



Newsletter

Issue No. 113

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Welcome to this update on the Friends of Flora's recent activities, and forthcoming plans –

The Alpine Project - 2020/1 – Lesley Hadley

FOF's alpine lizard project has only been going a couple of years, but is already providing interesting results to help us all understand the threats these remarkable wee creatures face. Without good monitoring data there's little chance of management solutions being found, so the more good data we can collect the better. Much of the alpine zone is pretty inaccessible and FOF's is probably the only alpine lizard monitoring undertaken by a community group. These summer - sometimes windy - wanderings up the Arthur ridge are about to recommence!

First the lizard FTTs : over the years of the project, we've had difficulty finding appropriate sites for up to 100 lizard tunnels – either too windy, too rocky or not lizard territory. Last year tunnels were reduced to 60 due to these factors, but in order to collect reliable data, more tunnel sites are required. It is hoped that there will be 100 sites in clusters set up for this season's monitoring. Our alpine monitoring has now been carried out over tussock masting years with an increase in mouse and rat presence in the alpine region, so ongoing monitoring to observe the effects on lizard and weta populations is important.

Next, the Weta FTT: monitoring will begin mid-January, the transect of 50 tracking tunnels being consistent since the beginning of the project. Alpine weta numbers were found to be reduced last year (a similar pattern being seen in the bush FTTs with bush weta) although the tracking of some juveniles gives hope for a population recovery.

Watch out for the Alpine Project Invites if you're keen to contribute.....



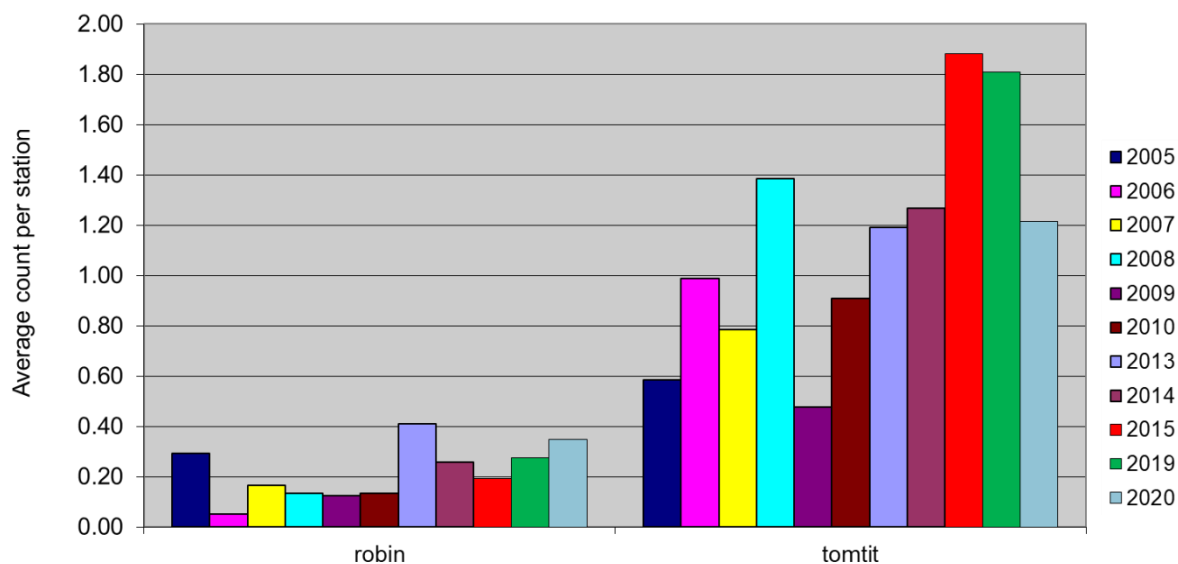
The Alpine Project team laying out tunnels under the Mt Arthur ramparts several weeks ago. Impressive country!



FOF's mission is biodiversity gain, but how do we know if we're being effective? Biodiversity and pest monitoring is the answer and we've been doing it since FOF's inception over twenty years ago. For biodiversity we use a variety of methods applicable to different groups of species: river walkthrough surveys for whio; night time call-count monitoring using acoustic recorders for roroa; DOC led hand searches of plots every three years for *Powelliphanta* snails; tracking tunnels for alpine lizards and wētā (see alpine article) and presence counts and five minute bird counts (5MBC) for forest bird species. Understanding changes in biodiversity is challenging and a long run of data is usually required, but if the counts indicate a problem, does the pest monitoring indicate the reason and do we have options to adapt our management practices to address the issue?

