

# Mokomoko Newsletter

Number 19, May 2021

Kia ora koutou, hello everyone. It's been a wonderful summer at Mokomoko Dryland Sanctuary. Here are a few highlights we'd like to share.

## Grand and Otago skink update

Lizard monitoring at Mokomoko Dryland Sanctuary is still providing plenty of excitement, as new grand and Otago skinks are gradually being found. We have now recorded 15 new grand skinks and 14 new Otago skinks born within the sanctuary. Some of these we are seeing as newborns, while others are first seen as one or even two year olds. This is encouraging confirmation that we are sighting only a portion of the animals that are there, as the wonderfully lizard-friendly tangle of rock bluff and native shrub provides plenty of opportunity for the skinks to stay out of sight.

We were also thrilled to sight another missing Otago founder earlier this month, which hadn't been seen since it was released in late 2018 - further evidence of the present but hidden

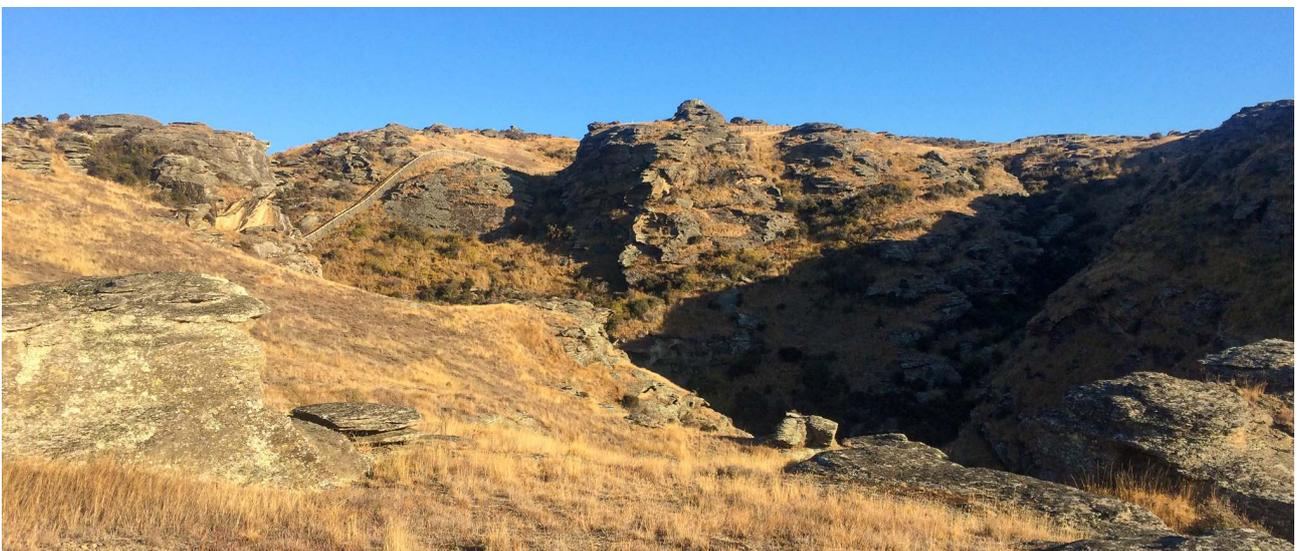


This juvenile Otago skink was seen for the first time in autumn this year as a two year old.

portion of the population. We've now re-sighted two thirds of both the grand and Otago skinks that were released, an encouraging statistic suggesting a successful first phase of the translocation.



A *Coprosma* bush gives some shelter and protection to a sunny basking spot for this young grand skink.



Mokomoko Dryland Sanctuary on a clear autumn day

### **Jewelled geckos**

The jewelled geckos are as usual staying well out of sight in the native shrubs, but monitoring by Carey Knox last year suggests that they're on their way to becoming well established in the sanctuary.

### **The other little lizards**

Visitors to Mokomoko are also enjoying the sight and sound of the more common lizards that are becoming well - more common! On any warm day at Mokomoko, McCann's skinks can be seen basking on the edges of rocks while southern grass skinks thread their way through the long grass.

On a mild night in the main gully, Dhana Pillai and Anna Yeoman saw more than 30 schist gecko foraging and hunting in the *Coprosma*, their ghostly white bellies showing up luminous in the torch beams. Anna was also delighted to discover a horizontal rock crack where in the daytime, if you squint your eyes and peer in, you find yourself eye-to-eye with half a dozen schist gecko all lined up together and calmly staring back from the safety of their shadowed retreat.



