



We may have been getting close to Christmas when this flowering appeared, but there was neither goodwill, nor cheer, in the message it brought - a serious beech mast event. Challenging times lie ahead.

## Trap placement assistance -

Last month the 2018 USA Wildlands Studies group - under Matt, Alejandra, Sarah, and Mike Malone's guidance - completed the double trap replacement on LB line, prior to having several days exploring the Tablelands as part of their NZ wide environmental studies. Sandy Toy addressed them earlier on the special nature of the Salisbury EMU, and FOF'S contributory role in enhancing its biodiversity values. The students were suitably impressed with the terrain that FOF worked in, together with our extensive and long term commitment to predator control, Sarah noting "thanks for providing another insightful experience for Wildlands Students". Thankfully the weather behaved, unlike that experienced elsewhere on their trip. The WS student's generous assistance to our predator control work was – again - greatly appreciated.



*Sandy addresses the WS group at Flora Hut*



*Mike with Sarah's WS team at the start of LB*



We also received assistance more recently from a contingent of Motueka High School students, staff, and their families, in completing the remaining Horseshoe Creek trap replacements through to B40. Our thanks go to Heidi James, TIC Environment Education, for the group's much valued contribution to our work.



*MHS students Milan and Thomas, with staff and their families, happily heading out with their loads.*

## DOC Science Presentation -

To improve our knowledge of the forthcoming beech mast outcomes, Robin and Sandy Toy brought together a number of key DOC scientific staff to address FOF volunteers, DOC staff and interested associates at a well-attended and informative event in Ngatimoti, on November 23<sup>rd</sup>. Graeme Elliott, Josh Kemp, Christine Hunter and Jenny Long outlined the on-going and timely research being focused on beech masting and stoat/rodent levels, 1080 timing, tracking tunnels - and the consequences ahead for the threatened rooroa, whio and rock wren populations through the country. This event was catered, and many thanks also go to Lesley and Cindy for contributing to the success of this evening.





## Lesley Hadley reports on the forthcoming Alpine Project -

Friends of Flora's Alpine Project is launching into action, which this year will comprise: -

- 50 weta (unbaited) FTTs changed fortnightly mid-Jan to mid-March.
- 100 lizard (baited) FTTs changed monthly mid-Dec to mid-April.

This is an exciting project to be involved in, with easy access up the main Arthur track, so keep an eye out for webmailer 'invites' as your help will be appreciated.

We have made a few changes to the methodology, building on what we have learnt since FOF started putting out weta and gecko FTTs in 2016, and from other projects.

To recap – the weta line is a transect of 50 unbaited tracking tunnels at 15m spacing along the NW side of Mt Arthur ridge. Cards were changed fortnightly from mid-January to mid-March. The giant alpine weta, *Deinacrida tibiospina* is the target.

The 20 lizard tracking tunnels were baited with tinned pear and placed at 'likely' habitat for Black-eyed gecko, *Woodworthia* gecko and skinks. The reptile monitoring ran over the same period as for the weta. The tracking results from our 20 lizard tunnels show there are too few *Woodworthia* tracks to get meaningful monitoring results. Our *Woodworthia* tracking rate in the baited tunnels was 25% in 2018 although 91% of detects were in 3 tunnels. A report based on field work for Orange Fronted Geckos suggests 100 baited tunnels and cards changed monthly from Dec to April.

It was decided that FOF should align our approach with the protocol for the OFG. Increasing the number of tunnels and the length of the tracking period will reduce the variability between sampling events - making it more likely that we can tell if a change is significant. It will also mean we need more volleys for each event. The weta FTT transect will continue unchanged ie 50 FTTs and cards changed fortnightly.

In Jan 2018 the monitoring slipped to 3 or 4 week intervals (largely thanks to Cyclone Gita) but to get meaningful results the time interval needs to be standard within a couple of days. So we'll have to hope for no cyclones this season!

The layout of the FTTs was undertaken on 8<sup>th</sup> December - another typically stunning Tasman day.....

