Newsletter

No.130 December 2024

Welcome to this particularly informative update on the Friends of Flora's activities -

Vote *Holacanthella*, Aotearoa's giant springtail, for Bug of the Year 2025 – Sandy Toy

Last year the Friends of Flora were official champions for the Tu Ao Wharepapa|Mt Arthur giant wētā in the Bug of the Year competition run by the Entomological Society. The wētā is critically threatened and our aim was to raise awareness of its plight, so having 1700 people vote for it was a great achievement. This year FOF has moved from the alpine tussock to the forest and is supporting Frank Ashwood's campaign for *Holacanthella*, Aotearoa's giant springtail. These critters are of course unique to New Zealand and are some of the weirdest, cutest, and most striking beasties. In case you're wondering why you've never seen these beautiful giants, it's likely because 'giant' is relative in the world of springtails. Many are microscopic, so ones that grow to all of 1 cm in length are giants! There had been no *Holacanthella* records for the Flora since 2005, so we enlisted Frank's help in searching for them on a soft, wet, misty day. It wasn't long before we'd found two different species. It's great to know that they're still flourishing in the Flora because they're considered to be a bit of a 'canary in the undergrowth' – indicators of undisturbed old-growth forests. And they do a vital job in breaking down decaying wood and recycling forest nutrients. Check out Frank's delightful poem on the Bug of the Year website https://bugoftheyear.ento.org.nz/ and encourage friends and whanau to **Vote Holacanthella, Aotearoa's giant springtail, for Bug of the Year 2025.**
Voting runs from 1 January to 17 February 2025.

Excitement as Frank Ashwood, Helen Reese, Ruedi Mosimann & Robin Toy discover Holacanthella duospinosa in the Flora.
Photo Sandy Toy

Two of the Flora's giant springtails: Holacanthella duospinosa *and* Holacanthella paucispinosa*. Look for the top picture on the Bug of the Year voting page.* Photos: Frank Ashwood.

A tiny orchid – Sandy Toy

Early summer is prime orchid flowering season and although this tiny orchid is not very showy, unless you study it with a hand lens, it is a speciality of the Flora. It is thought to be widespread in Aotearoa but naturally uncommon, occurring in sparse colonies in mossy forest. It's hard to find especially when it's not flowering, so keep an eye out for it over the summer. It's called *Townsonia deflexa* after a pharmacist, William Lewis Townson who spent years documenting the flora of the Westport area around the turn of the 19th century and whose reflections ring true today: -

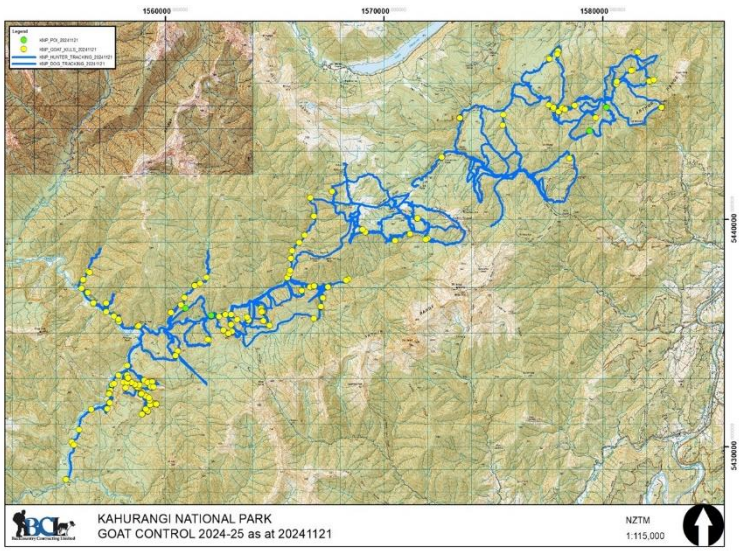
Photo: Sandy Toy

> *I have never regretted consenting to prepare this list, although I had no conception that it would prove to be such a big undertaking, for thousands of miles had to be walked, over hill country and plain, in fair weather and foul, and numerous difficulties had to be surmounted. But in looking back upon these years of wandering, when all my senses were on the alert, and my thews and sinews were strong to stand the strain of the longest day 's tramp, when the book of nature was no more a sealed book for me, and the trees, plants and birds became my familiar friends, they were, undoubtedly, the happiest years of my life.* (Transactions of the New Zealand institute 1906 39:380-433)

More dramatic Mountain Caps and Slender Forest Orchids.