Schist geckos are nocturnal, and in the hours after dusk they can be seen foraging for berries and hunting insects in the native shrubs.

It's wonderful to witness the way these lizard species that were there before the fence went up are also benefiting from the pest free environment, an observation that was backed up by Sam Turner's research last summer.

### **Mice**

All of New Zealand's fenced sanctuaries struggle to keep out mice, and Mokomoko is no exception. After having three mouse incursions in the last four years, COET is prioritising discovering how and where they're getting in. The Otago Community Trust and Central Lakes Trust have provided funds for COET to employ Anna Yeoman for several hours a week to carry out intensive mouse monitoring over a six month period. She is using a combination of tracking tunnels and non-toxic bait to regularly check the entire sanctuary and pin-point any incursion points.

The impact of mice on New Zealand's biodiversity gets little publicity, but is a very real problem. Mice attack even the larger lizard species, as was evidenced in the early days of Mokomoko, when mice were seen attacking a 30cm-long Otago skink. Mice might also compete for food. Mokomoko Dryland Sanctuary presents a wonderful opportunity to show what a mouse-free New Zealand ecosystem could look like.

### **SRARNZ conference**

The national conference of the Society for Research on Amphibians and Reptiles of New Zealand in February this year was affected by the country's brief sojourn back into Alert Level Two. What was to be a semi-virtual conference with a major hub in Alexandra became a fully online conference.



Grant shows some visitors around Mokomoko on the weekend of the SRARNZ conference.

Nevertheless it went very well, with fascinating presentations from around the country. The opening presentations by COET members Grant Norbury and Jan Kelly were very well received, with Grant giving an engaging and clear introduction to understanding predator-prey relationships for conserving lizards, and Jan providing a beautiful and valuable window into skink behaviour through her detailed observations of the McCann's skinks that inhabit her garden. Congratulations to all involved.



Visitor Natalie de Burgh photographs an Otago skink as it basks in the morning sunshine.

### Forest and Bird tour

In March, Forest and Bird brought a tour group to Mokomoko Dryland Sanctuary as part of a length-of-the-country “Echoes of Gondwana” tour. The twelve visitors were thrilled to be able to see and photograph both Otago and grand skinks within their wild habitat, along with schist geckos, southern grass skinks and McCanns skinks, and had a wonderful time wandering the sanctuary on a sunny morning. COET enjoyed the opportunity



The Forest and Bird group getting the lie of the land as they explore Mokomoko Dryland Sanctuary.

to host them, and is also very thankful for the donations made by several of the group.

### Transects

While Anna is carrying out mouse monitoring, she is also upgrading the markings on the bait station transect lines by colour coding the lines with plastic triangles and flagging tape. The lines should be easier to follow, and will hopefully lead to fewer incidences of volunteers being caught in tangles of briar or spending frustrating hours hunting for an elusive bait box.



The new transect markings

### Weed control

Keeping on top of invasive plants is a never-ending job, and COET trustee Garry Nixon has taken charge of co-ordinating the recent weed control efforts. Tackling the everlasting pea is the current priority, as this weed spreads prolifically and chokes other vegetation. The battle against briar rose also continues.



Volunteer Inge Diks heads out to spray everlasting pea



Stalwart COET volunteers Jo Wilson and Joe Sheriff ready to head out for the monthly fence inspection.



Two new recruits: Emily Yeoman practices her spotting skills while a juvenile Otago skink basks on the schist.

### The fence

Checking and maintaining Mokomoko's pest proof fence is a crucial job, and COET is very thankful to the volunteers who, on a monthly basis, walk and inspect the 1.6km long fence line.

COET is also very thankful to Earnsclough Station who are providing half the funds for annual fence insurance. In this dry environment fire is a particular concern.

In the extreme rain event in January this year, when Alexandra received a quarter of its annual rainfall in 24 hours, the culverts and over-flow gates got a good test, and we were pleased to see they performed perfectly.

### Thanks

As always, a huge thank you to our volunteers for the hard work they do. Also thank you to our supporters for the funding they give to enable this work to happen.

*Trustees of the Central Otago Ecological Trust*



Above and below: Visitors enjoying the opportunity to observe grand and Otago skinks in their native habitat.



Above: Og001 was the first newborn skink spotted at Mokomoko last March, and a year on is a noticeably stronger and sturdier individual.