



Wildlands Wellington News October 2012

An update on our people and the services we provide

Wildlands: providing outstanding ecological services to sustain and improve our environments

In our news this quarter: Threatened plants, rare ecosystems, wind farms, and lizards.

Stalking the Nationally Critical adder's tongue

Wildlands was recently asked by the Department of Conservation to undertake a survey of a remote kahikatea river flat in the upper Tangarakau. This area had been highlighted by the Department's Natural Heritage Management System as being of possible interest. The location was found to be unusually rich in divaricating shrubs for the Matemateaonga Ecological District.



More importantly, we found a population of the Nationally Critical stalked adder's tongue fern (*Ophioglossum petiolatum*) alongside fine-leaved parsley fern (*Botrychium bifforme*); probably at least 30 plants of each, although we didn't undertake a full census. It is unclear whether the

African club moss (*Selaginella kraussiana*) could be having an adverse effect on this population (some of the plants were found growing amongst African club moss). Wildlands have recommended to the Department that a more intensive vegetation survey is undertaken of the area and that a census of the stalked adder's tongue population.

This article was first published in Trilepidea, the newsletter of the NZ Plant Conservation Network No. 105. August 2012 <http://nzpcn.org.nz/>

Species and habitats

This last quarter we have been fortunate to find some unusual plant species and to survey several interesting ecosystems. In addition to the stalked adder's tongue fern we also saw woollyhead (*Craspedia uniflora* var. *maritima*) a Naturally Uncommon coastal species pictured above (centre photo above).

While undertaking ecological significance assessments around the region we visited a gravel beach at

Te Horo and a large urban seepage wetland.

Gravel beaches, stony beach ridges and seepage wetlands are categorised as Naturally Uncommon Ecosystems i.e. they are uncommon regardless of human activity. Because beaches are often easy to get to and have great natural beauty they are often threatened by coastal development and recreational use.

Wetlands of any type are rare in urban areas as many have been drained to make way for housing and businesses. Seepage wetlands occur where water percolates to the surface and then flows down a slope. The angle of the slope can range from shallow to almost vertical.

The seepage wetland we surveyed was close to vertical, dripping wet, shaded and sheltered by trees, and it supported a dense colony of glow worms (*Arachnocampa luminosa*). It is in Wellington City!

Information about other Wildlands skills, partnerships, and our Wellington staff profiles and contact details are set out overleaf.

Wind farms approved

Two Wairarapa wind farm applications have recently been approved. Castle Hill wind farm is the largest proposed wind farm project in New Zealand, and lies east of Eketahuna and Pahiatua. Puketoi is a somewhat smaller wind farm atop the Puketoi Range. Both proposals are being appealed in the Environment Court, but no substantive ecological issues have been raised to date.

Wildlands undertook the terrestrial ecological assessment and provided significant input into water quality assessment and mitigation and rehabilitation plans for both. Assessment included vegetation and habitats, birds, bats, lizards, invertebrates (for one) and fish values (for the other). We worked with both energy companies to avoid and minimise impacts on ecological features and values.

Specialist Wildlands skills

Mandy Tocher – lizard and frog expert



Wildlands can now offer the services of a very experienced herpetologist, Dr Mandy Tocher. Mandy is based in our Dunedin office, and has over 20 years' experience as a lizard and frog expert. Over her career she has designed and undertaken multiple surveys for hard-to-find reptiles and frogs; adopting a range of standard and novel methodologies. Mandy often features as an expert witness at hearings and undertakes significance assessments involving lizards and frogs. She conducts technical audits of management plans, has led successful research projects and authored many popular and scientific articles and book chapters. Mandy is the invited author of the lizard chapter of "ABOVE THE TREELINE - NATURE GUIDE TO ALPINE NEW ZEALAND" (Craig

Potton publishing) due in December 2012. She is looking forward to surveying lizard and frog populations in the lower North Island.

Threatened plants of Rarotonga

Wildlands worked in partnership with the Cook Islands Natural Heritage Trust to survey Rarotonga for threatened indigenous plants. This work was funded by the Pacific and Conservation Trust Fund. Tim Martin from the Wildlands Auckland office spent a week in the mountains with local guides. They searched for species not seen for 20 or more years, and one species that is thought to be extinct. The expedition was a success, with the location of many species mapped for the first time. Threat assessments were then prepared for submission to the IUCN Red List, which is an internationally recognised ranking system.



Recent Wildlands Wellington projects: Evaluation of options for State Highway 1 improvements, providing ecological advice to Council Planners on District Plan change options, fish surveys, providing advice to the Department of Conservation Business and Biodiversity Offsets Programme, ecological impact assessments, providing evidence for Environment Court Hearings, assessing the ecological significance of sites for inclusion in District Plans, how to assess and report on river condition in New Zealand, evaluating areas of habitat against the Wellington City Council and Greater Wellington Regional Council ecological significance criteria.

People



Astrid van Meeuwen Dijkgraaf PhD Ecology Senior Ecologist

A highly qualified ecologist with a wealth of experience on large projects such as wind farm and subdivision consent applications; and broad scale monitoring and inventory. Strong leadership skills make Astrid the ideal person to oversee projects while her science background means she can promptly identify and initiate appropriate monitoring and research programmes for your projects.

Her specialties: Survey and monitoring and expert witness at Hearings (birds, bats, lizards, ecology, biodiversity offsets), design of monitoring programmes and data analysis, plant-animal interactions.



Frances Forsyth BSc Geomorphology Ecology Senior Ecologist

An environmental scientist and ecologist with experience on a wide variety of projects Frances has a reputation for well-researched, thoughtful and practical work with reports written in plain English. Strong networking skills and a commitment to a quality product ensure that clients return with requests for further work and recommend her to others.

Her specialties: Ecological restoration, ecological management plans, expert witness, native freshwater fish and stream management.

OFFICE LOCATIONS

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