



No. 114

# Newsletter

March 2021

Welcome to an update of the Friends of Flora's activities over recent months.

## Touchdown – the Grecian bivy

Ivan Rogers - DOC

Following protracted delays from Covid, winter and blustery weather, the Grecian bivy finally achieved touchdown last week, 23<sup>rd</sup> – 25<sup>th</sup> March, the DOC building team of Chris Clode and Stu Houston, assisted by Matt Bolton and Ivan Rogers, having been flown into site to undertake the preparatory foundation work. Day two had the bivy and annex choppered in - both sections judiciously joined up by Chris and Stu - whilst Matt and Ivan dug the toilet hole, then fitted the base and toilet structure. Last off, the water tank was set up and any other work attended to, prior to sign off. The team's pick up was delayed from cloudy conditions, however all went well, satisfied with the new addition to the Park's assets.

This biv will now provide all weather comfort for the FOF trapping crews working in the Grecian, together with the whio survey groups, and others such as DOC contract goat hunters. The local whio, ruru and weka provided a noisy welcome chorus, which augurs well for our biodiversity enhancement in that catchment.



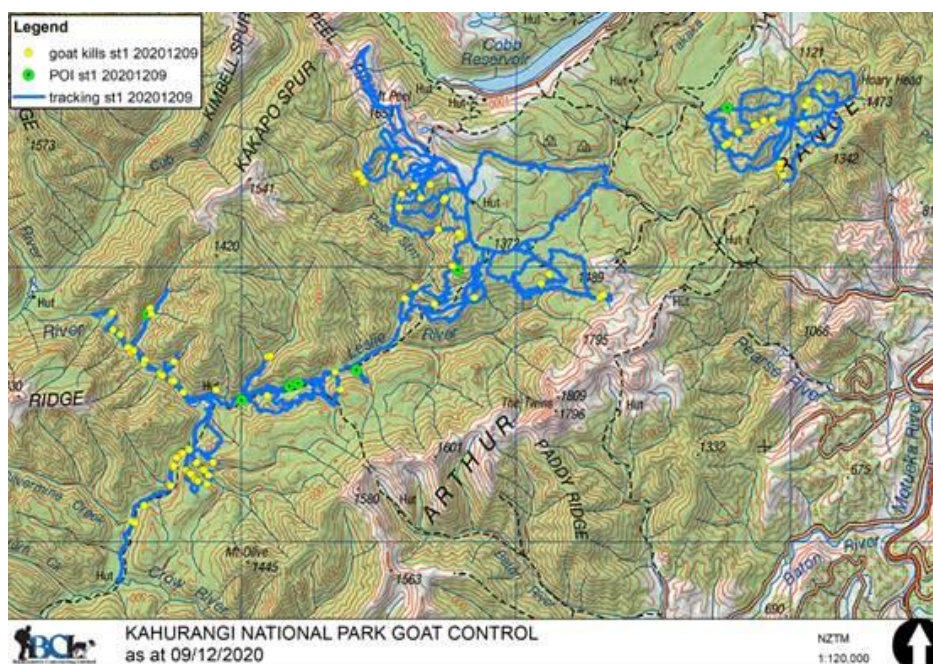
The G Team....Chris, Stu, Matt and Ivan at work.....



## Goat control operations

Ivan Rogers

A total of 53 goats were shot in DOC's ground-based goat control operations during last December. Based at Balloon and Salisbury Huts, and camping out at the Grecian Stream, BCL contractors and DOC hunters spent over 200 person hours tracking down goats with ground-bird-aversion trained dogs. A further 272 person hours resulted in 103 goats being culled in the Leslie/Karamea. This well-run operation was completed with no health and safety issues arising.



## Operations update

Mike Malone

Our monthly trap monitoring has been diligently maintained during the past quarter and many thanks to all those volunteers for their sustained commitment to this and the FTT work. We also acknowledge the enthusiasm of those newer volunteers who have assisted with overnight kiwi monitoring, the Alpine project and forest FTT work. The latter was delayed by a couple of weeks due to the weather, and completed in early March, the results confirming that rat numbers were still declining – down from 25% in November to 12.5% in March, so all good news – and mice numbers went down from 2% to nil, so even better. We are still catching quite a few stoats, particularly around the northern and eastern edges of our trapping area.

