

A photograph of a herd of cows grazing on a green hill under a blue sky with large white clouds. The cows are of various colors, including black, white, and brown. The sky is a deep blue with large, fluffy white clouds. The cows are scattered across the green field, some standing and some grazing.

Science in the service of animal welfare

Universities Federation for Animal Welfare
Annual Report 2001–2002



Designed and produced by Elizabeth Roberts.

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Letter from the Chairman

Almost every day (or so it seems) my mail contains an appeal from a charity. The needs are often so dire and immediate that there seems no moral option but to respond. And yet supporting everything is not a practicable proposition, and decisions for or against often depend on whether a personal chord resonates with the immediate or long-term aims of the charity.



For me, and, I imagine, for all of its supporters, the resonation of the UFAW chords is why we are members. The priorities and objectives set out on the next pages are the sheet music from which the Staff and Council play. Their appeal to almost anyone with an interest in the advancement of the welfare of animals by a better understanding of their needs is self-evident — and yet our profile in relation to some other animal charities is low.

Profile — and resonating chords — are essential to raising the funds needed to attain our objectives. The talent, enthusiasm and commitment of the staff have raised and maintained UFAW's profile over the last 75 years and our strategy is to raise it further. However, there is an additional powerful resource among our members and supporters to further this strategy. More new members would greatly enhance the core strength of the Federation. Feel free to impart your own enthusiasm (and resonations) for UFAW to your own like-minded friends and colleagues. We will welcome them!

A handwritten signature in dark ink, appearing to read 'R. S. Anderson'.

Ronald Anderson



UFAW ANNUAL REPORT

The Universities Federation for Animal Welfare is an internationally respected animal welfare charity. Its formal objectives are set out in detail in the memorandum of association. The Federation seeks to achieve these by:

Changing attitudes and perceptions...

UFAW promotes a humane, caring attitude towards domestic animals and those animals with which we interact in the wild, to reduce any stress, pain or fear inflicted upon them by humans.

Encouraging care and consideration...

UFAW encourages consideration for the physical and mental needs of all animals under human stewardship: on farms, in laboratories, in zoos, in the wild, and those kept as pets.

Providing funds and enlisting expertise...

UFAW funds animal welfare research and enlists the help of animal handlers and research workers to discover the needs of different species and the ways in which such needs can best be met.

Publishing and disseminating information...

UFAW publishes animal care handbooks, videos, leaflets, reports, and the journal *Animal Welfare*, to make information available to people who work with, are responsible for, or simply care about animals.

Giving balanced and impartial advice...

UFAW provides balanced technical information and advice about animal welfare matters to other animal charities and organisations, educators, religious bodies, and Government departments.

Care without confrontation...

UFAW promotes the use of non-animal alternatives in experimentation, the refinement of techniques to minimise discomfort, and the reduction of the number of animals used. UFAW tries to avoid wasting time in public controversies relating to the general legitimacy of the use of animals in science.

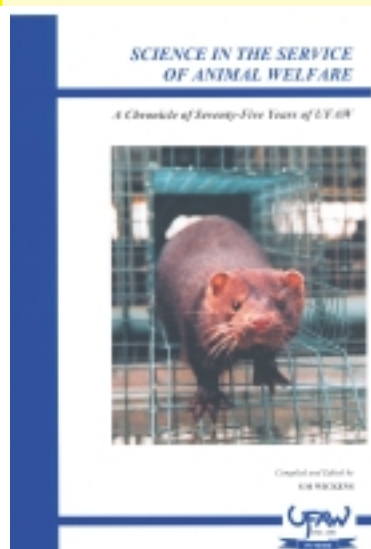
UFAW's priorities

UFAW's motto is 'Science in the Service of Animal Welfare'. Since its foundation, the charity has worked to bring about advances in animal welfare through the promotion of science aimed at determining animals' needs and how these needs can be met. UFAW's activities are focussed on the priorities identified in a review of strategy undertaken in 1997, namely:

- Encouragement and support of high-quality research likely to lead to substantial advances in animal welfare;
- Promotion of education about animal welfare, particularly at the tertiary (university and college) level;
- Promotion of animal welfare by provision of advice, dissemination of information, development of guidelines and legislation, and organisation of workshops and meetings.

Through championing the rational, sympathetic but unsentimental approach charted by UFAW's founder, the late Major Charles Hume, the charity has played a key role in the development of animal welfare in the UK and internationally. It has been able to do this thanks to the generosity and loyalty of its supporters, whose help we most gratefully acknowledge on behalf of the charity.

"UFAW can justifiably be proud of what they have achieved for animal welfare in the seventy-five years since they were founded. What is remarkable is that all this has been co-ordinated by such a small group of highly professional full time staff. Their strength has been that, throughout UFAW's history, they have maintained the support and recognition of the leading academics in animal welfare. This well-written, entertaining and very readable short history of UFAW is a fine tribute to all those who have been involved in the organisation."



Excerpt from Dr Martin Potter's review, published in the newsletter of the Animal Welfare Science, Ethics and Law Veterinary Association (AWSELVA Newsletter 5: 11-12), of *Science in the Service of Animal Welfare: A Chronicle of 75 Years of UFAW* by Stephen Wickens, published by UFAW.



This year...

It is tempting to say that this has been an exceptionally busy year, but scanning through UFAW Annual Reports for the past half-dozen decades, one has to conclude that so were all the others! Being a small organisation, with an independent, scientific stance, and with a wide remit — for the welfare of farm, laboratory, companion, and captive and free-living animals — UFAW is called upon for advice and assistance with a diverse array of problems and issues, and by many agencies and individuals. In addition to the other activities outlined in this report, staff have organised workshops, presented papers at international meetings in the UK and overseas, and published a variety of papers in the scientific press. On 11 May 2002 the Chief Executive and Scientific Director, James Kirkwood (above), was presented with the British Veterinary Zoological Society's award for meritorious achievement at their Spring Meeting, in recognition of his outstanding contributions in the fields of zoological veterinary surgery, medicine and research. During the year, the Deputy Director, Robert Hubrecht (below), was appointed as a member of the Government's Animal Procedures Committee and completed his term as Chair of the Animal Welfare Advisory Committee to the Ministry of Defence.