Chris, Andy, Sandy, Sandra, Warren – Lesley>



< Gecko tunnelling – Sandy

## Ivan Rogers comments on the decline of the Flora snails -

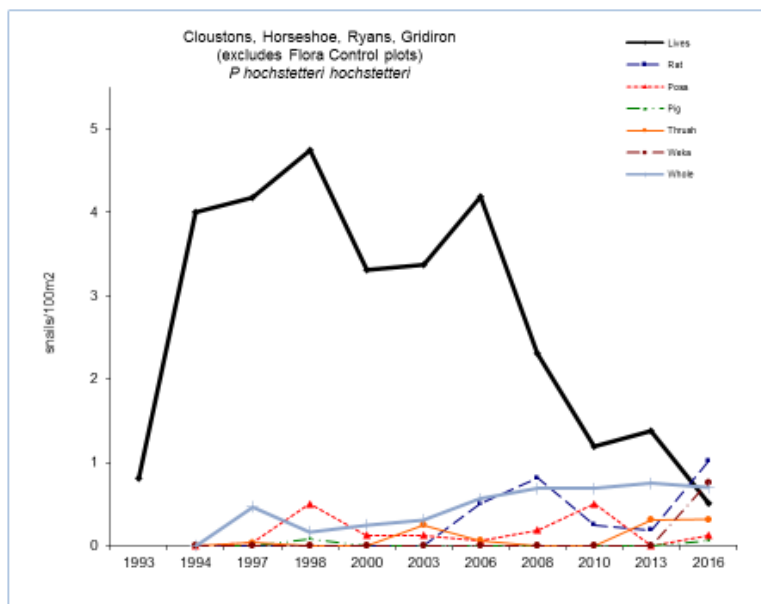
The three yearly survey of the Flora's snail population began this week (commencing 10<sup>th</sup>) – a task shared by DOC rangers and FOF volunteers. The snails, *Powelliphanta hochstetteri hochstetteri*, are one of our giant carnivorous land snails found only in high altitude beech forest in the Flora, Cobb and Takaka Hill. There are eight permanent plots of 20m by 20m, each of which takes a team of four a day or so to survey. The technique is straightforward – all get on their hands and knees and feel their way through the forest floor and low vegetation. Empty shells are bagged to diagnose predation; live animals are measured and returned to exactly where they were found. The job is half done as bad weather has intervened, but it appears the decline continues, or at best has bottomed out, with this week's results (0.5 animals per 100m<sup>2</sup>) matching exactly the point on the chart above marked 2016. 12 animals per 100m<sup>2</sup> is a published long-term recovery goal (Walker 2003)

Threats to the snails through predation are weka, rats, pigs, song thrush (for juveniles) and possums and probably in that order, since possums are locally nearly absent from the Flora.

Goats are a threat in terms of trampling and compacting *Powelliphanta*, also.

How to arrest the decline? Aerial 1080 knocks back rats and possums. Possums have not recovered after recent operations but rats have and will increase again in response this season's beech seed production. Weka, as anyone will tell you, have massively increased in numbers in recent years but will one day crash. Exclusion fencing to keep all predators out may prevent total extinction but is expensive and requires maintenance.

In the early days of FOF it was a common sight to see these beautiful snails cruising around on a damp day. Those days are gone but must return. A big thank you for all the volunteer effort this week and hopefully we will complete the job when the weather improves.





## Whio information panel –



Recent visitors to Flora Hut will have sighted the new FOF whio panel installed adjacent to DOC's info post, providing the background story to the reintroduction of this species into the Flora, and stressing the importance of predator control and habitat quality for their continued presence.

We are grateful to Motueka's **Image Creators** for generously donating the laminated sign, which complements the roroa panel at the Saddle.

The next whio survey is scheduled for 22<sup>nd</sup> December - so here's hoping for a good pre-Christmas count.

## In Memoriam -

We are very sad to report the death of Janet Lesser who had been a keen volunteer with FOF for many years. She started as a trapper and more recently was part of the kiwi tracking team. She was always keen to get stuck in as you can see from the photo (which is snail monitoring with Sandra, in case you're wondering). Janet was always full of ideas, enthusiasm and stories. We miss you, Janet.



## Some Friends of Flora notes –

November's FTT results and recent trap catch data indicate that rodent numbers within the Flora continue to run at uncomfortable levels - particularly problematic heading into the post mast period. As mentioned in my opening comment, we are heading into challenging territory, and there will be an increased emphasis in the year ahead to ensure that trap checks are maintained on a monthly basis and that all are functioning properly.

Regan Bridge, given increased work commitments, has departed Friends of Flora and left an impressive legacy of trap line layouts and trap checks through the Flora. His attention to quality in line preparation and delivery has been impressive, together with his commitment to maintaining a regular schedule of checks. We thank him, Michelle, and the Bridge family for their contribution to Friends of Flora over the past several years, and wish them all well in their endeavours.

The Friends of Flora webpage has had a great makeover, thanks to the combined input of Peter, Robin, Ruedi, and Gary of **WeDoWebsites.co.nz**. Particular appreciation must be given for access to Ruedi's impressive natural and event image library, which provides a par excellence home page lead to the revised links. Some fine tuning will undoubtedly be necessary in the short term, however the finished product should place FOF on a similar web standing with our neighbours.

The weekend of 10<sup>th</sup>/11<sup>th</sup> of November honed the skills of many FOF volunteers, through Robin and Sandy holding a GPS training workshop at Flora Hut, followed next day by a Triple One First Aid refresher and/or certificate course held in town. More wounds than you needed to see, and CPR regained its importance in a variety of medical situations. Thanks to Sandy, Robin and Sandra for arranging these sessions.

A few line changes. Mauricio L has taken over LF and TG lines, and Hamish T and Greg W have jointly taken over G line – thank you for your commitment. FOF have taken over the FOC Asbestos traps running from Lower Junction to the bottom of X line, creating a trapped box up to the R Cobb ridge line.

The Cobb access reopened earlier this week, thankfully making the XYR checks easier. The road contractors had a massive challenge on their hands, and users of this road will get to appreciate the immensity of the slips, and the scale of their work - necessitated by the damage wrought by Cyclone Gita, late February. I suspect a few anglers will be in the early groups.

This will be my last Newsletter - I've enjoyed spreading the good news about Friends of Flora. James Macdonald will be editing the next issue.

A special thanks to the many volunteers and supporters who contribute to our work, and achievements. All the best for an enjoyable and safe festive season.

Gerald Bruce-Smith