



**Figure 19** Yellow mistletoe (*Alepis flavida*) hosted on hard beech.

All through the covenant area we saw traps for animal pests. It quickly became obvious to us that the area was lovingly looked after by enthusiastic and knowledgeable landowners. A species list was compiled, with a copy provided for Maria and Scott as thanks.

## **HEBES OF THE SUMMER CAMP 9-15 JANUARY 2015**

**Alastair Macdonald**

Day 1 saw us heading up the DOC 4WD road to the Red Hills hut a long, steep and winding 7 km above the Wairau Valley in conjunction with the Wellington Botanical Society in a convoy of six vehicles and about 30 people. The red serpentine rock outcrop made the botany very interesting as there are species up there that are not found anywhere else.

As we came up the road we saw *Hebe leiophylla* on the track sides inside the beech forest. *Hebe leiophylla* is a tall spindly hebe of about 0.75-1.5 m. It has a rounded leaf bud sinus characteristically surrounded by hair from the lower leaf and petiole margin. The leaves are usually 15-40 x 4-8 mm

and sometimes have an orange tinge to the leaf margins with green branchlets.

On the bush edges we saw *Hebe vernicosa* with its straggly habit up to about 0.5 m tall with distinctly distichous leaves (the petioles being twisted so the leaves all face one direction). The branchlets are green. If in flower the anthers are white.

Above the bush line we came across *Hebe canterburiensis* that looks much like *H. vernicosa*, but is distinguished by being nearly always above the bush line in the open areas. The leaves are seldom distichous, the branchlets are red-brown, and, if in flower, the anthers are purple.

Out in the open grassland that is dotted with manuka, we saw the rare *Hebe carnosula* (Fig. 20, p 63), which is not found outside the red Marlborough serpentine rock belt. *Hebe carnosula* forms an upright but rather spreading bush 0.5-1 m high with glaucous leaves, cream leaf edges and purplish branchlets. The leaf sinus gap is purple as the branchlet under it shows through.

After lunch at the tarns and watching a falcon hunt we found numerous plants of *Hebe odora* living in the bog areas near the tarns. They were rather small plants with the characteristics of having a shield shaped sinus, a distinct leaf bud, and terminal as well as lateral flower spikes.

On Day 2 we explored a QEII covenant of a patch of lowland streamside bush in the Stanley Valley. Here we found *Hebe salicifolia* and *H. leiophylla*.

Day 3 found us heading up the 4WD track to Beeby's Knob with just our two 4WDs and 8 people. We were to encounter 10 *Hebe* this day. On the way up and inside the bush we once again saw *H. leiophylla* and *H. vernicosa* with *H. canterburiensis* seen above the bush line. We drove on to the Beeby's hut on a steep but not so rough track of about 7.5 km, and then botanised on our way back to the bush line.

The country up there was almost tundra-like with plenty of mat grass and small ground hugging shrubs and herbs. Poking its head above the mat grass was the straggly *Hebe macrantha* var. *brachyphylla*, mostly in flower. It has the largest hebe flower at nearly 20 mm wide. The plant has several pairs of teeth on each leaf with the upper leaf edges reddish. The leaf bud diverges early leaving an indistinct leaf bud.

There were two whipcord hebe living next and even amongst each other in the grassland and open areas each with quite distinct characters that set them easily apart from the other. *Hebe lycopodioides* is a small spreading rather dense shrub, orange to green in overall colour with the branchlets standing up at the ends forming sometimes large mats of up to

1–1.5 m across. This is a very small form of *H. lycopodioides* but, with the use of a 10x lens, one could see the sharp mucronate leaf tip, straight leaf back and 2–4 small stripes running down from the top leaf edge to near the base. This is nearly its northern limit and certainly its western limit in Nelson as it does not cross the Motueka River. The other whipcord hebe is *H. hectorii* ssp. *coarctata* (Fig. 21, p 63), easily distinguished by being green to yellowish in colour, with rounded leaf backs, and rounded leaf tip with no mucro or stripes. This plant is rather straggly and not forming compact upright mats.

On our way down Trevor Blogg said “This looks like an interesting spot, let’s stop here.” So we stopped and not 10 m away we found a sole plant of *Hebe decumbens* that is not recorded north of the Wairau River. But there it was (Fig. 22, p. 63). It sports shiny green leaves with red edges and purple branchlets, and the upright habit of the Marlborough form of this species. Small green mounds scattered throughout the tundra turned out to be *Hebe masoniae*, which has small rounded leaves of about 6-9 x 4-8 mm. It is easily differentiated from *H. odora* because the leaf bud diverges early in the bud, and from *H. pauciramosa* with there being no flattened under-leaf keel near the tip. In flower it has four terminal spreading racemes whereas *H. odora* has one terminal raceme and several lateral racemes, and *H. pauciramosa* has lateral racemes only.

We also found *Hebe odora*, which is distinct as having leaf bud distinct with no early divergence and flowers lateral in 4-5 spikes, and one upright terminal spike. Further down the track we found 5-6 plants, one in full flower, of *Hebe cryptomorpha* (Fig. 23, p. 64). A variable plant with leaves ranging from long narrow to rounded dish shaped. The characteristics are glaucous leaf undersides and green leaf top sides, a beautiful tall compact bush about 0.5 to 1 m tall.

On Day 4 we headed up to the Mount Arthur area to the Flora Saddle car park. Several of the party set out to top Mount Arthur and on our way came across two substrates: marble, the more prolific, and a band of what looked like greywacke. The botany of the greywacke is much different from that of the marble.

