

Mokomoko Newsletter



Central Otago Ecological Trust
A Community-led Conservation Project

Number 20, March 2022

Kia ora koutou, greetings everyone. It's been an exciting summer at the sanctuary.

Jewelled geckos

This summer the jewelled gecko population at the Mokomoko Dryland Sanctuary reached a milestone. The first offspring born inside the sanctuary have now grown into mature adults, and so will be beginning to breed. Over half of the jewelled gecko founders have now been seen, along with 22 juveniles. Most of the juveniles that have been spotted have been seen only once, suggesting we're seeing only a small proportion of this cryptic population.



A newborn jewelled gecko found at Mokomoko Dryland Sanctuary in October 2021.

Grand and Otago skinks

Monitoring of grand and Otago skinks at the sanctuary continues to go well. The annual DOC survey in early Nov 2021 was affected by some unseasonably hot weather, which meant the Otago skinks in particular were less visible. However, the combined surveys over this



The first newborn Otago skink for the season was spotted on Rock 13 on March 8th.

summer season, including the DOC survey, monitoring by the Wellington Zoo team, and monitoring by Grant and Anna, have recorded good numbers of both species.

In the last two years, two-thirds of the Otago founders have been seen, and half of the grand founders. The tally of newborns continues to climb encouragingly, and is now at 23 baby Otagos and 29 baby grands.

On some fine days in spring and autumn, the outcrops are beginning to feel almost busy with lizards. Occasionally observers have been able to watch three or more skinks from one vantage point - a novel enough phenomenon to rate as quite a thrill! It's a welcome glimpse of the kind of restoration that we're working towards.

So far, the grand and Otago skinks don't seem to be spreading through the sanctuary, with practically all the sightings still being on the release rocks. If anything, grand skinks are doing the opposite, as Rock 7 - nicknamed 'Grand Central' - seems to attract grand skinks from the other release rocks.

An escapee

In October 2021, a local mountain biker, Craig Ross, spotted an interesting lizard on the shore at Conroys Dam, and accidentally scared it into the water, where it swam competently and then returned to shore. He'd been able to take photographs, and Grant could ID the animal - it was the Otago skink Oo285, which had been released into the sanctuary as a juvenile in December 2018. It was now nearly 1.5km away from the sanctuary. It had probably been small enough at the time to squeeze through the fence mesh. Where it is now is anyone's guess. Searching to date has failed to find it. Thanks to Craig for noticing, and passing that on.



The adventurous escapee in Conroys Dam.
Photo: Craig Ross

Moths

While Carey Knox was at the sanctuary helping with the DOC skink survey, he spent his evenings catching and photographing moths. With the assistance of University of Otago students Sam Purdie and Harriet Wills, Carey found a remarkable 46 different moth species within the sanctuary. It's great to see the diversity and abundance of insect life present at the sanctuary. You can view the complete report on the Mokomoko website. Thanks Carey.



An *Austrocidaria similata* at the sanctuary.
Photo: Carey Knox

Visitors

In October 2021, two reptile keepers from Wellington Zoo, Joel Knight and Matt Forbes, spent ten days at the sanctuary helping with lizard monitoring. It was wonderful to have their sharp eyes and enthusiasm on the job, and COET is grateful for their contribution. The work is funded by the Wellington Zoo conservation programme.



Joel Knight photographs an Otago skink October 2021

In November 2021, trustees and volunteers from the local Haehaeata Natural Heritage Trust joined COET trustees and volunteers for a morning at the sanctuary. It was a chance to appreciate both the lizards and the native plants that are flourishing inside the fence, and a privilege to share it with others who are also working to restore our local drylands.



COET and Haehaeata Natural Heritage Trust members and volunteers enjoy a fine day at the sanctuary.



The next generation get a chance to glimpse the grand skinks out and about on Rock 7

Also in November, COET hosted a tour group from Forest and Bird, led by their president Mark Hanger. It was a pleasure to have such interested observers inside the sanctuary. Beside their thrill of seeing skinks and geckos, they enjoyed the karearea swooping overhead and the native orchids at their feet.



Grant shows the Forest and Bird tour group a schist gecko, Nov 2021

In December, COET trustees, Tom, Selwyn and Grant hosted two journalists from RNZ. They filmed several grand skinks and heard about the work and vision of the trust. It was great to have lizards and dryland ecosystems featuring on national media in this way, and you can watch the RNZ Checkpoint video at <https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018824394/central-otago-lizard-species-need-more-help-than-ever>

Mice

It's now 18 months since mice were last seen inside the sanctuary. A hole was found and patched on the south boundary where earth had been washed away from under the skirting on a steep section of fence line. It is possible, but by no means conclusive, that this was the point of entry for the last incursion. Anna continues to monitor for mouse presence inside the fence perimeter and along internal transects every month. The hope is to detect a future mouse incursion early to identify entry points and enable a rapid response without needing to spread toxic bait across the whole sanctuary. It was great to see Anna's article about the impact of mice on native biodiversity published in the January edition of New Zealand Geographic <https://www.nzgeo.com/stories/the-tale-of-the-hungry-mouse/?source=homepage>



McCann's skinks (pictured) and southern grass skinks are an increasingly common sight at the sanctuary



The grand skinks are marvellously agile on the rocks, helped by their long toes and tails.

Weed control

A solid effort was made in early summer to knock back the everlasting pea, an invasive weed that spreads prolifically and smothers other vegetation. Trustee Garry Nixon has led the spraying efforts, well supported by many volunteers, including stalwarts Alan Pickard, Joe Sherriff and Phil Murray. The long-standing war against the briar also continues. While we suspect the native shrubs will in time outcompete the briar, we like to speed up the process and maintain walking access throughout the sanctuary.



Grant, Phil, Garry and Joe prepare for an evening of spraying everlasting pea.

Green skinks

COET's plan to translocate a population of Otago green skinks into the sanctuary this summer has been postponed until the end of

the year. Otago green skinks used to be found throughout Central Otago but are increasingly rare and are classified as "At Risk - declining". Some small populations still exist in the Otago mountain ranges, and the plan is to translocate 60 individuals from across ten sites into the sanctuary. Carey Knox is overseeing the translocation.

People

Ross Curtis has replaced Sasha Roselli at DOC Alexandra, and is helping with DOC's contribution to the sanctuary.

Patrick Liddy has finished up as team leader with the grand and Otago skink programme at Macraes. Thanks to both Sasha and Patrick for their contributions to the work at Mokomoko.



Ross Curtis enjoys being up close to a jewelled gecko at Mokomoko Dryland Sanctuary



Patrick Liddy searches for Otago skinks during the DOC survey in November 2021.



One of the surprises during the DOC survey was this sub-adult male jewelled gecko, found in a crack on one of the ridge top outcrops. Maybe it was caught out by the heat while on an exploring foray!

Funding the work

We are very thankful for financial support received recently from the Central Lakes Trust, Otago Community Trust, and Otago Regional Council that funds mouse monitoring and the upcoming green skink translocation.

Volunteers

As always, we are very thankful to our volunteers. Their willingness to take on the bluffs, briar and hills is much appreciated, and their support is invaluable.

Trustees of the Central Otago Ecological Trust



The Forest and Bird group watching grands skinks



A juvenile grand skink



A swarm of bees was seen in the main gully one day in October, but not since



A juvenile Otago skink basks in a sheltered nook. The first Otago skinks born inside the sanctuary are now robust-looking three-year-olds.