Predator Free
SOUTH WESTLAND

Newsletter: Winter '24

Kia ora koutou,

It's hard to believe it is June already! I hope lots of you got to enjoy the spectacular aurora a few weeks ago. One of our rangers, Chad, captured some magnificent skies over the Ōkārito Lagoon (see one of them just above). It was certainly beautiful, but came with some other consequences for our team – as you'll read below.

A highlight of the year so far has been Te Wāhipounamu 'TED'-type talks in Franz Josef in April, hosted by the local Department of Conservation team. Several people spoke, all looking ahead to a future where South Westland is recognised as the conservation capital of New Zealand, and a haven for our native taonga.

We can already see that future arriving. As reported recently in the Greymouth Star, wildlife like kākāriki are becoming noticeably more prominent members of our community. You can witness the thriving bird population yourself: our friends at Ōkārito Eco Boat Tours captured a video of the amazing cacophony of birdsong on the Ōkārito Lagoon, which you can view on the project website. It's wonderful to see our collective conservation efforts are bearing fruit.

All the best for the season,
Katie

Katie Milne
PFSW Board Chair

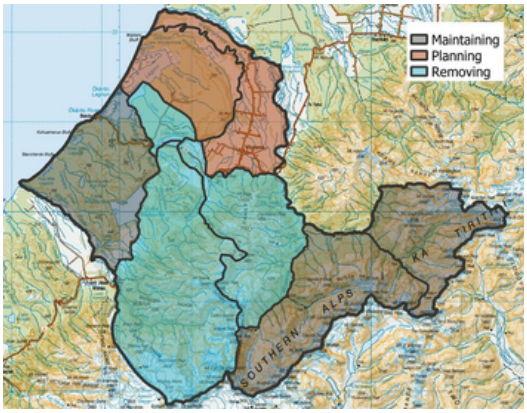
Ko koe kitēnā, ko ahau ki tēnei kīwai o te kete.

You take that handle of the kete and I'll take this one.

Hear birdsong on Ōkārito lagoon

Project update: surprises keep us nimble

The Predator Free South Westland project continues progress towards predator freedom. We are still on track to eliminate possums, rats, and stoats, from the mountains to the sea, by mid-2025.



Two blocks remain for initial predator removal – North Ōkārito and the Whataroa farmland. The timing of elimination work in these areas has shifted due to other challenges across the project area. Work is now planned to begin in July.

Elimination of predators on the mainland has never been done at this scale, which means there's a lot of learning happening along the way. Agility and adaptability have been necessary from the word go. Nothing has shown how capable our team is of adapting to challenges as the "solar weather event" earlier this year.

Our remote-reporting detection network is compiled of AI cameras, noded ZIPinns and cage traps. These tools are able to send data to us immediately through a network of satellites, allowing us to respond quickly and precisely when a trap is triggered or a target animal is detected on camera. The solar storm, big enough to create those magical night skies, pushed the satellites we use for our AI camera network out of orbit, reducing the capacity of the network and our ability to "see" what was happening across our management area.

The team quickly pivoted our operational plans, as our detection network is critical to the success to the PFSW project. The plan had always been to transition to a "terrestrial" ground-based network, using 4G coverage and low-powered radio instead of satellites. In addition to protection from future solar storms, a terrestrial network comes with a reduction in operating costs (something we are always looking for). This solar spanner has simply sped up that transition.

Field trials were completed in April, and the installation of new devices (called gateways) across the project area began in early May. Kudos goes to the technical, engineering, and field teams for rapidly innovating their way through this complex challenge.

Our rangers deliver some ZIPinn traps to Ōkārito. Photo by Carey Lintott.
John, Lead Engineer, setting up a terrestrial AI Gateway in the Price Range. Photo by Monty Saunders.

Maintaining predator-free: a community effort

We have added a new detection tool to our toolbelt! We recently launched a page on our website to collect predator observations from both our local community and travelers through the area.

We expect predator incursions, especially around populated, high-transit areas like beautiful Franz Josef. It's important to catch these quickly - and the observations of community members and travelers will be indispensable to our maintenance of predator-free areas.

