

Midwinter in the Mamakus – Glover Farm 2nd August 2020

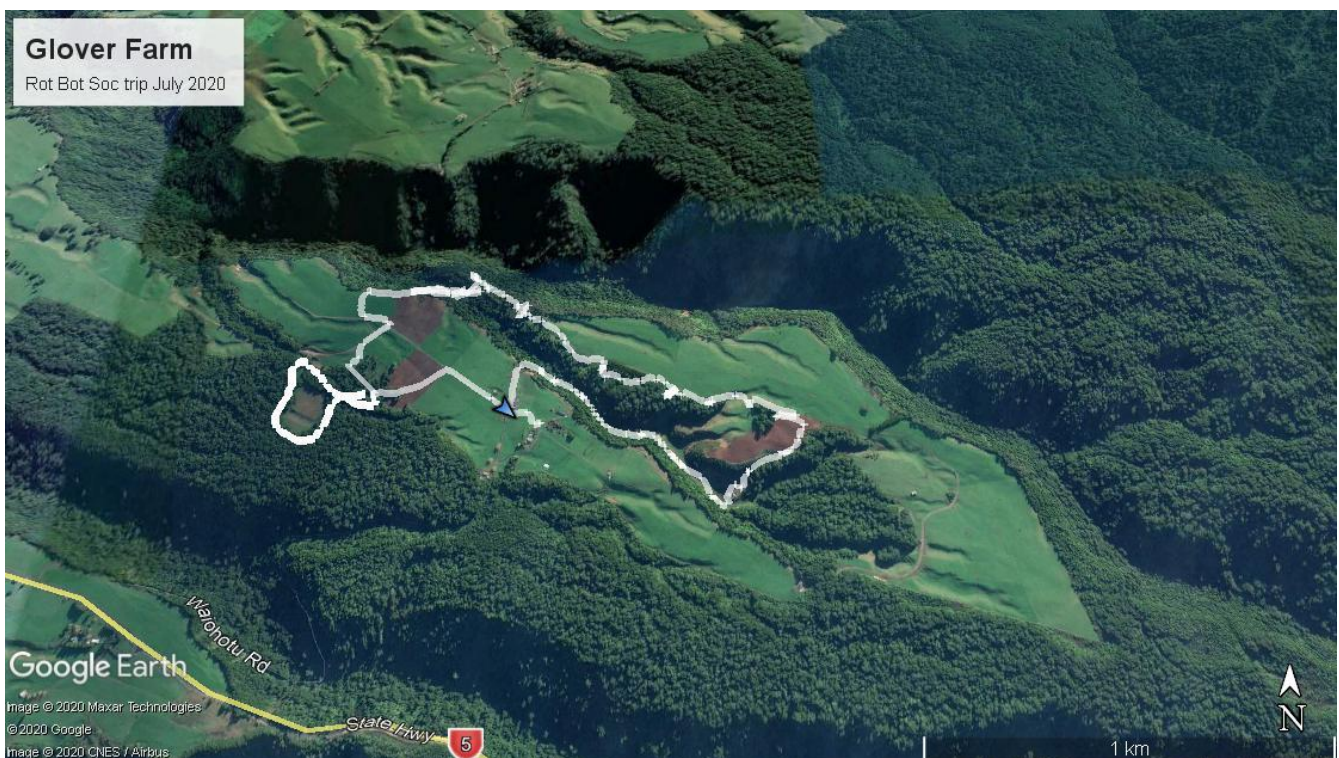
Jacqui Bond

All photos by Jacqui Bond

Last year's trip to the Glover farm had been cancelled due to a weather bomb so this year I was excited to get a solemn winter's morning with no wind or rain.

I found this spot a few years back while I was sniffing out Myrtaceae seed for the Department of Conservation's seed collection project in response to Myrtle Rust. It was suggested the edges of Selwyn Reserve off SH5 just before Fitzgerald Glade (western edge of the Mamaku Plateau) may be somewhere to try for climbing rata. I hadn't been to this reclusive reserve so thought I would take a look. While pulled over on the edge of Waiohotu Road staring at a climbing rata, a tractor came past with the local farmer wanting to know what I was up to. Expecting to have to defend myself I muttered something about saving the world from Myrtle Rust by collecting seed "Come to the farm", he said, "and meet my mother Rosie".

The Glovers' drystock farm is sandwiched between Selwyn Reserve to the south and the Kaimai Mamaku Forest Park to the north, a hole of pasture grass within a large native forest just at the western edge of the park. The farm is broken up by a large gully system (approx. 28 ha) of remnant native bush which has just been fenced and is in the process of becoming a QE2 covenant.



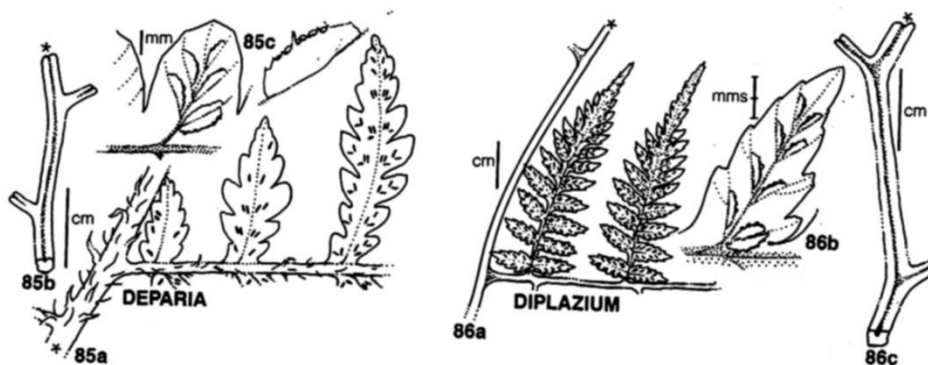
Map of the Glover farm. The white line shows the route we took around the gully.