RESEARCH

The welfare of animals under human care depends upon the following:

- 1) belief in the sentience of the animals;
- 2) understanding that this is a morally important matter;
- 3) having proper knowledge of the animals' needs;
- 4) having the ability and resources to meet these needs, and;
- 5) applying these beliefs, abilities and resources conscientiously.

UFAW's efforts are focussed largely at the third of these points — improving knowledge of animals' needs. It is now accepted widely, although it was not always so, that a broad range of species of animals are sentient — that is, that they have the capacity to experience unpleasant and pleasant feelings — and that it is important that this is taken into account in our interactions with them. The bottleneck in promoting good animal welfare is now very frequently at the third step — a lack of proper understanding of animals' needs and of how these can be recognised. For many species, including some that have been kept in very large numbers for very many years, knowledge of environmental and psychological needs remains less complete than is often assumed, and a great deal of both fundamental and applied research remains to be done in these areas.

UFAW supports animal welfare research through its Research Training Scholarships, its Research Fellowships, its project award schemes and the Vacation Scholarship scheme, although the main purpose of the latter is educational. News of a few UFAW-funded projects are outlined here to exemplify the Federation's current research interests.

Welfare consequences of human disturbance to breeding seabirds

As the human population continues to grow rapidly, the intensity of human disturbance to wildlife is likely to increase. There have been few studies of the welfare consequences of this. This year, UFAW has undertaken to part-fund a three-year study aimed at assessing ecotourist and researcher activities on physiological and behavioural responses of breeding seabirds in the wild. This work is being undertaken by Colin Beale, as part of his PhD studies at the Division of Environmental and Evolutionary Biology at Glasgow University, under the supervision of Professor Pat Monaghan.

Improving conditions for laboratory animals

In 1953, UFAW researchers William Russell and Rex Burch began their work to improve the welfare of laboratory animals, which led to the publication in 1958 of *The Principles of Humane Experimental Technique* which set out the 3Rs approach. The 3Rs — Replacement of the use of animals with non-sentient models wherever possible, Reduction of the number of animals that have to be used to the minimum required to achieve the desired result, and Refinement of techniques and husbandry so as to minimise the risk of harm — have been adopted around the world as the key guiding principles of humane research and have had a significant impact on laboratory animal welfare.

UFAW's efforts to improve laboratory animal welfare continue. The charity funds both applied research (eg identifying ways of improving housing conditions) for which there are few other sources of financial assistance, and research into more fundamental problems such as developing reliable methods of welfare assessment and gaining insight into the mental states of animals (see, for example, the Research Training Scholarships opposite). There are strong financial and political pressures helping to drive progress in replacement and reduction but the third R, refinement, although remaining extremely important, is often less well supported. UFAW has therefore focussed particular efforts in this area through the Research Fellowship and through the Pharmaceutical Housing and Husbandry Steering Committee (PHHSC).

This year, Dr Chris Sherwin, the UFAW (Hume) Research Fellow at Bristol University, has been studying the preferences of laboratory mice for various aspects of housing and husbandry including motivation for burrowing, social contact, running wheels and cage colour.

UFAW established the PHHSC in 1996 to help raise funds from industry and welfare organisations for research into refinements in laboratory



animal care and has, since then, raised over £130,000 for these purposes. The first project under this scheme (undertaken as a PhD study by Shirley Seaman at Edinburgh University) has investigated the housing needs of laboratory rabbits. The results will benefit companion and farmed rabbits also. One of the approaches used was to allow rabbits to demonstrate the strength of their desire for various resources by pushing through weighted doors. In this way, the rabbits clearly indicated that visual contact with other rabbits is a highly desired resource, choosing to spend more than half of their time in visual contact with another. The year-2002 PHHSC scholarship has been awarded to Kerry Westwood (a past UFAW Vacation Scholar) for a project entitled 'Effects of cage size, space allowance, environmental enrichment and their interactions on behaviour, stress, immune function and welfare in laboratory mice', to be carried out under the supervision of Dr Mike Mendl and colleagues at Bristol University.

Impact of high milk yields on the welfare of dairy cows

Modern dairy cattle have extraordinarily high rates of milk production and are under considerable metabolic load for much of the year. They have been selected for high yields for centuries but, over the last 50 years in particular, increments in production have been dramatic. These reflect changes in both the genetic potential of the animals and the methods of meeting their nutritional demands. The impact of these changes on welfare is unclear, particularly for the grazing cow. Dr Clive Phillips (University of Cambridge), M D Cooper and D R Arney (Moulton College), have recently undertaken a UFAW-funded study on the impact of high milk yields on the welfare of dairy cows. The results of an operant conditioning test in which animals were trained to press a lever to receive a concentrate reward suggested that high-yielding cows did not have a greater appetite for concentrates than the low yielders. In addition, the time budgets for various behaviours of high- and low-yielding cattle were compared. The high-yielding group was found to spend significantly more time grazing than the low-yielders. They therefore had less time for other activities, most notably lying down. As cattle are generally highly motivated to lie down, this finding may be indicative of the intensity of hunger being experienced. If cattle are deprived of their resting period by hunger, this may well be detrimental to their welfare.

Separation-related behaviours in dogs

Many dogs are left alone all day while their owners go to work. Does this cause significant welfare problems? In a study of canine behavioural problems carried out recently at the University of Southampton's Anthrozoology Institute with support from UFAW, separation-related behavioural problems were found to be very common. Dr John Bradshaw and colleagues found that 13% of owners reported that their dogs currently exhibited separation-related behavioural problems, and a further 11% had observed these problems in the past. The study concluded that "separation-related behaviour problems represent a significant but largely unrecognised welfare problem for the UK pet dog population", and that contrary to some previous reports, separation-related behaviours were no more common in dogs obtained from rescue shelters than in those obtained from breeders. There is a need for dog owners to be educated about the causes, prevention and cure of these behavioural problems, which reflect poor welfare.

Research Training Scholars to date...

1998 Emma Harding, University of Bristol, Department of Clinical Veterinary Science, 'Novel methods for assessing mental states and animal welfare', under the supervision of Dr Mike Mendl, Dr Elizabeth Paul and Professor Christine Nicol.

