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A report of capture myopathy in the Tasmanian pademelon (Thylogale billardierii)

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Abstract

In Tasmania, a small island state of Australia, wildlife is under increasing pressure from anthropogenic activities. Multiple species of native herbivores compete directly for resources with humans, such that wildlife populations are regularly managed to reduce their impact on agricultural and forestry landscapes. There is an increasing need to quantify the impacts of such wildlife management strategies on localised populations of Tasmania's iconic fauna. Gathering this information often requires capture and restraint of animals, but due to a paucity of published information on responses of wildlife to such techniques, regulatory bodies overseeing research do not always have complete information upon which to base decisions. In our study, the regulatory body designated manual restraint over chemical immobilisation as the preferred method, but current prescribed techniques can result in capture-related injuries including myopathy. To encourage dialogue on this welfare issue, we present observations on capture and restraint of the endemic Tasmanian pademelon (Thylogale billardierii). Three of 19 animals that were trapped as part of a research study exhibited symptoms consistent with capture myopathy. Results suggest that techniques involved with capture and manual restraint can be problematic for pademelons, and we present recommendations for preventative measures, including chemical immobilisation, to limit myopathy-related deaths.

Keywords: animal welfare, capture myopathy, chemical immobilisation, macropod, Tasmanian pademelon, wildlife