



Welcome to the Spring 2024 edition of Wildlands Otago news. We take pride in our team of eight Otago-based ecologists working out of Dunedin, Queenstown, and Wānaka. This newsletter outlines a selection of our recent projects.

Arthur's Point Ecological Restoration Plan

Tāhuna/Queenstown-based Senior Ecologist, Erin Gallagher has developed a restoration plan for a community group based out of Arthurs Point. Keeping Arthur's Point's Original Wildlife (KAPOW) is an active community conservation group made up of volunteer residents. The KAPOW group have been actively contributing to local biodiversity values by undertaking pest animal control and indigenous planting around Arthurs Point since 2017. KAPOW and Arthur's Point Community Association (APCA) intend to expand their conservation efforts and commissioned Wildlands to prepare an ecological restoration plan for the terrestrial margins of Arthurs Point. The draft plan outlines the objectives of the work, ecological values, and threats at the site, and ways in which to manage these values over time. The plan addresses several ecological ambitions, such as re-establishing indigenous biodiversity by restoring habitats for indigenous fauna, enhancing remnant indigenous habitats and reducing seed source of problematic wilding conifers, and other exotic species that pose a threat to neighbouring conservation areas. Wildlands has been pleased to develop this plan for KAPOW and APCA, and commend them for the ongoing volunteer efforts and look forward to watching the project progress.



View over the culturally and ecologically important braided river of the Kimi-ākau/Shotover River surrounded by exotic vegetation in Arthur's Point, Queenstown. The Kimi-ākau/Shotover River is habitat for endangered tarapirohe/black-fronted tern (*Chlidonias albostratus*) and other At Risk-Declining bird species.

Tekapo Military Training Area Vegetation Monitoring

This summer Wildlands vegetation ecologists from Otago, Southland, and Canterbury undertook the third measurement round of permanent vegetation monitoring plots established in the Tekapo Military Training Area. The plots were initially established in 2011 to monitor vegetation condition and trends over time across a number of vegetation and habitat types, including grassland, shrubland and a number of wetland types, ranging from ephemeral kettle hole wetlands to extensive marsh systems.



Re-measuring a plot of an ephemeral wetland for vegetation monitoring near Lake Tekapo. The lower section of the plot contains unique flora turf communities.

Hokonui Hills Ungulate Effects

Senior Principal Ecologist, Kelvin Lloyd has worked with the Makarewa Headwaters Catchment Group (MHCG) in Southland to better understand the impact of feral ungulates (deer) on indigenous forest in the Hokonui Hills. A survey was undertaken throughout regenerating and mature forest and a number of 'tipping points' were identified which may impede indigenous regeneration.



Bark stripped from *Pseudopanax colensoi* var. *ternatus* by feral deer.



Photograph of the month: At Risk-Declining tussock skink (*Oligosoma chionochloescens*) in Southland.

Dr Kelvin Lloyd – Senior Principal Ecologist (Dunedin)

Kelvin.Lloyd@wildlands.co.nz



Kelvin is a very skilled and experienced ecologist who recently celebrated his 20 year anniversary of working in the Wildlands team. He has ecological experience throughout Aotearoa New Zealand, describing or mapping vegetation, habitats, and fauna, and providing ecological advice for a wide range of projects. Kelvin has presented expert evidence in 38 Environment Court hearings and 32 resource consent and district plan hearings. He is an author of 22 peer-reviewed scientific research papers and over 340 contract reports and articles.

Dr Luke Liddell – Senior Ecologist (Dunedin)

Luke.Liddell@wildlands.co.nz

Luke is a vegetation ecologist specialising in the evolution and biogeography of flora of Aotearoa/New Zealand. He has worked across a wide range of ecosystems, and is experienced in statistics and modelling. Luke has also worked on a start-up project investigating the market potential of wild harvested native berries.



Dr Andrew Wells – Senior Ecologist (Wānaka)

Andrew.Wells@wildlands.co.nz



Andrew is an experienced terrestrial ecologist with a background in vegetation dynamics and ecosystem management. He has over 20 years experience in conservation management, ecosystem research and assessments of effects. Andrew manages the Biodiversity Action on the Ground programme and has also undertaken many ecological assessments through Southland and Otago.

Erin Gallagher – Senior Ecologist (Queenstown)

Erin.Gallagher@wildlands.co.nz

Erin specialises in vegetation and restoration ecology. She has worked across Canterbury, Otago, and Southland, and has substantive experience in vegetation/habitat mapping, botanical surveys, wetland delineation, monitoring and assessment of effects.



Cameron Thorp – Herpetologist (Dunedin)

Cameron.Thorp@wildlands.co.nz



Cameron specialises in surveying lizards and best practice lizard management, including producing survey reports, Lizard Management Plans and Wildlife Act Authority applications. Cameron has worked with a variety of lizard species throughout the country, including Nationally Critical species, and has a particular interest in lizards in the alpine zone.

Sarah Wright – Ecologist (Dunedin)

Sarah.Wright@wildlands.co.nz

Sarah has undertaken vegetation surveys across the South Island. She is an experienced botanist and has a particular interest in grasses, sedges, dryland ecosystems, and ephemeral wetlands.



Lucian Funnell – Freshwater Ecologist (Dunedin)

Lucian.Funnell@wildlands.co.nz



Lucian specialises in freshwater ecology with experience surveying freshwater macroinvertebrate communities, fish, and eDNA sampling. He has a wide range of freshwater ecological monitoring experience over several different regions. Lucian also has experience in developing fish management and stream naturalisation plans. Lucians skills also extent into vegetation and lizard monitoring.

Lydia Metcalfe – Ecologist (Dunedin)

Lydia.Metcalfe@wildlands.co.nz

Lydia specialises in vegetation ecology and has worked as a field botanist across Aotearoa/New Zealand. Lydia has undertaken a range of projects across Otago, Canterbury, and Southland, including ecological assessments, vegetation mapping, plot-based vegetation monitoring and wetland delineation.



Our Services:

- Freshwater and terrestrial ecological surveys and assessments.
- Assessments of ecological effects and solutions.
- Ecological restoration and implementation plans.
- Identification of mitigation options.
- Geospatial representation and analysis.
- Plant, bird, lizard, bat, and terrestrial and aquatic invertebrates surveys, assessment, and monitoring.
- Pest animal surveys, and weed impact assessments and management plans.
- UAV surveys for quality ecological data.
- Threatened plant and fauna management