# Mokomoko Newsletter

## Number 18, Dec 2020

This springtime has seen plenty of activity at Mokomoko Dryland Sanctuary.

## Zoo-keepers at Mokomoko

In October, the Central Otago Ecological Trust was lucky enough to have the enthusiastic presence of two reptile keepers from Wellington Zoo, James Kilduff and Joel Knight. Every year the Wellington Zoo Conservation Fund supports several Zoo staff members to assist with conservation fieldwork in New Zealand or overseas. Joel and James made a huge contribution during their ten days here, photo monitoring grand skinks, Otago skinks and jewelled geckos. They found new baby grand and Otago skinks, and saw some fascinating things such as one baby grand skink catching a honeybee, and another tussling with a McCann's skink! They also put in considerable and timely efforts to respond to a recent mouse incursion (see below). A big thank you from COET to these guys.



James Kilduff (left) and Joel Knight were thrilled with their time at Mokomoko Dryland Sanctuary. Photo: Joel Knight

## **DOC** survey

The annual DOC monitoring survey of the grand and Otago skinks was carried out in late October, led by DOC biodiversity ranger Sasha Roselli. During three days of reasonable weather Sasha, Pat Liddy, Carey Knox, Anna



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A baby grand skink catches a honey bee. Photo: Joel Knight

Yeoman and Nicki Van Zyl photographed the skinks they saw. They found reasonable numbers of adult animals and a good number of babies, including two new baby Otago skinks and one new baby grand skink.



Evading searchers since release almost two years ago, Oo277 made a false move one September morning and was caught on camera! - another missing Otago that's no longer missing. Photo: Anna Yeoman

**Grand and Otago skink population update** In late 2018, 33 grand skinks were released into Mokomoko Dryland Sanctuary. Two thirds of these have been sighted since, suggesting the initial phase of the translocation was successful. This year saw the first babies born within Mokomoko, and nine newborn grand skinks have been sighted so far.

Forty-three Otago skinks were released in 2018 and 2019, and two thirds of these have also now been sighted, along with nine newborns. It's wonderful to see these babies, as it suggests a healthy population that is beginning to establish itself. They're also incredibly stunning little animals, the gold, cream and black markings are very bright and clear on the newborns. Fully independent from birth, they climb around the schist at top speed on their oversized feet.



Anna and Emily Yeoman enjoying a monitoring day out at Mokomoko. Photo: James Kilduff

#### Jewelled geckos

Carey Knox also spent some time surveying the jewelled gecko population within the sanctuary. He has now re-sighted 36 of the 86 founders, as well as 13 juveniles that have been born at Mokomoko, and considers the population is on its way to establishment. Several COET volunteers were able to join him and enjoyed the challenge of surveying the green shrubs and grass in search of these superbly camouflaged wee gems. It's such a thrill and a privilege to see them in the wild here.



One of the nine baby grand skinks seen this year. Photo: Anna Yeoman

### Mice

There has been another mouse incursion into the sanctuary. Volunteers have put out bait in the 250 bait stations spaced on transects throughout the sanctuary, a solid task through the bluffs and patches of regenerating shrub. Bait will remain until no more mice are detected, and then an intensive monitoring effort will made in the new year to discover possible points of entry.





The eagle eyes of Carey Knox identify a 5cm long juvenile jewelled gecko in the *Coprosma* far below. Photo: Anna Yeoman

Jewelled gecko in Muehlenbeckia. Photo Joel Knight.



Tim Whittaker, Dhana Pillai and Carey Knox spot a jewelled gecko by torchlight, when the direct beams illuminate the solid form of their bodies in the shrubs, making it (slightly) easier to find them than in daylight. Photo: Anna Yeoman

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## Otago green skinks

COET are investigating the possibility of introducing Otago green skinks into Mokomoko Dryland Sanctuary. The Otago green skink is a medium sized skink that lives in low vegetation and rocks, named for the shimmering green band that runs the length of its back. There are currently small populations in the Central Otago ranges, and its conservation status is "At risk - declining". Carey Knox has been contracted to oversee the work.



Otago green skink. Photo Carey Knox

### Vegetation

Photo points have been re-surveyed to track vegetation change within the sanctuary since the herbivore fence was constructed in 2009. Native regeneration in the drylands is certainly a slow process, but some positive change is becoming evident, such as in the photos of the gully below.

## **SRARNZ** Conference

The Society for Research on Amphibians and Reptiles in New Zealand is basing its national conference in Alexandra in February 2021 (including hubs in Wellington and Auckland). There will be a mixture of online and live presentations from Thursday 18th – Saturday 20th, and a field trip to Mokomoko on Sunday 21st. Grant Norbury and Jan Kelly will be giving opening addresses on the Thursday evening. Grant will be talking about conserving lizards by understanding predatorprey interactions (including Mokomoko briefly), and Jan will talk about her long-term behavioural study of McCann's skinks near Wanaka.



A juvenile McCann's skink on a dandelion. Photo: Jan Kelly

The Thursday evening talks and supper is open to the public, so come along to the Alexandra Community House starting at 7 pm. Or if you're interested in attending the whole conference you can register at <u>https://</u> <u>events.otago.ac.nz/2021-srarnz/rego</u>



Vegetation in the main gully 2009



Vegetation in the main gully 2021

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On a mild spring evening the gully at Mokomoko is alive with a myriad of moths and other insects, testament to the increasing native vegetation. Photo: Anna Yeoman

### Thank you

Mokomoko Dryland Sanctuary is a community initiative, and is only made possible by the ongoing support of our funders. A huge thank you to the Central Lakes Trust, Otago Community Trust, Manaaki Whenua Landcare Research, Lottery Grants Board, Transpower and the Department of Conservation who generously provide the funding for this work, as well as a myriad of donations from private individuals.

Also a huge thank you to our volunteers who cheerfully brave the briar and bluffs to get stuff done! Your efforts make this work possible. Many of you have contributed for a number of years to get to where we are now.

It's because of people's generosity that these lizards are once more scrambling the schist bluffs and dryland shrubs of the Alexandra basin, happily settling in and procreating back here in their homeland. Ngā mihi nui.



Volunteers Simon, Joe, Jo, Dhana and Grant enjoy hard earned refreshments after an evening checking the bait lines. Photo: Anna Yeoman



The nationally threatened karearea, native falcon, are a common sight at Mokomoko. As they prey mostly on small birds they pose (we think!) little threat to the lizard population. Photo: Joel Knight

#### Support

Our trust requires ongoing funding for lizard translocations, mouse eradications, weed control, and fence maintenance. We would be grateful for your continuing support. Direct donations can be made to the Central Otago Ecological Trust 06-0917-0711760-00. If an individual or business is interested in becoming an ongoing supporter, please email Grant Norbury norburyg@landcareresearch.co.nz.

Trustees of the Central Otago Ecological Trust





A newborn Otago skink enjoys some sun, Sept 2020. Photo: Anna Yeoman

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