



Dr Tammy Steeves

Spotlight on saving critically endangered kakī

A University of Canterbury scientist is investigating ways to ensure the survival and recovery of critically endangered kakī (black stilt) in the wild.

Dr Tammy Steeves (Biological Sciences) is making recommendations to support the management of one of the world's rarest birds, the kakī, which is a critically endangered endemic wading bird restricted to the Upper Waitaki Basin in the South Island.

"We often refer to kakī as the feathered All Blacks. There are fewer than 100 adults known to be alive. They are tough little birds. Unlike other birds that migrate to the coast during winter, kakī stick it out in the basin during the cold months," Dr Steeves said.

"They are resilient. Despite declining to a population of about 23 in 1981, kakī have a remarkable amount of genetic diversity, which bodes well for their recovery."

Steeves is investigating how a species can decline to so few yet maintain such a relatively high level of genetic diversity.

"We are using birds from museums around the world to investigate the historical genetic structure of kakī in the Upper Waitaki Basin to determine the genetic origins of the current population. In collaboration with the Department of Conservation's Kakī Recovery Programme, we often use innovative conservation genetic management strategies like these to ensure the recovery and survival of this iconic species," she said.

"The results of this project will be used to develop appropriate conservation genetic management strategies specific to kakī. If genetic analysis indicates the Upper Waitaki

Basin was comprised of five distinct kakī sub-populations before 1981, then it will be critical to manage the captive breeding population so it contains descendants of birds from all five of these sub-populations."

Steeves' research also focuses on maintaining the genetic integrity of kakī.

"The introduction of predators and widespread habitat loss has driven the kakī close to extinction. Since 1999, kakī had been actively prevented from breeding with non-kakī and our research to date indicates that this is an appropriate conservation management strategy for kakī."

Steeves' research is funded by conservation trusts, including the Mohua Charitable Trust.