Photos: Ruedi Mosimann

Goat control



DOC have again run a goat control programme in the Flora and surrounding areas. Professional goat hunters killed more than 400 goats. The map shows the serious effort required to keep numbers down and the importance of co-ordinated large-scale control to limit the speed of re-invasion. Ungulates, including goats, deer and pigs can directly threaten rare plants but also adversely affect the whole forest ecosystem through trampling, removing the forest understory and leaf litter. Thanks to DOC for this investment in the future of our forests.

Please don't destroy their homes – Sandy Toy

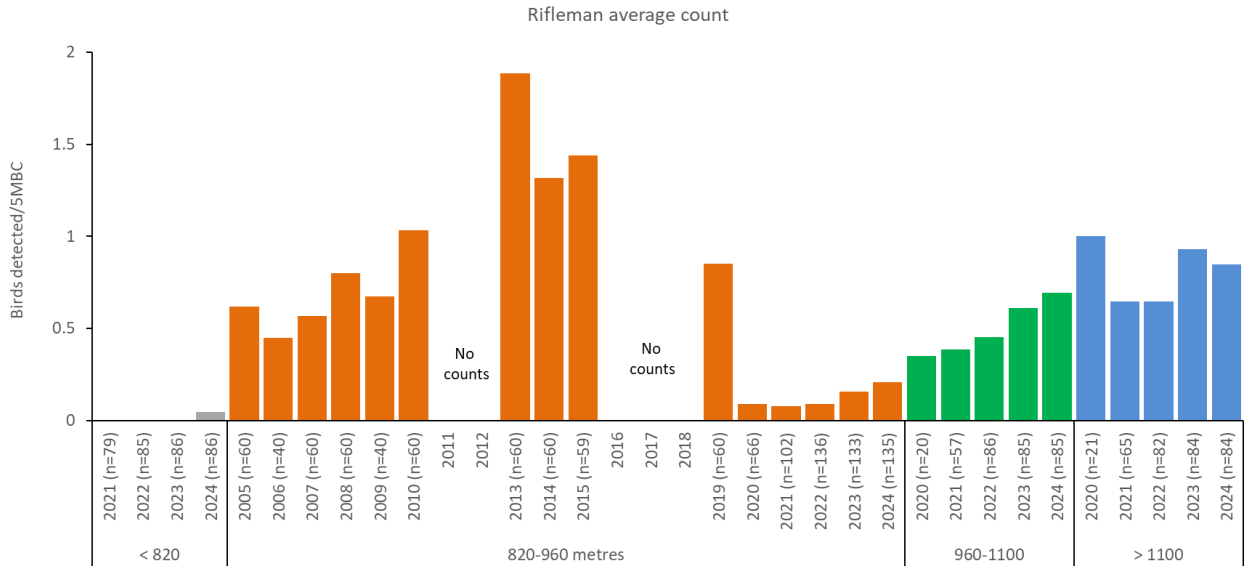
FOF monitors two species of threatened alpine lizards in the Flora using footprint tracking tunnels. The lizards rely on the rocky jumbles on the Wharepapa ridge to provide shelter in the harsh alpine conditions. So it's sad to see the current craze for walkers to add a stone to rock cairns on the ridge as they pass. DOC have marked the route up Wharepapa extremely well with blue snow poles, so rock cairns are not needed as a navigational aid and with the heavy visitor traffic on the maunga, lizard homes are being destroyed on a daily basis. So if you see someone adding to a cairn, gently remind them that they're ripping the roof off a gecko's home.

We have a special responsibility to look after Woodworthia Mt. Arthur which lives on the high rocky slopes of only a few mountains in northwest Nelson.

Photo Dylan van Winkel.

Small bird monitoring - Robin Toy

FOF's trapping gives a reprieve to stoat-sensitive bird species. FOF counts whio and monitors kiwi calls and a kea nest to determine the effectiveness of our trapping. All this monitoring shows that our trapping is helping. Smaller bird species are both vulnerable to both stoats and rats. These species are dependent on DOC's 1080 programme to control rats. To determine how these birds are faring we do 5-minute bird counts (5MBC). We've been doing this since 2005 and most species haven't changed a lot over the period. It would be nice to be able to report that numbers of small birds have increased, but no change compares well to areas without pest control, so we're happy with 'no change'.