Worryingly, though, there have been a couple of recent 'surprise' catches – a ferret along the Mt. Arthur track, and a wild cat towards the Grecian. Both are of major concern as a ferret can take out an adult kiwi and wild cats can do similar damage. The cat was quite young, so possibly there may be a breeding pair around that territory.

The new double traps have generally been performing well and the number of 'sprung empty' traps has reduced considerably since recalibration on most of the lines. There are still a few lines to complete this work on - to ensure all are performing at their optimum level. Spare lids are now also available should they be required to replace any warped lids or damaged hinge fittings.

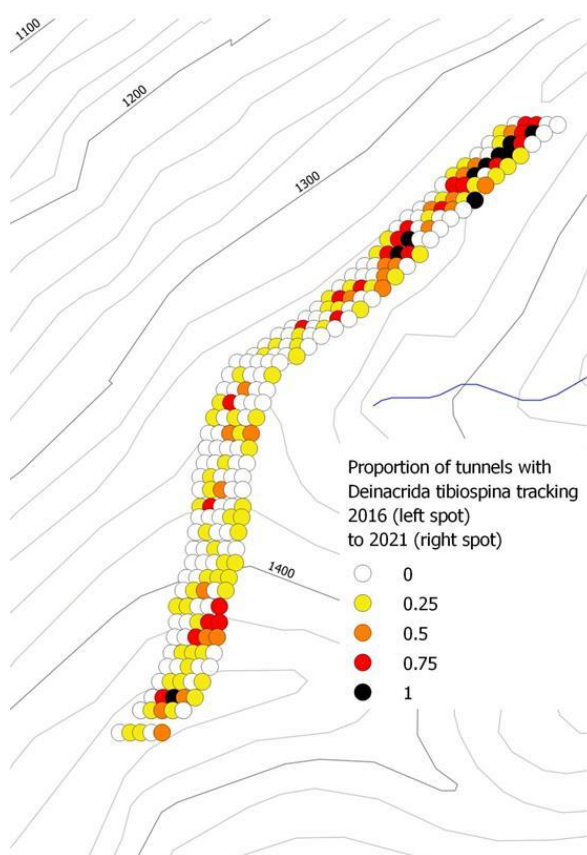
Lastly, a special thanks to Stewart Fowler for his valued maintenance and housekeeping work in the FOF shed. His recent addition of further shelving has enabled a tidier material storage - and definitely a less cluttered floor!

Friends of Flora's aim is biodiversity restoration. We don't just talk about it, and we don't assume that our management will automatically result in biodiversity gains. Rather we have set up long running monitoring programmes to help us understand how biodiversity responds and enable us to adjust our management as necessary. As another busy season draws to a close, we report on the results of two long-running programmes and on the results of some threatened plant surveys. All this monitoring effort is done by volunteers – thank you all for your dedication and commitment.

### Mt Arthur giant wētā (*Deinacrida tibiospina*).

This incredible beast is only found in the alpine areas of Kahurangi National Park and the Arthur Range is a stronghold. Being relatively fat and juicy as invertebrates go, we imagine it makes good rodent tucker and we were concerned that last year's rodent explosion would result in a population decline. Thankfully, our tracking index from 50 footprint tracking tunnels indicated only a minor decline, although this masks some variation in their distribution. The tracking tunnels are monitored over four periods each summer. Fig. 1 shows the proportion of these periods in which wētā were tracks were seen in each tunnel in each season. It indicates that there has been a decline in tracking in the lower altitude tunnels, but an increase in the higher tunnels. In the last newsletter we reported that rifleman are also becoming less abundant at lower altitudes although the drivers are likely to be different. No mice were seen in the alpine tunnels this year, so it'll be interesting to see if wētā numbers come back up next year. The alpine lizard monitoring is still running so no results to report yet.