Check out the page by scanning the QR code, and send in an observation if you see any signs of rats, stoats or possums in the project area.

bit.ly/PFSWpredator

Predator elimination for climate wins?

Forests, like those that cover vast swathes of Predator Free South Westland, play an important role in the carbon cycle. Trees and other plants absorb carbon dioxide from the atmosphere as they grow. This carbon dioxide is converted into carbon and stored in the plant's branches, leaves, trunks, roots and in the soil. Because of their ability to store carbon, forests have the potential to be a powerful tool for offsetting greenhouse gas emissions.

Introduced predators damage our native forests. Possums destroy young trees, and older trees die earlier as possums eat their leaves. Other introduced predators, like rats and stoats, disrupt forest growth and regeneration by eating seeds and birds, which disperse seeds.

The Barlow River Gorge, by Chad Cottle.

But do introduced predators impact the ability of our native forests to store carbon?

No one knows - but, with support from philanthropic investors, and advice from government agencies and science organisations, we have started a research programme to find out. Part of this research involves attempting to measure a difference in carbon storage between two forested sites. One, at South Ōkārito, has benefitted from predator management for decades (thanks to our pals at DOC); the other, further south near the Karangarua River has not.
If we are able to measure additional carbon storage in the forest where predators are managed, we might be able to prove that there are untapped benefits of the Predator Free 2050 mission - not just for biodiversity, but also for climate and economy. We expect to have the first results from this research in 2025.

Meet the team: Bradley, Field Team Ranger

Raised on the shores of Golden Bay, Bradley grew up observing fernbirds (mātātā) in the local estuary near his home. As a teen, he developed an interest in photography which quickly led to a passion for bird spotting.

When bird sightings became rare and stoat sightings more common, it weighed heavily on him. He became involved in several conservation projects including Project Janszoon, Kākāpō Recovery, and the NZ Bird Atlas on eBird, which uses citizen science to map out bird sightings across the country.

Bradley joined ZIP in 2022 as a field ranger to become more involved in protecting native fauna. Aware that the work would lead him into isolated areas without much data on birdlife, he was also very eager to fill in the gaps on eBird.

"I enjoy the maps at the end and seeing where these endangered species are popping up. Even in the last 2 years, there has been quite a big difference in improvement, especially in kākāriki numbers."

His first three days in the field, Bradley heard only one kākāriki, and didn't spot any. Now, he regularly sees multiple groups in a single day, and occasionally flocks of up to a dozen.

It's not just kākāriki that he is seeing more of. While the fern birds have disappeared from his home in Tākaka, he is pleasantly surprised to see so many appearing in the Ōkārito Sanctuary. "Fernbirds are thought to be more of a wetland or scrubland species," Bradley said, "but that's because they're easily predated in forests and better able to avoid predators in wetlands. Now, we're starting to see them all through the forest!"

Unsurprisingly, Bradley's spare time is consumed with photography and bird spotting. In his words: "It's a grey line for me between work and passion. I feel like I love what I'm doing all the time."

Who are we?

Predator Free South Westland (PFSW) is an ambitious five-year project to restore 107,000 hectares in South Westland by eliminating possums, rats and stoats. The project area contains forested and alpine areas, rural land, and the townships of Franz Josef, Whataroa and Ōkārito, and is bounded by the Whataroa and Waiau (Waiho) Rivers, the crest of the Southern Alps / Kā Tiritiri o te Moana, and the shores of the Tasman Sea / Te Tai-o-Rēhua, which provide natural barriers to predator reinvasion.

Zero Invasive Predators (ZIP) is leading the predator elimination approach for this project, in partnership with the local community. Keep an eye out for the friendly team – you may see us out and about.

The Community Team consists of Wendy Rakete-Stones, Rhianna Hughes Eddy, Sandy Hodges, and Pouri Rakete-Stones. You can contact them at ***communitysupport@zip.org.nz.***

Thanks to the people of South Westland, our partners and funders. We couldn't do this without you.

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