The one species that has declined is tītitipounamu|rifleman. Until 2019 it also showed little change in the Flora valley downstream of Flora Hut. But in 2020, 5MBC showed a massive decline. This followed a period of consistently high rat numbers. The decline prompted us to expand the monitoring programme to cover the range of altitudes found in the Flora area. Titipounamu counts at higher altitudes were higher. Since 2020, counts have slowly risen in the Flora valley, although there is still a long way to go to get back to 2019 levels. Counts have also risen in the 960-1100 m altitude band. We have just completed the 2024 counts, all 390 of them. These show the tītitipounamu recovery continuing and little change in any other species. Good news! Even better, tītitipounamu seem to have had a really good breeding season. While walking down from Tu Ao Wharepapa, we counted nine tītitipounamu families in the 1.8 km below Mt Arthur hut, and I've detected tītitipounamu in the Upper Grecian for the first time. Presumably the very low rat numbers present since the 1080 drop in March have enabled this successful breeding. Lets hope this is reflected in the 2025 counts.

Orthoclydon pseudostinaria - Robin Toy

Not a name that slips off the tongue, but it doesn't have a common name. Nevertheless, this moth is very special and very rare. It's in an exclusive, if unenviable, club of 25 moths with a threat classification of Nationally Critical. We found this one quite by chance, a first record for the Flora, indeed, there are very few records from anywhere. It shows again what a very special place the Flora is for invertebrates.

From the Chair – Sandy Toy

As another busy year draws to a close, FOF volunteers are well into a summer of biodiversity outcome monitoring. It's a core part of FOF's mahi and tells us whether we're achieving what we want to achieve, whether we need to change what we do, and what evidence of emerging threats we need to share. The alpine lizard and giant wētā tracking tunnel monitoring programme has just started. Even checking and re-marking the 191 tunnels before the start of the season was a mission with the team battling driving rain and southerlies that repeatedly knocked them off their feet. Yet the unique flora and fauna of Tu Ao Wharepapa are adapted to these harsh conditions, largely by finding refuges where conditions are more stable. Temperature dataloggers we've installed in the tussock grassland just above ground level reveal temperature fluctuations in excess of 55 C in summer and -10 C in winter! We hope they don't become more extreme with the climate crisis ramping up.

Last summer, an incursion of ferrets into the Flora threatened much of our most precious birdlife. A lot of work has gone on behind the scenes with DOC over the winter to design a trial to test trap-boxes for DOC 250 traps without risking our curious native birds – roroa, kea, and weka. FOF has partnered with our neighbours Farmers for Whio to strengthen the arsenal of traps on the eastern edge of the Flora and hopefully this will prevent ferrets from getting into the Flora. Thanks to everyone who has devoted their energy to this unforseen project and to our donors who made it possible to respond.

Dave Hansford's gorgeous new book *Kahurangi, the Nature of Kahurangi National Park and Northwest Nelson,* published by Potton & Burton, features Tu Ao Wharepapa|Mt Arthur on the cover. Dave's thoughtful writing is a reminder of how much work goes into looking after our beautiful backyard. It is also a call to arms because a nature-rich environment is not a 'nice to have'. It's essential to our wellbeing.

We are not surrounded by nature – we are an integral part of it. Our fates are tied to the fate of the natural world. It's a huge pleasure and privilege to drink from a clear sparkling stream, to watch kea riding the wind, calling in wild abandon and to gaze in wonder at towering forest trees. Robin's report on FOF's small bird monitoring results belies the joy of seeing a family of tiny young tītitipounamu fluttering around. I cannot imagine the Flora without their tinkling calls. Thank you to all FOF's volunteers, partners, and donors for caring for Kahurangi and helping to ensure that future generations can lead healthy and joyous lives, and experience the wonders of nature in the Flora, just as we do. I wish you all a happy and peaceful new year full of nature-rich experiences.

All aglow with mistletoe – one of the joys of volunteering in the Flora in December.

Photo: *Lesley Hadley*

Stop press, results from the annual whio survey are in!

Walk through-surveys of the monitored stretches of the Flora and the Grecian found 13 pairs of whio with 27 whiolings. And we've had reports of at least two additional families each with three ducklings outside the monitored stretches. That's a whopping 33 ducklings, most of which are well grown — a fantastic result helped no doubt by DOC's 1080 operation earlier in the year and the lack of aggressive late winter floods. It's especially pleasing that the resident pair at the top of the Grecian have four well-grown ducklings. Seems like the trap that caught three ferrets on that stretch of river at the beginning of the year did the job.

Paul Ewers caught this Whio family during the survey – how many beaks can you count?