1999 Kenneth Rutherford, University of Edinburgh, Roslin Institute, 'Fractal analysis of behaviour: a non-invasive method for assessing animal stress and welfare', under the supervision of Dr Marie Haskell, Dr Bryan Jones, Professor Alistair Lawrence and Dr Chris Glasbey.

1999 Emma Smith, University of Bristol, Department of Biological Sciences, 'Influences of the light environment on avian behaviour and welfare', under the supervision of Professor Innes Cuthill, Dr Arthur Goldsmith and Dr Andrew Bennett.

2000 Naomi Latham, University of Oxford, Department of Zoology, 'Refining the role of stereotypic behaviour in the role of welfare', under the supervision of Dr Georgia Mason.

2001 Fritha Langford, University of Edinburgh, Department of Veterinary Clinical Studies, 'Behavioural and electrophysiological characterisation of sleep in sheep and its application in animal welfare studies', under the supervision of Dr Michael Cockram, Dr H M Brash and Dr R J Prescott.

Assessment of stress in captive primates

The measurement of stress hormone levels is often included in the suite of observations used to assess animal welfare. Until recently, however, it has been necessary to take blood samples to assay for stress hormones, and this in itself is a stressful procedure. UFAW has supported research by Dr Jessica Gimple at Oxford University into the potential use of faeces and saliva, instead of blood, to assess stress levels in captive primates. Dr Gimple's results have been very encouraging, suggesting that analysis of corticosterones in faecal samples may be a useful method for detecting long-term stressful events in a primate's life, and that analysis of saliva samples is more appropriate for detecting short-term stress. The study also provides useful information on better and more welfare-friendly methods of validating these stress indicators.





EDUCATION

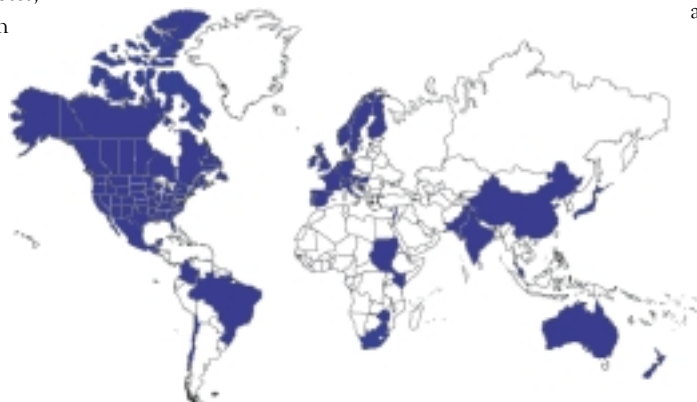
Lack of information about, and poor understanding of, animals' requirements, and lack of skill and experience in detecting pain and other aspects of poor welfare, are at the root of many animal welfare problems. A great deal can be done to overcome these difficulties through education. UFAW does not have the resources for running large-scale education programmes and, in view of this, targets its efforts at the tertiary education level — universities and colleges — to help teach those who will become the teachers in the future. UFAW promotes animal welfare education in a variety of ways, including:

- 1) Publication of the journal, *Animal Welfare*;
- 2) Publication of key texts on animal welfare (eg *The UFAW Handbook on the Care and Management of Laboratory Animals*, and *Management and Welfare of Farm Animals: The UFAW Farm Handbook*);
- 3) Running workshops and symposia;
- 4) Lecturing at universities and colleges;
- 5) Running the Vacation Scholarship scheme, to enable students to develop their interest in animal welfare science;
- 6) Running the Research Training Scholarship scheme, to provide training in animal welfare research;
- 7) Providing financial support for other educational initiatives.

Some examples of the educational work undertaken or supported by UFAW are outlined here.

The UFAW journal *Animal Welfare*

One of the main ways in which UFAW disseminates new findings in animal welfare science to people who work with, are responsible for, or who simply care about animals is through the publication of its journal *Animal Welfare*. The journal is now in its eleventh year, and has been a very important vehicle in promoting UFAW's scientific approach to animal welfare around the world. It continues to be rated highly as a source of reliable information. The journal features not only scientific papers, but also short communications, technical notes, letters and book reviews. In addition, each issue contains reports and comments, in which the most topical welfare issues are examined and discussed. The journal is now taken up in thirty-nine countries (see blue areas on map), and the number of subscribers is steadily increasing. We are being approached with increasing frequency to publish the proceedings of conferences and symposia as supplementary issues of the journal.



UFAW/Blackwell Science animal welfare series

The science and technology of animal welfare is growing rapidly and, associated with this, there is great current interest in the ethics of our interactions with animals and a proliferation of new welfare laws. We are aiming to establish a new series of books in this field that will maintain UFAW's tradition for intellectual rigour in pursuit of advances in animal welfare. These books, commissioned by UFAW, will be published by Blackwell Science of Oxford. Among the first likely to be published in the series are *The Physiology of Suffering* by Dr Neville Gregory, *Environmental Enrichment* by Dr Robert Young, and *Welfare and Wildlife Management* by Dr Ian Inglis.

We would like this series to cover a wide range of aspects of animal welfare and to become recognised worldwide for providing authoritative reviews and scientifically based opinion. If you would like to contribute to this series, please contact UFAW's Publications Officer, Elizabeth Roberts, for further details.

The UFAW Handbook on the Care and Management of Laboratory Animals

This book, currently in its seventh edition, continues to sell well and to be one of the most frequently used publications in its field.

"...the bringing together of so much expertise in this Handbook confirms UFAW's pre-eminence in defining optimal standards for the husbandry and welfare of a wide range of laboratory animals."

From a review by Dr Bryan Howard, published in *Laboratory Animals* (2000, 34: 233), of the seventh edition of *The UFAW Handbook on the Care and Management of Laboratory Animals*.