FOF's monitoring indicates that larger birds are doing fine, numbers of whio have increased, kiwi and kea are successfully getting chicks away and anecdotal evidence suggests there are more kaka. Smaller birds are harder to monitor, not least because they are mobile and difficult to see in the canopy, so you have to know your bird calls and most species have several. However, forest birds are generally considered to be a good indicator of forest health, and monitoring their numbers is standard, so it's worth the effort. 5MBC have been done along the main Flora stream most years since 2005 and by and large have shown little change over this time – for example, robin and tomtit continue to hold steady, (Fig. 1). But in the last couple of seasons, rifleman numbers have shown a precipitous decline. Tracking tunnels have also shown a decline in small forest wētā tracking rates. We thought we were still hearing rifleman at higher altitudes, and this November conducted a series of five minute bird counts at higher altitudes. Thankfully these found more riflemen. Canterbury University did some counts in these areas a few years ago and we hope to compare their data with ours to provide an historic perspective.

Figure 1 Robin and tomtit numbers in the Flora as shown by 5MBC

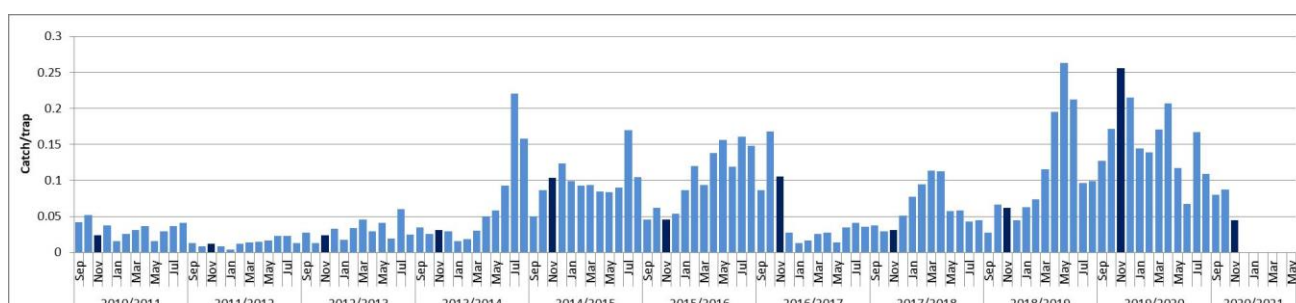
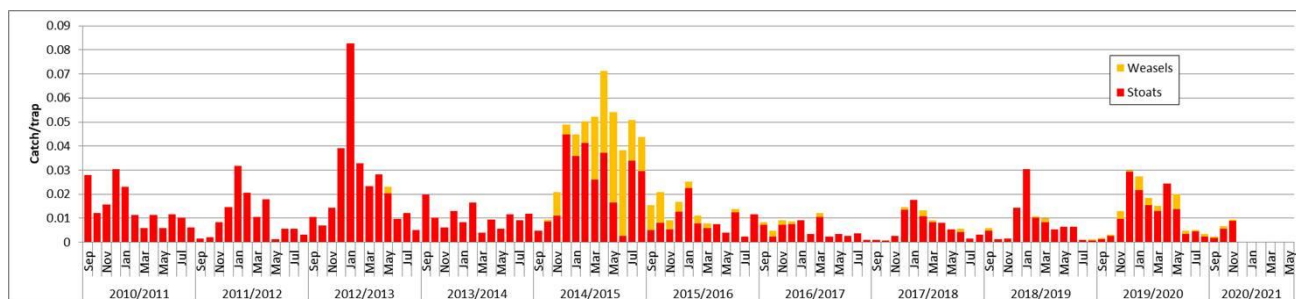


We don't know what's caused these changes in pattern, but rat predation is a possibility. Rat numbers spike following beech mast, but following the latest beech mast they have stayed pretty high. Not only are we seeing high rat numbers, but we're also seeing them at higher and higher altitudes. In 2016 rats were detected in tunnels above 1200 m for the first time and above 1300m in 2019. Friends of Cobb are also recording increased rat numbers at higher altitudes which they associate with warmer temperatures.

