



No.127

Newsletter

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Welcome to this update on the Friends of Flora's activities, achievements and more challenges –

2024 Bug of the Year campaign – Chrissy Kaneen

This year's Tibio campaign and entry by the Friends of Flora was a first for FOF, and though it took a few of us out of our comfort zone/s, we learnt a lot - and had some good fun on the way. The campaign was fiercely competitive, as RNZ 'Critter of the Week' listeners would vouch. Despite being runner up to the red admiral butterfly, we are confident that there are now many more people out there knowing that the Tibio Mount Arthur giant wētā is the smallest of the giants, a gentle vegetarian and is as rare as the kakapo!

We had a couple of busy days at the Flora carpark and kiosk, together with a very hectic day at the popular Motueka Sunday market, persuading many people into voting - and also educated, sold raffle tickets, and gave out colouring competition forms. Special thanks and our appreciation need to go to Julie from Joolzart for her generosity in donating her original watercolour of the Tibio - our raffle 1st prize - and also big thanks to Wayne Elia for his illustration, which was also offered as a prize. And finally, thanks 'Team Tibio' for all your hard work.



Robin and Warren on Flora carpark duty, spreading the Tibio and FOF love.

Julie of Joolzart, our generous Tibio artwork donor, with Lesley at the Motueka Sunday Market >



Sad news about our *Powelliphanta* snails – Sandy Toy

DOC have recently released a review of the conservation status of Aotearoa's carnivorous snails, <https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs42entire.pdf>. These are the stripey giant *Powelliphanta* that used to be abundant in the Flora but are only rarely seen these days. They also include the smaller *Rhytida* snails. These snails are unique to Aotearoa and arguably as iconic as kiwi, but much less well known. The review is shocking. There are 109 different taxa of snails in this group – 44 or 40% are critically threatened, meaning that without conservation management they will become extinct. Only 5 were assessed as not threatened. The expert panel that undertook the review highlighted the urgent need for action to combat climate change, protect habitat, and control exotic browsers and predators. For some species the situation is so dire that urgent measures such as constructing fences that exclude pigs, deer, goats, hares, hedgehogs, weka, and – where possible – rats from small areas of snail habitat are deemed necessary.

The stripey giant of the Flora is *Powelliphanta hochstetteri hochstetteri*. It had a relatively large population that previously buffered it somewhat from threat. However, along with other North-west Nelson snail species it became sparse in the 1990s after possums learnt how to open *Powelliphanta* shells; but they started to recover following widespread possum control. However, since c. 2005, the numbers of live snails in regularly surveyed plots across Kahurangi have dropped alarmingly. The continuation of such high rates of decline over the next 30 years (i.e. three generations) would reduce the population size of all these snails by 96% on average. *Powelliphanta hochstetteri hochstetteri* snails which have large, comparatively thin shells with wide-open apertures, are particularly susceptible to moisture loss and consequently need damp ground and high humidity in the litter layer and understorey to thrive. Feral goats, deer and pigs are degrading the leaf litter that insulates and nourishes the habitat of both *Powelliphanta* and their earthworm prey.

Powelliphanta snails are usually nocturnal so Leon Bernard's encounter with one out in the sunshine last November was a surprise.



Predated Lodestone snail shell. Note the stripes loop transversely round the shell rather than horizontally as they do in P. hochstetteri hochstetteri.



Another, albeit smaller giant, *Powelliphanta* “Lodestone” is known only from the Flora area. No systematic monitoring has been undertaken for this species but a recent survey on Lodestone, found much lower than expected densities and evidence of habitat degradation. FOF’s Paul Ewers is one of the few people to have seen a live *Powelliphanta* “Lodestone” snail and videoed it back in 2005. More information is needed on the size and population trend of this elusive critter.

FOF Annual General Meeting - A date for your diary - Sandy Toy

FOF’s AGM will be held at the Moutere Hills Community Centre at 6:30 pm on Tuesday 21 May. All welcome. We are delighted that renowned author Annette Lees will be our guest speaker, talking about her book *After Dark: Walking into the nights of Aotearoa*. In the company of bats, owls, moths and seabirds, she guides us from dusk to dawn with fascinating night stories: tales of war, stealth and ghosts; nights lit by candles and lighthouses; night surfing, fishing, diving and skiing; mountain walking and night navigation on ocean voyaging waka. It will be a great evening!

Ferret Trouble – Robin Toy

Bleak news from the Flora with four ferrets caught in our stoat trap network. In the last 20 years we have only caught two ferrets, one in 2006 another in 2021, so four in a month is dreadful. Elsewhere ferret numbers are also high. Farmers for Whio have caught ten ferrets in the Graham Valley since the New Year, and Friends of Rotoiti caught ten ferrets in live-capture traps at Tophouse in December/January. That’s scant comfort for us.