Sponsorship of other educational initiatives

UFAW sponsors important education resources that help to reduce the numbers of animals used in research and education. These include the

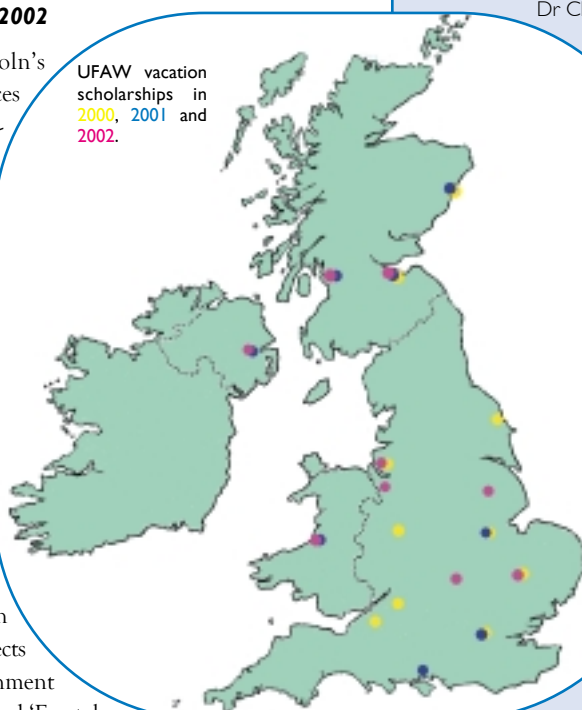
NORINA database on alternatives to animal experimentation. UFAW has also contributed to the funding of the European Resource Centre for Alternatives in Animal Experimentation (see website, www.eurca.org), and the second edition of the Interniche guide to alternatives to the use of live animals in education.

Vacation Scholarships 2002

Through its Vacation Scholarship Awards, UFAW encourages students to develop their interests in animal welfare and their abilities in welfare research. The first Vacation Scholarships were awarded in 1983 to enable students to develop and pursue their interests in animal welfare. Since then, there have been over 180 scholars, and the range of projects undertaken has been very wide. In many cases, scholars have published papers on their work in the scientific literature and some have gone on to undertake postgraduate research in aspects of animal welfare. A gratifying number of the scholars have been able to use the experience as a stepping-stone towards a career in promoting animal welfare through science. Congratulations to the winners of the year-2002 scholarships, who are listed on this page.

Vacation scholars' meeting 2002

The University of Lincoln's Department of Biological Sciences has kindly agreed to host the meeting of the year-2002 scholars. This meeting is being held earlier than usual this academic year – on Wednesday 11 December 2002, at the university's Riseholme Park site. These meetings give each year's Vacation Scholars the chance to present and discuss their findings. We are very pleased that UFAW Research Training Scholars Emma Smith and Kenneth Rutherford will be attending the meeting, and will be delivering presentations on their UFAW-funded research projects ('Influences of the light environment on avian behaviour and welfare', and 'Fractal analysis of behaviour: a non-invasive method for assessing animal stress and welfare', respectively). The meeting is open to UFAW members, but space is limited so please book early. For more information, please contact Stephen Wickens, Development Officer (wickens@ufaw.org.uk).



Rosie Allister, University of Liverpool Veterinary School, 'Investigation into the "bird table effect" and salmonellosis in British garden birds' under the supervision of Professor Malcolm Bennett.

Emma Blaney, Queen's University Belfast, 'The influence of a visual barrier on the behaviour, welfare and public perceptions of captive gorillas' to be carried out at Belfast Zoo under the supervision of Dr Deborah Wells.

Annabel Craig, Oxford Brookes University, 'Zoo education service and animal welfare' to be carried out at Zoo Negara, Malaysia, under the supervision of Dr Allister Smith.

Rachel Eager, University of Edinburgh, 'Evaluation of pain and distress associated with equine castration' under the supervision of Dr Natalie Waran.

Nicola Hind, Chester College of Higher Education, 'Using behaviour to assess welfare in captive amphibians: *Epipedobates tricolor*', under the supervision of Dr Charlotte Hosie.

Shylo Johnson, University of Edinburgh, 'An exploration into the relationship between rats, foraging, contra-free-loading and welfare' to be carried out at the University of British Columbia, Vancouver, under the supervision of Dr Emily Patterson-Kane.

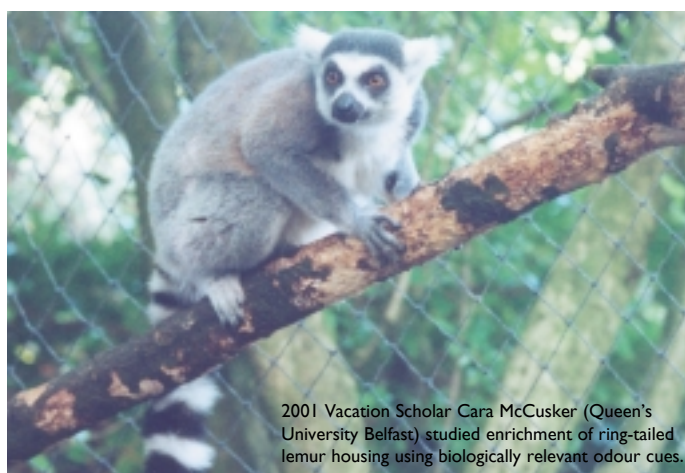
Abigail Josty, University of Lincoln School of Agriculture, 'An assessment of the space requirements of pet rabbits and the suitability of hutches as a type of rabbit housing' under the supervision of Dr Melissa Albentosa.

Julia Lacey, University of Edinburgh, 'The persistence of laboratory mice in gaining access to conspecifics assessed by the varying costs imposed by four different natural obstacles' to be carried out at the University of Bristol School of Veterinary Science under the supervision of Dr Chris Sherwin.

Theresa Leslie, University of Cambridge School of Veterinary Medicine, 'The preference of juvenile domestic rabbits for access to pasture and concentrate', under the supervision of Dr Clive Phillips.

Elizabeth Morrison-Smith, University of Wales at Aberystwyth, 'Effects of light spectrum on the behaviour of fish in laboratory aquaria', under the supervision of Dr Iain Barber.

Lindsay Whistance, University of Lincoln, 'Investigating the behavioural consequences of positive handling of pre-parturient heifers prior to introduction to a dairy herd', under the supervision of Dr Jonathan Cooper.