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It is impractical to trap rats over landscape scales, so the only tool available to do something about the rats is aerial 1080. In the meantime, monitoring our biodiversity helps provide the data needed to inform decisions.



These ten year charts – mustelids/upper and rats/lower - record those predators *caught* within FOF's trap station network. Note: that double traps were deployed progressively from 2018 to replace the older singles.

Operations review – Mike Malone

Rat numbers are finally trending downwards so hopefully that will continue through the summer. Last month's tracking tunnels showed rats at 24% and mice at 2.5% - considerably down from those September highs of 45% and 18%, respectively. Ideally the target is to get below 5% tracking for rats - so we still have some way to go!

Kill trap calibration and testing has continued and hopefully will be completed over all the lines this summer, the new adjustment tool designed and made by Ruedi making this job much easier to undertake in the field and resulting in fewer 'sprung' traps - with more potential for the intended 'double' kills. Wire mesh cradles have also been fitted for the Erayze baits to remain whole and open to the spread of their odour in the wind. It's great to see that all the trap line checks are being well supported by our valued volunteers on a regular basis. A special thanks to them, the Line leaders, and Ivan Rogers and our DOC partners, for their support and assistance during this relatively more challenging year.

Very recent multiple stoat catches on TG line may indicate a dispersal of juveniles is underway, so please ensure trap checking routines are maintained and baits current.

The weekend before Christmas had FOF volunteers walking the Flora and Grecian Streams doing the first of the 2020/1 summer whio surveys, their findings being a mixed bag.

In the Flora there were six pairs, nearly the best tally ever - bar 2015's seven pairs - but as then, no ducklings were observed.

The situation in the Grecian, usually bursting with whio, was a bit quieter than expected, with just four pairs and two singles - though one of the pairs having five ducklings!

These observations are consistent with the rest of Kahurangi National Park - good numbers of adults but low recruitment. Many pairs who did make successful nests were observed with only one or two ducklings and a high proportion of adults were already moulting - usually the moult is in late summer. Both parties of surveyors noted whio feathers on the water, indicative of moulting birds holed up nearby.

DOC's Jason Malham thinks that flood events in November may have killed off a lot of young ducklings, and that combined with the possibility of light body weight of females coming into Spring, may have contributed to a mediocre breeding season.

The healthy mistletoe currently seen on Andy's Ridge mirrors that seen along the lower Cobb Ridge track.

Thanks to Ruedi Mossiman, Jasmin Mossiman, Warren and Chrissy Kaneen, Andy Woodall, Steve Harris, Shaun Atkinson and Paul Ewers, for their leg work.



The Grecian whio ducklings and (below) Andy's Ridge Mistletoe *Peraxilla tetrapetala* – Paul Ewers.



This has been a challenging year on many fronts. Disappointingly the June 2019 Cobb Sector 1080 drop failed to control the rat plague in the Cobb Valley. Our trappers were faced with rat after rotten rat in our traps of the highest level ever, and to make matters even more serious, our alpine monitoring showed rats munching their way through the environment right up to 1500m. New traps installed in Henderson basin trapped a significant number of mustelids and rats. Tussock seeding summer 2019/2020 was near zero and recent rodent monitoring has shown no tracking of both mice and rats in the alpine, much to our relief. Our precious rock wren, after a resurgence in numbers in 2019 - 24 birds were proudly banded in Feb 2019 - have crashed with just one pair recorded nesting last week, the lowest count in our 20 years of study there! The Sam's Creek kea are having a year off nesting with just some nest maintenance visits noted on camera. On a positive front: kaka numbers are stable with a flock of five seen at Tent Camp recently and five kea flying over Henderson Basin. A pair of whio with ducklings were seen below the power station on the Takaka River this spring though we appear to have lost whio from the upper Cobb valley, which has been our highest mustelid catch area this year. A pair of kiwi reported near Tent Camp recently, and mistletoe are doing well with no possum reported for some time now.

