

ANOTHER LOCALITY FOR BOTRYCHIUM LUNARIA:

BILLIES KNOB, NORTH-WEST NELSON

TONY DRUCE

In Journal 15, 1981 I recorded Botrychium lunaria from Hoary Head, N.W. Nelson, and ended by saying '..... surely Botrychium lunaria is elsewhere on the 'marbleous' mountains of N.W. Nelson - Mt. Arthur, Mt. Owen, etc.' I can now say: yes, it is elsewhere, but not everywhere, and not, as far as we know, on either Mt. Arthur or Mt. Owen.

In January 1982 eight members of the Wellington Botanical Society spent three days on the Arthur Range between Mt. Arthur and the Twins. We searched hundreds of areas of short herbfield of the type in which B. lunaria was found growing on Hoary Head, but without success.

Then in January 1983 the Wellington Botanical Society had its Anniversary weekend trip to Mt. Owen. Again we searched, and again we failed to find B. lunaria. After the main party left ten of us stayed on to visit the neighbouring Turks Cap Range. As luck would have it we had fine weather there so were able to return a day early to Granity Pass, our base for Mt. Owen. What better could we do than to spend the extra day on the marble mountain straight in front of us - Billies Knob. After a steep climb we came out on a tableland at about 1500m, some 150m below the summit. We were at the top of a long, gentle slope leading north-west to a series of sink-holes. If short herbfields were to be present on the sides of these then we would be in 'B. lunaria territory' once again. Besides B. lunaria we were also looking for Pterostylus cycnocephala, another plant of short herbfield at high altitude in N.W. Nelson.

We hadn't gone far down slope before the first plants of P. cycnocephala were found. As we got closer to the sinkholes we could see that short herbfield was indeed present. Our pace quickened and Ted Abraham soon found the first B. lunaria. Many more followed, the frond of each just emerging from the centimetre-high turf. This kind of herbfield is dependent on the late-melting of snow that has accumulated in the hollows over winter. Snow tussock, Chionochoa pallens and the other relatively tall plants surrounding the hollows are unable to tolerate

these conditions. We looked at a number of hollows with short herbfield and in each found P. cynocephala or B. lunaria, sometimes both.

A specimen of B. lunaria has been sent to Botany Division herbarium, Lincoln. The grid reference is NZMS 1 S19 976 008.

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Aids to Identification - ERICACEAE

Ross Elder

Assuming one can identify Gaultheria and Pernettya from other shrubs the following may help to separate the Canterbury species of these two genera.

Fr a dry capsule (dry, dehiscent fr.); lvs with distinctly toothed margin, teeth often apiculate ..... Gaultheria

Fls solitary and axillary; white, pink or red, fleshy calyx surrounding fruit.

G. depressa: scrambling shrub:

var. depressa: teeth on marginal serrations of leaf armed with long persistent bristles.

var. novae-zelandiae: teeth not armed with bristles when mature.

G. antipoda: erect bushy shrub.

Fls in racemes:

G. crassa: Lvs 10-20 x 10mm, thick and coriaceous

G. ruprestris (incl. G. subcormybos): Lvs 20-40 x 10mm.

Fr a berry (succulent fr): lvs either linear with 10 or less teeth, or margins indistinctly toothed ..... Pernettya  
(The calyx may be swollen in Pernettya but the fruit sits on it or is only partially surrounded. The true P. macrostigma should have linear leaves and pink fruit).

P. macrostigma: lvs 6-12 x 1-1.5mm

P. alpina: lvs 3-7 x 2-4mm

P. nana: lvs 2-4 x 0.5-1.5mm

Look out for hybrids as they are very common. G. antipoda is known to hybridise with all other species of Gaultheria and the 3 species of Pernettya.