2001 Vacation Scholar Cara McCusker (Queen's University Belfast) studied enrichment of ring-tailed lemur housing using biologically relevant odour cues.

Where are they now...?

"As a UFAW vacation scholar, I thought you might be interested to know what becomes of us after this valuable experience! The UFAW vacation scholarship enabled me toward gaining a place to do my DPhil with Marian Dawkins at Oxford, working on a MAFF grant to assess the effects of environmental enrichment on behaviour and welfare of commercially produced broiler breeders. I completed this at the end of last year and moved to the USA to work for the Humane Society of the US last December, to work on welfare issues for research animals and those used in education ... Consequently, please may I take this opportunity to thank you for all the work UFAW does, and for giving me the opportunity to take the first steps on my career in animal welfare science."

Recent news from Dr Leslie King, year-1997 UFAW Vacation Scholar.



ADVICE, INFORMATION AND CONSULTANCIES

UFAW provides information and advice on aspects of the biology, management, health, welfare, and ethics of use of domestic and wild animals to government departments, non-governmental organisations, universities and others. The Federation is consulted on draft legislation, guidelines and codes of conduct relating to animal welfare, and staff serve on several national and international advisory committees and working groups including the Animal Procedures Committee, the Zoos Forum, the Ministry of Defence Animal Welfare Advisory Committee, the Companion Animal Welfare Council, and the Boyd Group. Some examples of these aspects of UFAW's work are outlined here. Staff also make visits to animal facilities to advise on best practice in animal care and welfare.

Council of Europe Convention ETS 123 on housing and husbandry of laboratory animals

One of the most effective ways of ensuring that standards of laboratory animal welfare are improved worldwide is through development of international legislation. UFAW has continued to work on the revision of the Council of Europe Convention ETS 123 which makes recommendations on laboratory animal care and use. The old Convention concentrated heavily on space allowances but the new one, currently being drawn up, is based on the understanding that requirements for welfare depend on a range of other additional factors, such as social interactions with conspecifics and provision of environmental features to meet other species-specific needs. Considerable progress has been made, and the working party's recommendations for dogs, cats, rodents and rabbits are now complete and are, we hope, ready for adoption at a meeting later this year. It is expected that these recommendations will become EU law in due course and that they will result in substantially better housing conditions for laboratory animals. Work on new standards for other species is continuing.

Advisory Group for Bristol University Wildlife Rehabilitation research project

During the last 20 years, great strides have been made in the veterinary science and care of wild animals and, around the world, interest in the rescue and rehabilitation of wildlife casualties has grown. Each year, numerous sick and injured wild animals are brought into captivity for treatment. However, relatively little is known about the post-release survival of these animals, and a group of scientists at Bristol University, headed by Professor Stephen Harris, has embarked upon an RSPCA-funded project into wildlife rehabilitation. Among the aims are to identify welfare problems associated with wildlife treatment and rehabilitation and to advise on how improvements may be made. UFAW's Director has been appointed Chairman of the Advisory Group for this project.

Balancing conservation and welfare in zoos

There is no doubt that with the human population at six billion and still growing rapidly, many species of animals will become extinct unless active measures are taken. Europe's new Zoos Directive requires that zoos implement conservation measures by promoting public education and also by participating in research, providing conservation training, or by captive breeding or reintroductions. UFAW's Director, as a member of the Government's Zoos Forum, has been involved in the development of ethical review processes in zoos, which are being put in place to facilitate the full consideration of situations in which the use of animals for conservation aims may not be in the best welfare interests of the individual animals involved. The Director was invited to speak on this subject – the ethics of balancing conservation and welfare interests in zoos – at several meetings during the year, including the International Zoo Veterinary Conference at Veronovo, Russia in November 2001, and DEFRA's Zoo Inspectors' Training Seminar at Bath University in April 2002.

House of Lords Select Committee

This year a House of Lords Select Committee was established, under the Chairmanship of Lord Smith of Clifton, to enquire into all aspects of the use of animals in scientific procedures. UFAW staff submitted written evidence and were invited subsequently to a meeting to discuss various aspects with the Committee. Amongst other issues, UFAW emphasised the need for continuing efforts to advance the 3Rs, for a greater level of funding for laboratory animal welfare research, and for support to help develop centres of excellence in this field.

BVA(AWF)/FRAME/RSPCA/UFAW Joint Refinement Group

Several years ago, the British Veterinary Association Animal Welfare Foundation, the Fund for Replacement of Animals in Medical Experiments, and the Royal Society for the Prevention of Cruelty to Animals teamed up with UFAW to form the Joint Refinement Group to review and prepare guidelines for welfare refinements for laboratory animal housing, husbandry and procedures. During the year, two new papers were published by the group:

Hawkins P, Morton D B, Cameron D, Cuthill I, Francis R, Freire R, Gosler A, Healy S, Hudson A, Inglis I, Jones A, Kirkwood J, Lawton M, Monaghan P, Sherwin C and Townsend P 2001 Laboratory birds: refinements in husbandry and procedures. Fifth Report of the BVA(AWF)/FRAME/RSPCA/UFAW Joint Working Group on Refinement. *Laboratory Animals* 35: 1-163 (Suppl 1)

Morton D B, Jennings M, Buckwell A, Ewbank R, Godfrey C, Holgate B, Inglis I, James R, Page C, Sharman I, Verschoye R, Westall L and Wilson A B 2001 Refining procedures for the administration of substances. Report of the BVA(AWF)/FRAME/RSPCA/UFAW Joint Working Group on Refinement. *Laboratory Animals* 35: 1-41

The next publications in this series, addressing welfare aspects of genetically modified laboratory animals and the use of remote monitoring techniques, are to be submitted for publication shortly and work has begun on a report aimed at improving the welfare of dogs used in science.

Welfare and ethical aspects of wildlife management projects

Some 30 years ago, hedgehogs were unfortunately introduced, by a naive member of the public, to the Hebridean Island of South Uist. This was an extraordinarily ill-advised action. The hedgehog population grew and the animals are now found throughout large parts of both North and South Uist. It was discovered during the 1990s that the populations of several species of ground-nesting waders had declined severely, and detailed studies by the Royal Society for the Protection of Birds established that hedgehog predation of eggs is the cause of this catastrophe. It is hoped that control of the hedgehog population will lead to a recovery

of the wader populations. During the year, UFAW has been assisting the RSPB and Scottish National Heritage in planning humane and ethical approaches to tackling this problem.