Even worse, FOF’s traps are not designed to catch ferrets being housed in boxes with a 4.8 x 4.8 cm hole designed for stoats and weasels to enter. Boxes for ferret traps have a 6.4 x 6.4 cm hole, so it’s surprising ferrets have got into our traps. That makes me wonder if there are more out there than we think, and/or they’ve been there longer than we think.

The 2006 and 2021 ferrets, and two of the recent catches, were caught on the eastern boundary of FOF's trapped area, not far from Flora carpark. Ferrets are known to follow fence lines and other boundaries, so these animals may have sauntered up the road. But the other two recent catches were along the Grecian River, 4 km from the edge of the park. Juvenile ferrets disperse at this time of year, commonly travelling more than 4 km, so these could be recent immigrants. However, one was larger than the other, and might have been resident. Ferrets are normally associated with rabbits, so we've always thought the Flora, which is almost entirely rabbit-free, should be safe. But ferrets are sometimes found in drier forests, so maybe our optimism was ill-founded.

The two ferrets caught in one trap box alongside the Grecian River (photo: Lesley Hadley)



One of the ferrets caught near the carpark (photo: Mike Malone)



Why all the fuss about ferrets? Like all mustelids they are incredible predators, but they are by far the biggest of the mustelids now found in NZ — 3-4 times a stoat's weight. This big size means they are able to take adult kiwi and weka. In the 20,000 ha Tongariro Kiwi Sanctuary, 142 North Island brown kiwi were radio-tagged over a period of 22 years. During this time, 36 adult kiwi died, 20 of them killed by ferrets.

What can be done? Hopefully, the recent 1080 drop will have dispatched any other ferrets. But these recent kills illustrate the risks of incursion. We're currently looking at trapping options to try to prevent or deal to such incursions.

Thanks to Carolyn King and David Forsyth for their comprehensive *Handbook of New Zealand Mammals*, from which much of the information in this article was taken.

The Cobb team – Gerald Bruce-Smith



The Cobb trap team heads over Takaka Hill and into the Cobb Reservoir, monthly, and has evolved an efficient check routine covering the three FOF trap lines that align with our western territorial boundary. Pictured are David Renwick, Mike Malone and Dean Carroll – Cobb stalwarts. David is heading back to Christchurch, so all the best in your next endeavours, and many thanks for your trapping and forest FTT assistance.

This striking rock @ 1350m- well up the ridge - reminds us that the Cobb has some of the oldest sedimentary ground layers in New Zealand.

From the Chair- Sandy Toy

The summer has brought unexpected challenges for FOF and the biodiversity of the Flora. It's also brought pleasure from the company of fellow volunteers, from watching whiolings bob in the creeks,

hearing roroa call at night and following the mesmerizing dance of tussock butterflies. The spike in stoat catches was unusually high this summer and we were horrified to find stoat footprints in 73% of 30 tracking tunnels in the alpine Horseshoe basin in March. These tunnels are baited with tinned pear to attract lizards, and stoats are not known for their liking for pear, so the result is extraordinary. Then came the shocking discovery of a ferret incursion deep into the Grecian. We are grateful that DOC's aerial 1080 operation was successfully completed, since it is the only control option available for ferrets and feral cats on a landscape scale. By knocking back the rodents and possums it will also give the entire forest ecosystem a breather. Organising these operations is a major undertaking —thanks to all involved.

Our forest invertebrates have taken an unwelcome hit this summer. Wasp nests and activity were detected at much higher altitudes than in the past, even extending above the bushline into the tussock. Watching wasps quartering the ground and moving systematically across the vegetation, it's a surprise that any invertebrates survive. Species like the forest ringlet butterfly whose caterpillar stage lasts two years are especially vulnerable.

FOF's championing of the critically threatened Tu Ao Wharepapa Mt Arthur giant wētā for the Bug of the Year title was a heap of work and a lot of fun. It was wonderful how so many locals supported the campaign – Wayne Elia, founder member of FOF donated characterful drawings, Jamie Brown at Copyart, Richmond produced display posters, Julie Davies of Joolzart donated a wonderful painting (have a look at her creations showcasing our native fauna and flora at the Motueka market), Ngatimoti school students starred in videos....the list goes on and on. More than 1700 people voted for the wētā nicknamed Tibio, second only to the red admiral butterfly. We hope that Tibio has highlighted the largely unmanaged threats from climate change and mouse predation that affect much of our alpine fauna. I'm proud that FOF successfully raised awareness of this often-overlooked aspect of our biodiversity. However, the sad fact is that despite the interest engendered by the contest, Tibio remains critically threatened, and FOF's monitoring this season has shown the ongoing threat from mice.

Summer is exceptionally busy up the hill. Thank you to all FOF's dedicated volunteers for doing the hard yards, sometimes several times a week. Everything you do makes a difference. We are delighted to receive support from a new sponsor, RMA Ecology. Thanks to them and to all our generous donors and sponsors – you enable us to keep going.

Finally, I look forward to seeing you at FOF's 2024 AGM in May -

Upper Moutere Community Centre - 6.30pm Tuesday 21st May