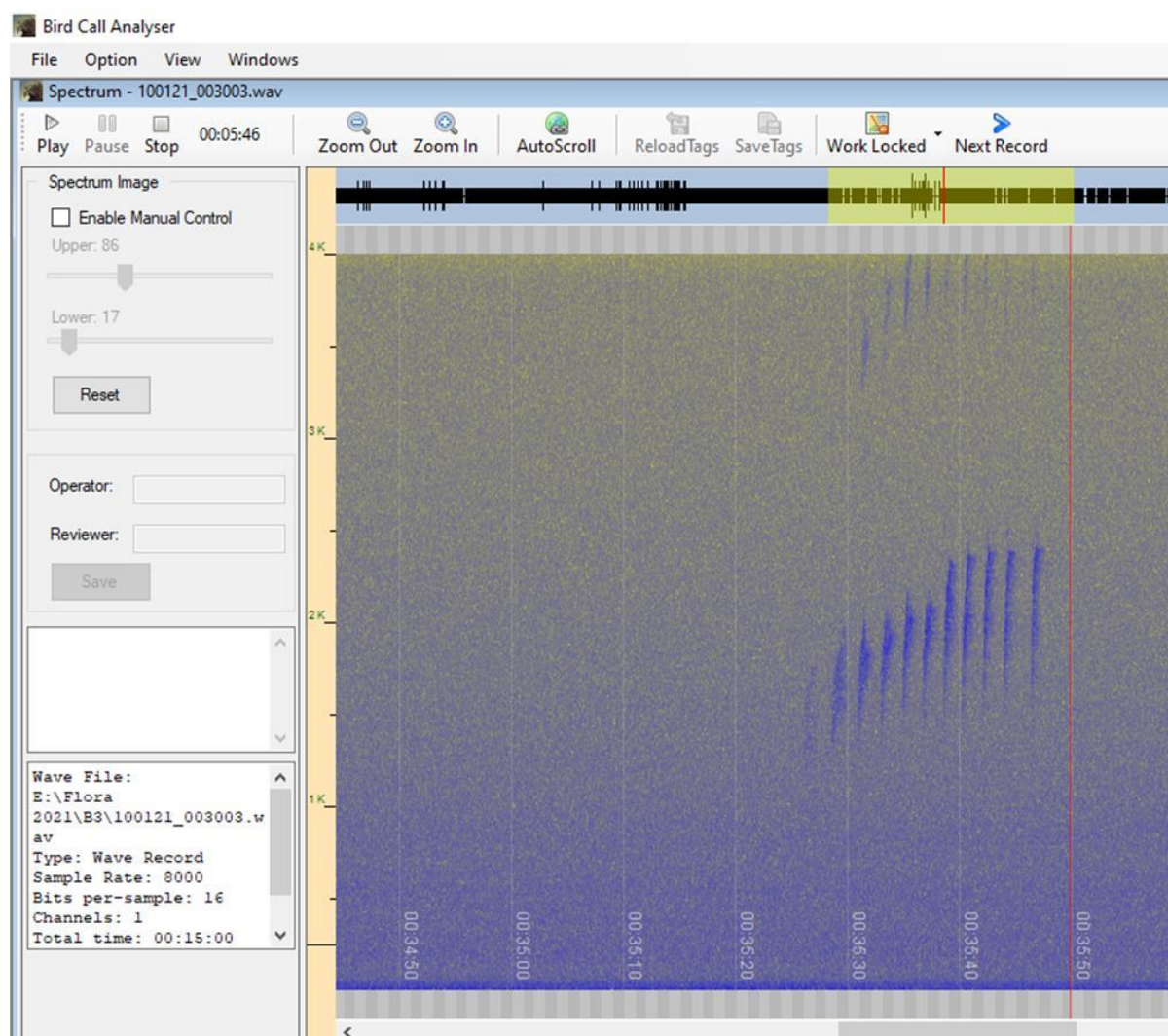
Figure 1 *Deinacrida tibiospina* relative abundance in tracking tunnels





We monitor nocturnal birds through a network of 25 acoustic recorder stations. We analyse 5 nights of recordings for each station, a total of 1,125 hours each summer! Fig. 2 is a spectrogram of a male roroa (great spotted kiwi) calling shortly after midnight on 10th January. It's been exciting to identify kiwi pairs calling in areas where there were no previously known home ranges.

Figure 2 Spectrogram of male roroa call



One of the best things about biodiversity monitoring is the potential for the unexpected. A mysterious middle of the night 'peeping' call on the recordings from a few stations in late January appears to South Island Pied Oystercatcher flying over, probably while migrating from their breeding grounds in inland Canterbury to their coastal wintering grounds further north.