Diseases of garden birds

UFAW continues to receive many calls about disease and mortality incidents in garden birds. The signs observed are frequently consistent with localised epidemics of salmonellosis or colibacillosis, and these incidents appear to be becoming more common. We are delighted that the subject is beginning to receive further attention. During the last year, students at Liverpool University and the Institute of Zoology have undertaken projects into aspects of the epidemiology of these incidents as part of their degree courses. Advice on preventative measures, based on our current incomplete knowledge of these diseases, can be obtained at www.ufaw.org.uk.

UFAW Symposium, Edinburgh, 2003

UFAW is organising a three-day international symposium on Science in the Service of Animal Welfare in Edinburgh on 2–4 April 2003. The aim is to bring together leading authorities from around the world to present papers on the science of welfare assessment, the use of science in ethical decisions and for promoting animal welfare, and public understanding of and influence over welfare standards. It is hoped that the symposium will stimulate discussion with a view to identifying future priorities for research, education, and practical/policy developments. At the time of going to press, over 250 scientists have expressed an interest in attending, and the numbers are increasing steadily. Our aim is for this symposium to be a valuable, fascinating and memorable event, and we hope that animal welfare scientists, veterinarians, biologists, ethicists, lawyers, animal welfare policy makers, and others with interests in the field from around the world will attend. A limited number of subsidised places will be available for students. We plan to publish the proceedings as an issue of *Animal Welfare*.

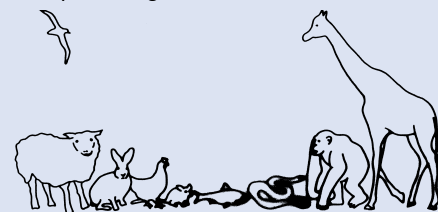
The symposium will include sessions on the following themes:

The science of animal welfare assessment;

The role of science in making ethical decisions about animal use and care;

The application and transfer of scientific advances for the care of animals;

Public understanding of, and power over, standards in animal welfare.



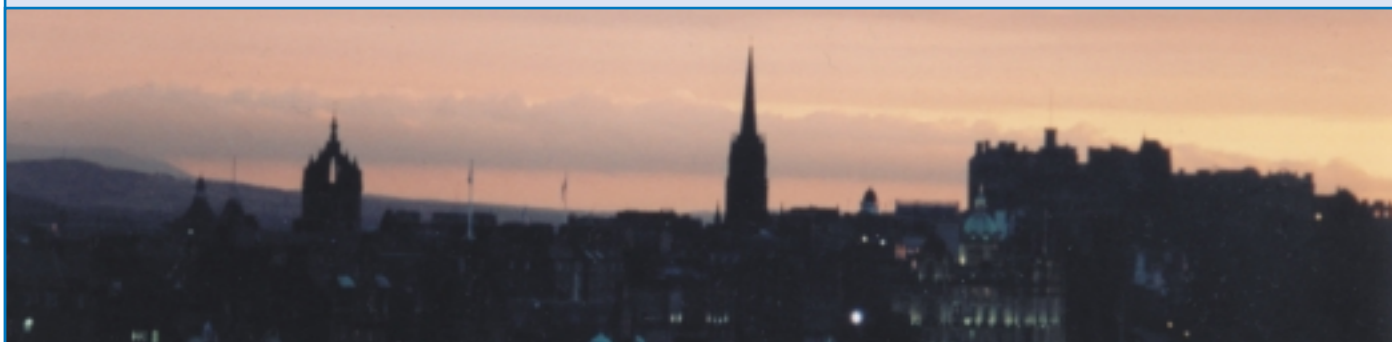
Speakers who have indicated that they wish to contribute to the sessions on the science of welfare assessment include Professor Marian Dawkins (University of Oxford), Professor Paul Flecknell (University of Newcastle-upon-Tyne), Dr Linda Keeling (Swedish University of Agricultural Sciences, Skara), Dr Mike Mendl (University of Bristol), Dr Klaas Kramer (Free University, Amsterdam), Dr Chris Sherwin (UFAW Hume Fellow, University of Bristol) and Dr Jonathan Cooper (University of Lincoln).

The following have indicated that they wish to contribute to the sessions on using science in ethical decisions: Professor David Mellor (Massey University), Dr Andrew Rowan (Humane Society of the United States) and Dr Jonathan Reynolds (The Game Conservancy Trust).

Papers about the application and transfer of scientific advances to the care of animals have been offered by Professor Irene Pepperberg (Brandeis University and MIT Media Lab), Professor Alistair Lawrence (Scottish Agricultural College), Dr Mike Appleby (Humane Society of the United States), Professor David Morton (University of Birmingham), Dr Lesley King (University of Oxford and the Humane Society of the United States) and Dr Mike Radford (University of Aberdeen).

The sessions on public understanding of, and power over, animal welfare standards will include papers by, amongst others, Professor James Serpell (University of Pennsylvania).

The symposium will be held at the George Square Lecture Theatre, George Square, Edinburgh. Accommodation will be available at Edinburgh University's Pollock Halls of Residence. We are hoping to arrange a welcome reception at the National Gallery of Scotland on the evening of Wednesday 2 April and a symposium dinner at the Royal Museum, Edinburgh on the evening of Thursday 3 April. If you would like to receive further information about this event or you would be interested in presenting a paper or a poster, please fill in and return the form that is being circulated with this Annual Report or email Samantha Mills, Scientific Officer, at scioff@ufaw.org.uk.





