Tracking down a biodiversity killer

Professor Shelley Burgin from the School of Natural Sciences, together with Dr Geoff Ross of the Department of Environment, Climate Change and Water, has been awarded a NSW Environmental Trust grant to track down the North American red-eared slider turtle. The aim of this project is to determine the extent of the invasion of this illegal species across Sydney’s rivers and wetlands.

‘The North American red-eared slider turtle, Trachemys scripta elegans – also known as the “penny turtle” - is now illegal in Australia but they are traded internationally as pets and many have escaped into our waterways, says Professor Burgin. ‘As one of the top 100 world’s worst invaders, these feral populations of turtles have disastrous impacts on aquatic biodiversity. “Sliders” compete with native species for food and nestings sites and may spread diseases and parasites to which native animals may have no resistance. We need to know to what extent these turtles have invaded Sydney’s rivers and wetlands. The usual method of netting is not always reliable and so we are taking a different approach – following the trail of a parasite that may have been transferred from slider turtles to native turtles.’

A blood parasite, Pirhemocyton chelonarum, was recently found in the native turtle species of Sydney, and is suspected of being introduced by the feral sliders. The team will collect blood from native turtles to find out if this parasite occurs naturally in the native turtles in the region. Analysis will also provide detailed information on the parasite and evidence of whether or not it is endemic to the feral sliders and if it can be used as a surrogate for their tracking.

It is expected that this research will develop a more reliable method to identify the presence of the red slider turtles. It would underpin an assessment of their current status and provide a more rapid assessment tool of red eared slider turtle presence in wetlands. Control of this species would be of considerable benefit in contributing to the survival of the Australian aquatic environment and its native inhabitants.

Project Title: Tracking down a biodiversity killer – the red-eared slider turtle
Funding has been set at: $19,842
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How to identify red-eared slider turtles