### Bogs and bluffs

The Flora is a well-known hotspot for rare and threatened plants. Finding them can however, be a challenge (Fig. 3 is photos of the critically endangered shy foxglove, *Ourisia modesta* and the forget-me-not, *Myosotis chaffeyorum*), and it was great that DOC's highly skilled botanists were able to spend a couple of days recently focussing on small forest wetlands and tall limestone cliffs in the Flora. The bluffs are the last refuge for a suite of palatable threatened plants that are eaten by deer and goats and now occur only on high cliffs out of reach of these voracious munchers. Ledges under the bluffs are the home of the small forget-me-nots. They are often the only plants that can survive in these dry places. But they too are threatened by the

ungulates which like to rest up on these dry ledges. In contrast the shy foxglove only occurs in wet conditions. It occurs in tiny patches, usually less than 1m<sup>2</sup> in extent, making it extremely vulnerable to local extinction by pigs 'ploughing' their habitat. The surveys are a reminder of the special responsibility we have to look after these rare treasures that occur only in New Zealand. Unfortunately, predator control will not help them, we also need sustained control of goats, deer and pigs.

Figure 3 Shy foxglove (*Ourisia modesta*) and Chaffey's forget-me-not (*Myosotis chaffeyorum*) in the Flora



## Safe working in the field

Gerald Bruce-Smith

The Friends of Flora recently attended an informative liaison meeting hosted by Motueka LandSAR President, Gerry Tonkin. Following an outline of several major searches in the Nelson/Tasman region, he focused on the key search methods and resources employed in the field to achieve a successful outcome. LandSAR (Land Search & Rescue) do have data of our trapping and FTT footprint in KNP and have also expressed an interest in securing our group's assistance for search area containment in the Flora - should the need arise.



The importance of our own volunteers following the procedures detailed in the *FOF Field Guide* was again stressed by Gerry - including the nomination of a contact person, the carrying of PLB, whistle and night glowstick within an emergency pack, wearing fluoro clothing - and filling in intention logs.





## FRIENDS OF FLORA

Twenty years ago on 2 February 2001 Friends of Flora was officially incorporated and an amazing journey began. Twenty years later the biodiversity achievements are stunning:

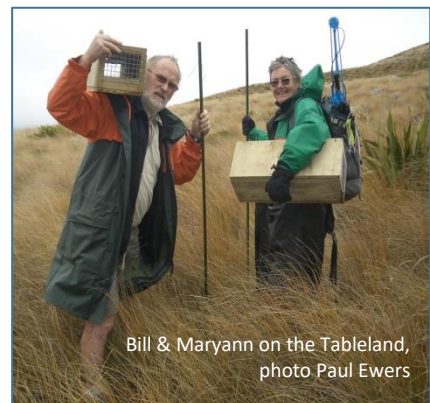
- Whio numbers up to some 26 pairs from a single lonely male
- Roroa (great spotted kiwi) re-established and spreading beyond the project area
- Stunning dawn and evening chorus of kaka, kea and bellbird
- Flourishing alpine lizard and giant weta populations...

And to achieve all this:

- 2568 stoat traps installed
- Volunteers walk >3000 km every year and every month climb 10,130 m (1.14 x the height of Chomolungna/Mt Everest) servicing the traps
- 1092 inked tracking tunnel cards placed and collected every year to monitor predators and biodiversity
- 18,941 video clips from trail cameras analysed

And much much more...

Our founders, Maryann Ewers and Bill Rooke are inspirational. Their vision, dedication and commitment is legendary, especially since back at the beginning volunteer community groups doing conservation work was a novel concept. So many DOC staff have helped and supported us sharing the highs and lows. We are grateful to our numerous generous donors and grant giving bodies, we value every dollar. Most of all, thank you to every single volunteer who has generously given their time, energy and commitment to get us to this stage.



Bill & Maryann on the Tableland, photo Paul Ewers

## From the Chair –

Covid-19 has been in our vocabulary for a year now and hopefully will be put away soon.....

There are a few new volunteers to welcome into the fold – Neil A, Ben C and Phil C. Many thanks for your interest in our work and we look forward to your participation in the months/years ahead.

It is great to see the Grecian Biv on site and now available to assist in the further expansion of our predator control territory and species protection. Many thanks to the Management of DOC Motueka for seeing this asset through to fruition, and importantly to Chris, Stu, Matt and Ivan for undertaking the installation work on site.

Lastly, as we move closer to our AGM, a big thank you to the generous donors of funds and services, the Committee and other volunteers who keep ourselves moving forward, DOC Motueka management and staff for their on-going scientific and general assistance, and yourselves the readers for monitoring our progress along the winding road. Our twenty year's performance is no mean feat for a community group and hopefully this provides an impetus for similarly focused conservation projects.

Keep safe and well

Cheers

Gerald and Sandy