ADMINISTRATION AND FINANCE

Obituary

Frederick Alexander Harrison **BVSc BSc MVSc DSc FRCVS**

Fred Harrison was brought up in Cheadle Hume, Cheshire, educated at Manchester Grammar School and, after national service in the Royal Army Veterinary Corps in Singapore, attended Liverpool University Faculty of Veterinary Science. He graduated in 1957 and moved on to a successful scientific career as a research physiologist. He joined UFAW as a student — in fact he was student Chairman of the Liverpool University Branch — and he remained a member throughout his life and contributed chapters to various editions of the *UFAW Handbook on the Care and Management of Laboratory Animals*. He was elected to the Council of UFAW in 1980, became Honorary Treasurer in 1983, Vice Chairman in 1987, and held office as Chairman from 1990 to 1993. After retiring as Chairman, he remained on Council for a further two years until 1995, and was then elected President — a post he held for five years until 2000. He had responsibility also for the Humane Slaughter Association (HSA), UFAW's sister charity, during much of this time, becoming Honorary Treasurer of the HSA Executive Committee in 1986, Vice-Chairman in 1987, Vice President 1989, and Chairman from 1990 to 1993. Both UFAW and HSA thrived during these years and the charities owe a great deal to him for his loyal support and guidance. He will be remembered very fondly by all those who knew him.



UFAW's activities, highlighted in this annual report, are dependent on the generosity and kindness of the charity's members and supporters — to whom we are most grateful. The charity spends very little on advertising and promotion and depends considerably on its members and supporters to assist with this by recommending the charity to others likely to share UFAW's commitment and philosophy. If you would like copies of this report to hand on to friends and relatives please let us know. The annual subscription remains a modest sum at £10 (and £5 for students). The value of donations made to the charity are maximised when given through the gift aid scheme; details of this and advice on how to make provision for the charity in a Will can be obtained from the Secretary and are also available on the website: www.ufaw.org.uk. The budgeted expenditure for the 2002/03 year is £498,000 and whilst Council is satisfied that the Federation's reserves are adequate to enable the costs of the planned activities to be met, the charity is seeking to be able to support a more extensive programme of animal welfare research and education in the future. Can you help?

Annual General Meeting 2001

The AGM was held at the Women's Institute Hall, Wheathampstead, on Tuesday 9 October 2001. As in previous years this was held in conjunction with the AGMs of the Society for Animal Welfare in Israel (SAWI) and the Humane Slaughter Association and Council of Justice to Animals (HSA & CJA). The members of UFAW Council are the Trustees of these societies also. Joint meetings are held to save time and money.

The notice convening the meeting had been sent to all subscribers and was taken as read. The meeting agreed the Minutes of the AGM of 2000 and resolved to receive the Accounts and Auditor's Report for the year ended 31 March 2001. There were no questions on the Report of the year's work and the meeting resolved that the Report and Accounts be received and that Alexander, Neil & Co, Registered Auditors, be appointed as auditors to UFAW and its associated Trusts and that their remuneration should be fixed by Council.

Professor Jane Hurst and Mr Barrie Hart retired from Council at the AGM. Two new members were elected to Council: Dr Margaret Parry, Principal Lecturer in Animal Science at Harper Adams University College, and Dr Bryan Howard, Director of Animal Welfare at the University of Sheffield. Dr Barry Hughes was re-elected.

Notice of Annual General Meeting 2002

The AGM will be held at 3.00pm on Tuesday 8 October 2002 at The Women's Institute Hall, Mead Lane, Wheathampstead. The formal notice and agenda have been sent to all members and are available from the Secretary at the registered office.

Summarised Financial Statements for the year ended 31 March 2002

	2002 £	2001 £
Incoming resources		
Subscriptions, donations & grants	49,687	60,522
Appeals	8,510	15,879
Investment income	116,675	123,111
Interest on bank deposits	30,296	44,297
Publications, royalties & lecture fees	40,893	64,081
Recoveries	5,910	5,724
Legacies	225,804	234,112
Total incoming resources	477,775	547,726
Resources expended		
Direct charitable expenditure	334,502	445,506
Other expenditure	159,788	161,492
Total resources expended	494,290	606,998
Net incoming resources for the year	(16,515)	(59,272)
Other recognised gains & losses		
Net realised gains on investments	20,332	46,216
Loss on disposal of assets	(12,040)	-
Net expenditure for the year	(8,223)	13,056
Gain on revaluation of tangible fixed assets	57,500	-
Net unrealised losses on investments	(153,533)	(206,667)
Net movement in funds	(104,256)	(219,723)
Balance brought forward	3,084,579	3,304,302
Balances carried forward	2,980,323	3,084,579

BALANCE SHEET as at 31 March 2002

	2002 £	2001 £
Fixed assets		
Tangible fixed assets	481,606	441,823
Investments	2,473,665	2,455,116
	2,955,271	2,896,939
Current assets		
Debtors	51,867	34,755
Money market & deposit accounts	265,029	493,220
Cash at bank and in hand	29,591	29,301
	346,487	557,276
Current liabilities		
Creditors: amounts falling due within one year	(163,523)	(246,843)
Net current assets	182,964	310,433
Total assets less current liabilities	3,138,235	3,207,372
Creditors: amounts falling due after more than one year	(157,912)	(122,793)
Net assets	2,980,323	3,084,579
Funds		
Unrestricted (inc £57,000 revaluation reserve: 2001 nil)	2,698,658	2,777,335
Restricted	281,665	307,244
	2,980,323	3,084,579

The summarised accounts were approved by Council and signed on its behalf on 11 July 2002.

Ronald S Anderson BVMS PhD MRCVS
Chairman UFAW Council

Norman J Reed BSc FCA
Treasurer UFAW Council

The accounts will be filed with the Companies Registry and the Charity Commission after the Annual General Meeting on 8 October, 2002. Full accounts and the audit report can be obtained from the Company Secretary, The Old School, Brewhouse Hill, Wheathampstead, Hertfordshire AL4 8AN.

The summarised accounts set out above have been extracted from the full accounts and have been prepared in accordance with the Charity Commission's (2000) Statement of Recommended Practice – Accounting by Charities and were approved by Council and signed on its behalf on 11 July 2002.

Independent auditors' statement to the Council of the Universities Federation for Animal Welfare

We have examined the summarised financial statements which comprise the summary statement of financial activities and summary balance sheet.