The purpose of the trip on this winter's day was to explore the edges of this gully system from the farmland. Parts of this gully had been grazed in the past, making access easy to this forest edge and its regenerating native species.

This was a joint Waikato/Rotorua Botanical Society trip, attended by 27 botanists and plant enthusiasts from Te Awamutu, Hamilton, Tauranga, and Rotorua. We started the day with a briefing and a laminated map from Rosie Glover, then we walked down past the back of the house, past the sheds and began our journey through and around the farm gullies.

The area had been selectively logged for native timber in the past, but there was still a diverse range of native plant species, with many types of *Hymenophyllum*, rata, orchids and ground ferns. The predominant canopy species were tawa (*Beilschmiedia tawa*) and rewarewa (*Knightia excelsa*) with minor species of miro (*Prumnopitys ferruginea*), matai (*Prumnopitys taxifolia*), kahikatea (*Dacrycarpus dacrydioides*), titoki (*Alectryon excelsus*), hinau (*Elaeocarpus dentatus*) mangaeo (*Litsea calicaris*), porokaiwhiri (*Hedycarya arborea*) and pukatea (*Laurelia novae-zelandiae*). Some of the notable understory species were tauhinu (*Pomaderris amoena*), kanuka (*Kunzea robusta*) and the fern genus *Deparia* and *Diplazium*. My project for this trip (along with making sure everyone had fun and no one got lost, eaten or electrocuted) was to learn some new plant species. All those understory ferns look the same (don't they?) and we had some of the best botanists in the country; now was the time to learn how to identify them!

Deparia vs *Diplazium*? Despite some members of the trip saying the differences were obvious, the two ARE closely related! Both have an almost identical herringbone sori pattern but *Deparia* is a smaller fern with 2-3 pinnae, as opposed to 3 for *Diplazium*! If in doubt, for *Deparia* species, the groove of the rachis does not open at the junction into the groove of the pinna midrib.



The Image on far left shows the diagnostic groove pattern for *Deparia*, and on the right for *Diplazium*. Taken from: Brownsey, P.J and Galloway, T.N.H. 1987. A key to the genera of NZ ferns and allied plants.

At the start of our walk was a regenerating clump of kanuka. With kanuka recently separated into 10 species, the debate was ... which *Kunzea* were we looking at? Without examining microscopic hairs on branchlets the answer is simple, what species would be found there? Only one, *Kunzea robusta*, debate over!

Mangaeo, common to the central North Island was regenerating on the edges of the track. This commonly overlooked species, shouldn't be. It is a spreading medium-sized tree with smooth dark bark with distinctive shiny veined alternate leaves which have a thin white powdery coating on the underside. This genus comes from the tropics, however in New Zealand its strong hold is in the south of its range: Te Kuiti to Mokau and the Kaimai Range and Rotorua lakes. For at least 50 years mangaeo dieback has been documented, however, despite researching this phenomenon, its cause is still unknown.



As we arrived at the top of the gully the sun came out highlighting the spectacular epiphytes and climbers on the cattle chewed understory. While this forest had been recently fenced, cattle in the past had removed low vegetation letting light in, leading to the growth of colonies of clinging epiphytes on stems just above the chew line! In close quarters were: two species of bamboo orchid (*Earina autumnalis* and *Earina mucronata*), hound's tongue fern (*Microsorium pustulatum*), a flowering winter rata (*Metrosideros fulgens*) and *Astelia* sp. The microscopic *Bulbophyllum pygmaeum* was found on the ground, a potential 'widow maker'... in 500 years' time. This was also a perfect place to have lunch.

Scouting by the children found unusual grey feathers with a white spots and massive piles of pooh ... The debate was on, was it a Ruru roost? And then a screech and ID of the feather... Guinea fowl.

Improbably attached colony of epiphytes
– admired by Paul Cashmore



The botanical crew, lunching in a retired grazing site on the edge of the bush

We returned through a deep gully, where a track dove off down to a reputedly



Tauhinu on track margins

spectacular waterfall and bridge (not to be crossed), however we were running out of time. In an old clearing we needed to send the scouts to find our way out; they discovered a scrubby track pointing in the right direction. As we crawled up, the track margins had tauhinu, a species commonly seen in open scrublands but one I hadn't seen for a while. Wood from this species was reputed to make the best fishhooks (after bone), being moulded to the right shape while it was young and flexible.

This track was a hot spot for forest regeneration, with native *Carex* and rewarewa winning out over exotic

weed species. At the top we crossed the farm paddocks and headed for our last destination, old clearings in Selwyn Reserve still used as a forest camp site.

Taking some overgrown tracks, we found a small and large clearing with the surrounding forest making the most of these open spaces (presumably kept open by wild grazing animals). There was winter rata in flower and a variety of forest trees to be examined, followed by a short walk across paddocks to return to the house.



Exploring old clearings in Selwyn Reserve

I can see why the Glovers' farm is a popular spot for ramblers, pony clubs, weddings and school camps. The great hospitality of the Glovers in combination with old native forest with a long history of human use means a diverse flora which is tracked and easily accessible. There is a lot of regeneration of the bush in areas which have now been fenced off from cattle allowing large trees, climbers and epiphytes to be seen up close.

A big thanks to the generosity of the Glovers – Rosie and Lindsay – for being so welcoming and letting us access the bush through their farmland.



The remaining trekkers at the end of the day surrounding Rosie Glover with the map