The first two hebe we found were *H. albicans* and *H. topiaria*, both glaucous shrubs but each its own shade of blue and quite distinct. *Hebe topiaria* with a greenish blue and yellowish leaf edges and small mucronate yellowish point, and *H. albicans* with a more bluish blue, opaque leaf edges, and pointed but not mucronate leaf tip. *Hebe topiaria* is a small-leaved upright, compact, round headed shrub 0.5-2 m tall, whereas *H. albicans* is a larger leaved, straggly, low growing shrub up to 1 m across to usually 0.5 m tall, except where it grows in the bush where it can be up to 1.5 m tall.



**Figure 20** *Hebe carnosula*.



**Figure 21** *Hebe hectorii* ssp. *coarctata*.

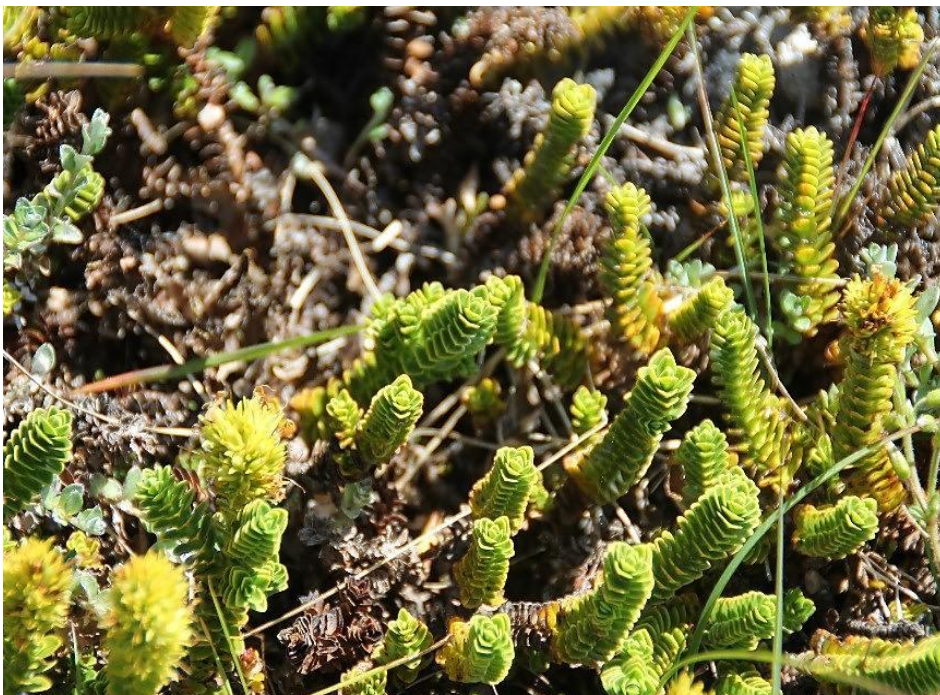


**Figure 22** *Hebe decumbens*.

On the marble we found *Hebe macrocalyx* var. *humilis* (Fig. 24), a small low-growing, spreading shrub with the soft leaves very crowded on the branchlet with mostly red edges and a compact terminal flower spike. On the greywacke we found the semi whipcord *Leonohebe ciliolata*, which was not found on the marble. *Leonohebe ciliolata* is a very small, compact, low growing, spreading shrub with deep cruciform branchlets in cross section. It has large but short hairs on the upper leaf margins, hence the name, and the leaf tip is thickened to a cube shape with a small water pore in the centre of the cubical tip seen under a 10x hand lens.



**Figure 23** *Hebe cryptomorpha*.



**Figure 24** *Hebe macrocalyx* var. *humilis*.

Amongst the grassland were plenty of the low, compact, round headed *Hebe masoniae*. Also in the grassland were plenty of *Hebe hectorii* ssp. *coarctata* with a great variety of habit from strong upright plants to 0.5 m tall to small straggly shrubs to only 0.1 m tall. Also in the grassland we saw *Hebe macrantha* var. *brachyphylla*.

Then we came across the spectacular *Hebe ochracea*, a rare whipcord hebe found only on the marble in north-west Nelson. From a distance they show as large patches of orange-red vegetation sprawling amongst the grassland. I saw four such patches and climbed down to see two of them. *Hebe ochracea* has bright orange to red foliage and is a low spreading shrub to about 2 m across and 0.5 m high, some were covered in masses of terminal flowers. It looks nothing like the popular 'Hebe James Stirling' from your local nursery. Heading back and just above and in the bush line we saw *H. canterburiensis* and *H. vernicosa*.

Day 5 was a long steep and rough 4WD drive up Mount Campbell, 15 km and a vertical climb of 1270 m. The cloud hung low so the views were not great, but we set out for Hoary Head on a 5 km trip that rose and fell over 1350 m.

There was not much in the way of hebe, but one plant was spectacular in its abundance and size of individual shrubs and that was *Hebe topiaria*. In places it was the dominant vegetation with large spherical shrubs to 2 m tall and 2 m across. Higher up it was scattered all through the open scrubland. *Hebe albicans* was scattered through the open scrublands too, with some plants inside the bush looking very *H. glaucophylla*-like. We also saw *Hebe canterburiensis* and *H. vernicosa* in and near the bush line. When we got up to the top of Hoary Head we found *H. macrocalyx* var. *humilis* in cracks in the solid marble.

On the whole this was a very interesting camp. The highlights for me were seeing *Hebe carnosula* for the first time and seeing *Myosotis arnoldii* and *Clematis marmoraria* on the top of Hoary Head. Thanks Trevor Blogg for a great camp.

*This report first appeared in the Canterbury Botanical Society Newsletter in 2015.*