Respective responsibilities of the Council and auditors

You are responsible as the Council for the preparation of the summarised financial statements. We have agreed to report to you our opinion on the summarised financial statements' consistency with the financial statements, on which we reported to you on 11 July 2002.

Basis of opinion

We have carried out the procedures we consider necessary to ascertain whether the summarised financial statements are consistent with the full financial statements from which they have been prepared.

Opinion

In our opinion the summarised financial statements are consistent with the full financial statements for the year ended 31 March 2002.

Alexander, Neil & Co, Registered Auditors, London. 11 July 2002.



UFAW AWARDS

UFAW's top priorities are promoting high-quality science that will lead to substantial advances in animal welfare, and promoting education in animal welfare — particularly at the tertiary level. Funds permitting, awards are given to support a wide range of project types. For those considering making an application to UFAW, these are outlined below. For further details of the awards listed here, please contact the UFAW office.

Hume Animal Welfare Research Fellowship

This scheme aims to promote high-quality animal welfare science. These awards are to support post-doctoral research at UK universities and are offered on an occasional basis only (funds permitting). Calls and application details for this award are published in the scientific press.

Animal Welfare Research Training Scholarships

The awards are to support promising young graduates to undertake three-year research projects leading to PhD or equivalent degrees at UK universities. Funds permitting, the awards provide for a generous stipend, research costs and university fees. Projects must aim to address issues likely to lead to substantial advances in animal welfare. Calls for initial concept notes, to be submitted by supervisors, are advertised in the scientific press during the last quarter of each year.

Vacation Scholarships

This scheme provides opportunities for students to develop their interests in animal welfare, encourage a scientific approach to the issues, and establish a starting point for further, longer-term research into improving the lives of animals. The scholarships provide for living expenses and research costs to enable students at UK universities/colleges to carry out projects lasting up to eight weeks during a summer vacation. Funds permitting, about 12 scholarships are awarded annually. Scholars must submit a report of their studies to UFAW and will be asked to present their work at a Vacation Scholars' meeting. These awards are advertised via university and college departments in the last quarter of each year.

Small Project and Travel Awards

UFAW makes a limited number of awards to support travel in connection with advancing animal welfare, and a number of other small awards (up to £3500) to support welfare research or other projects. These awards are open to persons in the UK and overseas. Applications are judged on their merits for animal welfare, their scientific quality (in the case of research applications), and also in relation to the other applications received. UFAW particularly welcomes applications for pilot studies

where there is a likelihood of successful completion leading to further, more substantial work. Applications must be made using the standard form available from the UFAW office.

Research and Major Project Awards

UFAW occasionally makes more substantial awards (over £3500) for research or other animal welfare projects (eg for educational initiatives or publications). Judging criteria are as for the Small Project and Travel Awards. Further information and application forms are available from the UFAW office. Brief concept notes must be submitted for preliminary comment before making applications for awards of over £5000.

Zoo Animal Welfare Awards

UFAW aims to promote improvements in zoo animal welfare and husbandry by rewarding exciting new initiatives in this field. Calls for applications are advertised and circulated to UK zoos in the last quarter of each year, and application forms are available from the UFAW office. Shortlisted exhibits and innovations are visited by representatives of the judging panel and the awards are typically presented later in the year. This year's winners are London Zoo's *Web of Life* exhibit, and Blackpool Zoo's *Gorilla Mountain* exhibit.



Universities Federation for Animal Welfare

The Old School, Brewhouse Hill, Wheathampstead, Hertfordshire AL4 8AN, UK
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 Company Limited by Guarantee No. 579991
 Registered Charity No. 207996

Presidents

President Emeritus: H V Thompson BSc CBiol FIBiol
 Vice-Presidents: D W B Sainsbury BSc MA PhD MRCVS FRSH CBiol FIBiol
 Professor P H Holmes BVMS PhD MRCVS
 W M Brancker CBE FRCVS
 I J Lean BSc PhD CBiol MIBiol
 G D Sales BSc PhD AKC MIBiol DipTCDHE (from 21.02.02)

Council (who are the Directors of the Limited Company)

Chairman: Professor R S Anderson BVMS PhD MRCVS
 Vice-Chairman: J Sanford BVSc PhD FRCVS
 Honorary Treasurer: N J Reed BSc FCA**†‡
 C B Hart BSc MRCVS FIBiol*†‡
 Members: R Bennett MSc BSc PhD‡
 Professor P M Biggs CBE DSc DVM FRCPath CBiol FIBiol FRS FRCVS
 Professor S J G Hall MA PhD†
 B R Howard BVMS PhD MRCVS**
 B O Hughes MA VetMB PhD MRCVS†
 Professor J L Hurst BSc PhD*
 M A Parry BSc (Hons) CBiol MIBiol Cert Ed**
 J H Pratt BVM&S DVSM FRCVS‡
 M Radford LLB
 E Wright

*to 09.10.01, **from 09.10.01, †Member of the Grant Panel, ‡Member of the Finance Panel

Staff

Chief Executive/Scientific Director: James K Kirkwood BVSc PhD MRCVS CBiol FIBiol
 Deputy Director: Robert Hubrecht BSc PhD
 Scientific Officer: Samantha Mills BSc MSc
 Development Officer: Stephen Wickens BSc PhD
 Publications Officer: Elizabeth Roberts BA MSc
 Secretary: Donald C Davidson
 Office staff: Samantha Griffin
 Wendy Goodwin
 Wendy Brownhill BSc (to 02.01.02)

Registered Auditors: Alexander, Neil & Co, Everlast House, 1 Cranbrook Lane, off Betstyle Road, New Southgate, London N11 1PF
 Bankers: HSBC Bank plc, 171 Darkes Lane, Potters Bar, Herts EN6 1BU
 Barclays Bank plc, 33 Darkes Lane, Potters Bar, Herts EN6 1BA
 Alliance & Leicester Girobank, Bridle Road, Bootle G1R 0AA
 Bank of America, P O Box 24297, Los Angeles, California 90024, USA
 Solicitors: Bignalls, Balderston, Warren & Co, 11 Whitehorse Street, Baldock, Herts SG7 6PZ
 Investment Advisers: NCL Investments Ltd, 9-12 Basinghall Street, London EC2V 5NS



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