

LAGOON ROAD FIELD TRIP AND HERBARIUM VISIT

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The traditional field trip on the day of the Annual General Meeting is always held in reasonably close proximity to Rotorua. This year on 6 June the trip was a morning excursion to wetlands off Roy Road/Lagoon Road, a side road of the Tauranga Direct Road, and an afternoon in the Forest Research herbarium considering the taxonomy of some of the more interesting finds of the morning.

An enthusiastic “multi-national” group proceeded to the end of Lagoon Road. Three wetlands were visited during the morning. They are all in the Mangorewa Forest Conservation Area, a former State Forest now administered by the Department of Conservation. The first (grid reference NZMS 260 U15 877520) is a somewhat degraded and grazed wetland which, judging by the old stumps and dead trunks, was a former swamp forest.

Wallace (1994) provides the following description of the expanse of open water: “This lagoon is about 1 to 1.5 metres deep in winter but usually dries out completely in summer. The margins have been mostly very modified by grazing and forestry operations. A large number of tree stumps occur throughout the lagoon (probably kahikatea and rimu); the demise of these trees is uncertain but it is likely the area has been burnt in the past.”

Water levels were definitely very high on the day of our visit, reflecting the recent heavy rainfall in the Rotorua District and the wider Bay of Plenty. Nevertheless we were able to botanise the margins and adjacent swampy hollows.

The grazing regime combined with a varying water level has promoted the development of a turf community. The turfs are a mixture of indigenous and exotic species. Small patches of remnant indigenous forest are present on the margins of the wetland. Vegetation types include *Juncus bulbosus-Myriophyllum pedunculatum-Eleocharis acuta* rushland, (kahikatea)/swamp coprosma-manuka-wheki-blackberry shrubland (with local grey willow), and pasture (Beadel 1995 and in press, Shaw and Beadel 1998).

We then moved to a smaller wetland on the other side of Lagoon Road (grid reference U15 885525). When WBS last visited this wetland it was unfenced and heavily grazed. It is now fenced and in much better condition. Manuka is scattered throughout on a series of small mounds, with *Sphagnum falcatulum* common in the wetter hollows between the mounds. An *Isolepis* species is locally common.

The third wetland (grid reference U15 885522) was the botanical highlight of the morning. This wetland is relatively intact and is in very good condition. The outer margin is kahikatea swamp forest. Swamp coprosma (*C. tenuicaulis*) is abundant, with *Baumea rubiginosa* and *B. tenax* also present.

The swamp forest grades into manuka-*Dracophyllum subulatum/Baumea arthrophylla-Gleichenia dicarpa/ Sphagnum cristatum-Nertera* sp. Other species present include Spanish heath (*Erica lusitanica*), toetoe (*Cortaderia fulvida*), kiokio (*Blechnum novae-zelandiae*-swamp form), *Carex dipsacea*, *Gahnia xanthocarpa*, spearwort (*Ranunculus flammula*), and *Galium palustre*.

Matata (fernbird) were heard calling in the shrubland.

It was a little disconcerting to find an infestation of ivy (*Hedera helix*) scrambling up a kahikatea on the swamp forest-pasture margin. This may reflect the likely former presence of a house in the immediate locality.

After lunch the group then proceeded to the Forest Research herbarium for the afternoon. Members were briefed by Chris Ecroyd on the procedures to follow to assist in accurate identification of the plants collected from the morning field trip. An initial division into dicots and monocots was made as both had been collected. In some cases the family or genera was easily determined, in other cases a little direction was necessary to start people on the right track.

Owing to the time of year (early winter) some specimens lacked useful diagnostic features such as flowers, and closer attention had to be paid to other aspects, e.g. whether there were stipules at the base of the leaf stalks; whether the leaves were rounded or pointed (dicots); how thick the leaves were; whether the margins were hairy or smooth?

“Wetland plants in New Zealand” by Johnson and Brooke was an indispensable reference with an easily understood text with useful drawings. Within the herbarium the availability of voucher specimens and microscopes made the identification process much less daunting. *Nertera* “sp.” became *Nertera depressa*, and along the way we learnt a little bit about *N. ciliata* and *N. scapanioides*. And so on. Not all specimens were identified but it was still useful to learn what something wasn’t!

Thanks to Chris Ecroyd for making available the Herbarium facilities and his expertise.

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