue or similar memorial would be unlikely to be approved by the Conservators but they are not yet decided on the form the memorial will take and are open to suggestions should the Conservators approve, in principle, the request. *(See attachment 3).* ***The Conservators are asked to consider this request.***

From Board Minutes April 2006

Rose Lamartine Yates – The Chairman reported that he had been contacted by Merton Cycling Campaign to ask whether it might be possible to place a permanent memorial to Rose Lamartine Yates on Wimbledon Common. Ms Yates had had an association with the Commons in that she had been Secretary of the Wimbledon branch of the Women's Suffragette Movement and had often given talks to large groups of people at Rushmere on Wimbledon Common. The Conservators considered the request but felt that the Commons were not an appropriate place for the type of memorial that the Merton Cycling Campaign would like. The Clerk & Ranger was asked to reply accordingly.

An e-mail supporting this has been received from the Leader of Merton Council (See Appendix 1)

Events Update

Carols at the Windmill – 10 December 2022 - The Carols at the Windmill event is taking place on Saturday 10 December 2022.

Winter Talk – 7 February 2022 - I am delighted to advise that Dr Naomi Ewald of the Freshwater Habitats Trust has agreed to be the speaker at our Winter Talk in 2023. The topic will be around ponds and their importance as a habitat and for wildlife. At present it is hoped that this will be a face to face event at the London Scottish Golf Club. Anyone wishing to attend this event will need to reserve a place via Eventbrite. Publicity will start in the next few weeks.

From: Leaders Office <Leaders.office@merton.gov.uk>
Sent: 01 December 2022 14:01
To: Diane Neil Mills <diane.neilmills@wpcc.org.uk>
Subject: Suffragettes Memorial Pound Wimbledon Common

Dear Diane

I understand from the Dorset Hall Group (Barbara Gorna, Simon Hood, Hugh Morgan & other Board members) that they have been in discussion with you regarding the erection of a monument on the Commons to the suffragettes. I understand your Board will be considering this at a Board Meeting on 12 December.

Merton Council is proud of the important role that the Commons played in providing open space for free speech to the Suffragettes to promote the "Votes for Women" cause. The Council are keen to recognise Rose Lamartine Yates, a Merton resident, who regularly attracted large crowds on the Common.

As Leader of the Council I am pleased to support the efforts of Dorset Hall Group and the Conservators to recognise the sacrifices of the suffragettes and to honour these through a suitable monument.

Best wishes,

Ross

Councillor Ross Garrod
Leader of the London Borough of Merton &
Labour Councillor for Longthornton Ward
Email: leaders.office@merton.gov.uk
Twitter: @rossgarrod
Website: Leader's blog | Merton Council Newsroom

Committee(s):	Date(s): 12 December 2022	Item no. 12.22.10
Board of Conservators		
Subject: Fundraising Update		**Public**
Report of: Fundraising Manager		**For Information**

Summary

This report provides a summary of fundraising activity from October to the beginning of December.

Contactless Car Park Donation Machine

£706 has been donated since the last Board update in October. This brings the total donated to £2,062.

Support from local businesses

The Hand in Hand' Charity of the Year
The Hand in Hand has chosen WPCC as it's Charity of the Year. In November they held a pub quiz to raise funds for the Commons and we are delighted that they raised £300 from this event.

Waitrose - Community Matters
WPCC received a cheque for £1,000 from the Waitrose Community Matters Scheme. Staff at the Raynes Park store nominated WPCC as one of their local charities to support.

The Brasher-Chataway-Bannister Bridge

Members of the Thames Hare and Hounds running club (TH&H) took on the ambitious task of raising £42,000 to replace and renew the old timber footbridge. In May 2022 the funds were secured and the bridge rebuilt in October.

The formal Opening Ceremony took place on Saturday 3rd December. The bridge has been named after three champion runners who were members of TH&H and we were delighted that members of the Brasher, Chataway and Bannister families were able to join us as we cut the ribbon and unveiled the plaque. It was an opportunity for the Conservators and staff to thank members of the Thames Hare and Hounds, Wimbledon Foundation, Thomas Day School – Putney Vale, RunThrough Events, London Marathon Charitable Trust and all the generous individuals who made a donation towards this project.

Fundraising for footpaths

We are applying to a number of grant funders to enable the restoration of main footpaths and shared cycleways, along with the addition of new bike racks. The cost for restoring five main paths is around £120,000.

The plan is to raise 80% of this cost via major grants, many of which request additional funds raised as 'matched funds'. The target for matched funds is 20%. Continuing from the success of the previous 'Access for All' fundraising appeal and the restoration of Inner Windmill Road,

we launched a new Access for All appeal to help provide match funds (£24,000) for our grant applications.

The appeal was launched on 'Giving Tuesday' on 29th November. WPCC is grateful to everyone who has responded to the posters on site and so far £1,075 has been donated.

If we are lucky enough to raise more than our ambitious target then any additional donations will help with the paths long term maintenance, and other activities that will improve accessibility and facilities for visitors.

Commemorative Orchard on Putney Lower Common

An orchard is being planted this winter as part of the Queen's Green Canopy – a tree planting initiative launched as part of Her Majesty's jubilee celebrations. Twelve different fruit trees will be planted and each has been offered as sponsorship opportunities. Eight of the trees have now been sponsored or reserved. Donations from tree sponsors and from donations made via our JustGiving page have now raised £3,585 with a further £2,000 pledged from potential tree sponsors.

Donations will help fund the purchase of 12 trees, their planting and protection and their long-term care. Donations will also help care for the wider landscape on Putney Lower Common.

After the trees have been planted, we hope to invite the tree sponsors and orchard donors to join us on the Common for a ceremony.

Applications to the Mayor of London's environmental funding schemes

Rewild London Fund
WPCC has submitted an application to carry out a pond survey and landscape design of Queensmere Pond, plus the delivery of a pond/water monitoring training course for staff and volunteers.

Green and Resilient Spaces
This grant scheme is expected to open in the new year and WPCC will be submitting an application seeking funding for some of the conservation and access projects proposed in the Masterplan.