We have a great team of volunteers at the moment and a cheerful van load head up monthly to service the lower Cobb Valley trap lines with others heading up in their own time to run lines on the periphery. Line changes this year include re-installing traps in Henderson Basin; picking up the servicing of NZDA lines in the upper Cobb TL, and we provided landowners on Barron's Flat with ex-FOF traps which we hope will reduce re-invasion into the Grecian. New lines for 2021 will likely include the Chaffey's stream area.

Wishing all FOFers a bonny festive season from your friends over the hill.

Farmers for Whio

Next month Farmers for Whio celebrate their first anniversary, having completed a solid year with broad trap layouts in the Graham Valley. This provides invaluable support to the Friends of Flora within previously predator host territory along the eastern boundary of the Park. Their project focus remains the trapping of the Motueka River between the Graham and Baton Valleys, and beyond. Congratulations to Barry, Sky and their team on their progress todate.

Safety gear

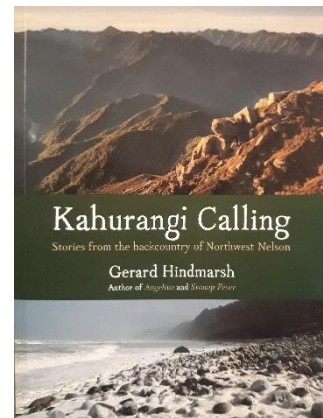
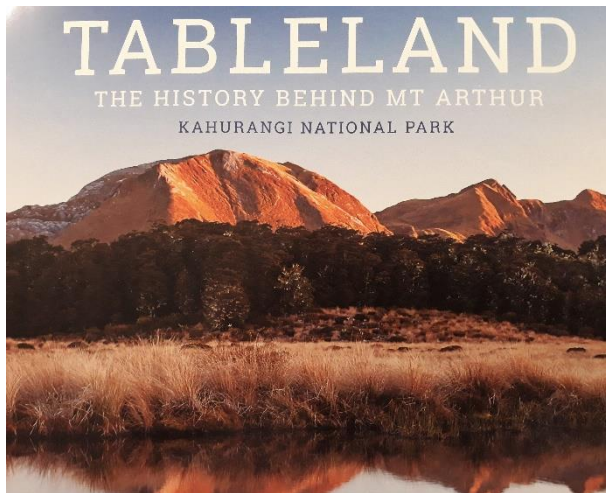
In the New Year all active volunteers will receive a plastic whistle and orange emergency lightstick for inclusion in their emergency packs. Both, mentioned in your *FOF Field Guide*, have been recommended for our field work by Motueka LandSAR, who have also offered to run some rescue scenario exercises with us in February/March. Sound and light tools, either singularly or jointly, have been proven to lessen the search times in terrain such as the Flora - particularly when used together with an activated PLB/Personal Locator Beacon. The cost of these two items has been covered through the sale of our recycled traps.



Those FOFers who attended the recent TripleOneCare First Aid Course arranged by Sandra will be aware of the particular focus on allergic reactions (Anaphylaxis) to wasp stings, and the need to carry Antihistimine tablets. These are packed within the First Aid kits in the FOF Shed, and should also be carried in individual First Aid kits. Please ensure the expiry dates are current, and do follow the labelled instructions if stung, particularly when facing a lengthy walk out to transport - and keep the water intake up.

Further reading –

Ray Salisbury has recently added comprehensively to the historical people and places record of the Flora and Cobb through his 'Tableland' book, which includes content on the National Park's inauguration and the conservation work undertaken by both the Friends of Flora, and Friends of Cobb.
For newcomers to Tasman District, Gerard Hindmarsh's 'Kahurangi Calling' is also good reading material.



Closing notes –

The completion of our double trap layout and the removal of the old singles from the field prior to the Covid Lockdown were the undeniable achievements of this somewhat disrupted year. The dispersal of the old traps to have second lives in the field throughout Tasman District has also been a bonus, and assists the biodiversity enhancement movement that is so increasingly evident in our local media and forums.

Friends of Flora again thank our many supporters, including the generous donors of funding, products or services, DOC Motueka management and staff, and all our dedicated volunteers who kept our wheels oiled and moving forward.

All the best for the festive season and 2021, to our many readers.

Friends of Flora - www.fof.org.nz