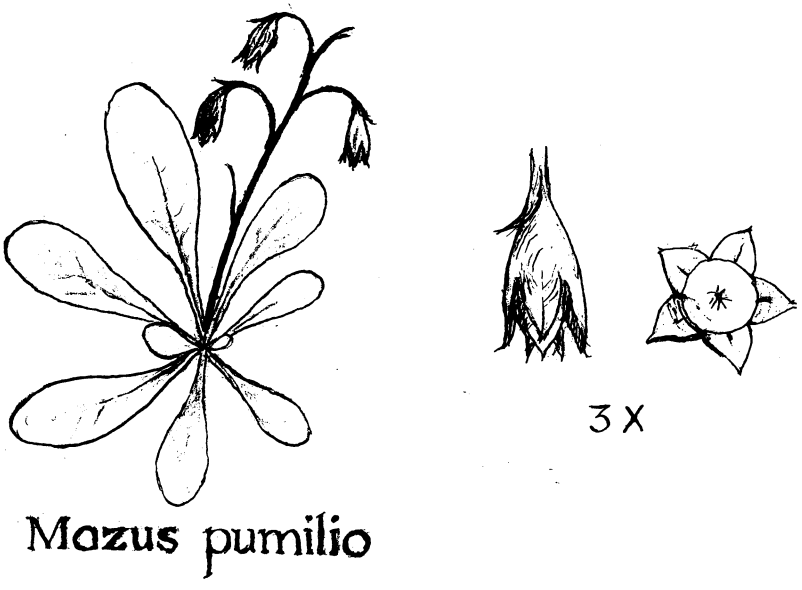
tion of Juncus sp. Hypochaeris glabra, Scirpus nodosus, or other damp area plants.

Mr. Cecil Dunn's drawing shows M. pumilio in fruit. You will note that all the capsules are arranged in one plane.

I wish to thank Mr. Peter Johnson, Miss Bryony Macmillan, Miss Mary Barker and Mr. H.G. Gilpin for their help in supplying information on this interesting species and to Mr. Cecil Dunn for his drawing.



DISTRIBUTION MAPS OF HEBE IN CANTERBURY AS AN EXTENSION OF THE CANTERBURY CHECKLIST

A.D. Macdonald

A series of maps has been compiled using specimens in the D.S.I.R. herbarium (including the herbarium from the Canterbury Museum), and the herbarium of Canterbury University. I thank the curators of the herbaria for their permission to use the specimens and for their assistance. I have checked the names of the specimens, found their localities on the topographical maps and placed the

symbols on the base maps provided by the D.S.I.R. The fine grid at the margin of the map represents the grid of blue lines on the topographical maps NZMS 18 and NZMS 1, i.e. 10,000 yard or about 9 kilometre squares.

The main point of discussion with these maps will be the gaps in the distribution of the species. These occur for two reasons: (1) the plant does not grow there, or (2) no collecting has been done in the area, especially in some of the more isolated gaps. In more accessible gap areas it could be that a person seeing a hebe thinks "It's supposed to be here, leave it" and consequently no specimen is taken. For example square 52/60 on the east side of Arthur's Pass highway from Lake Pearson to south of Craigieburn Cutting, has only one hebe, H. brachysiphon, recorded from it, although thirteen species grow in the region.

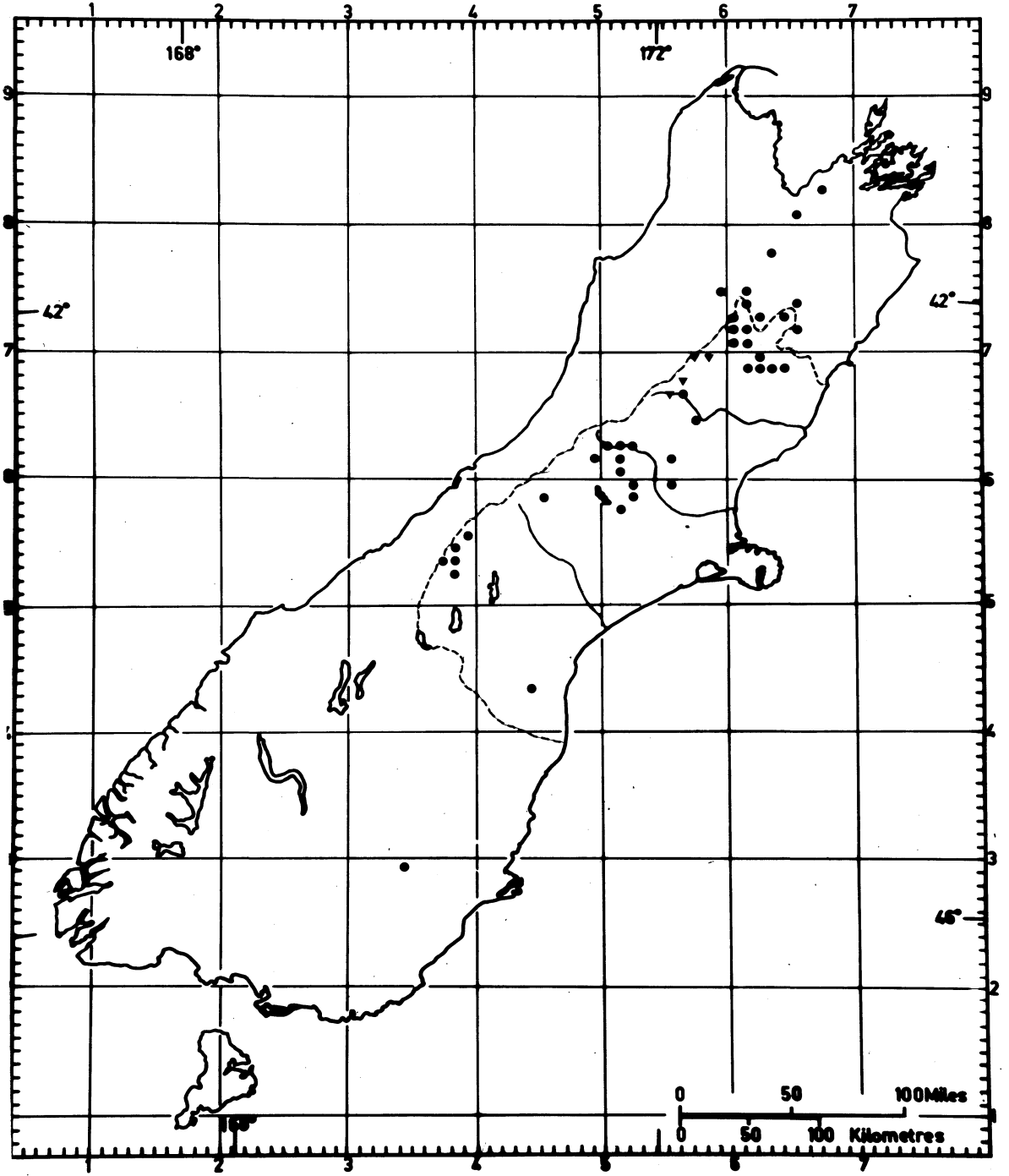
The work that I am doing does not stop now that the maps are finished, on the contrary, I must now go about filling in the more pertinent gaps and we, the members of the Botanical Society, are the ones to do this. When you go on that picnic, camp, field trip, stroll or strenuous climb, select one or two only, good cuttings of each Hebe you see in that area. I would be only too happy for you to send them to me direct. I can then process them and record them on our distribution maps ready for future publication of an updated series.

How do you send cuttings?

(a) Wrap the lower stems in sphagnum moss or wetted newspaper.

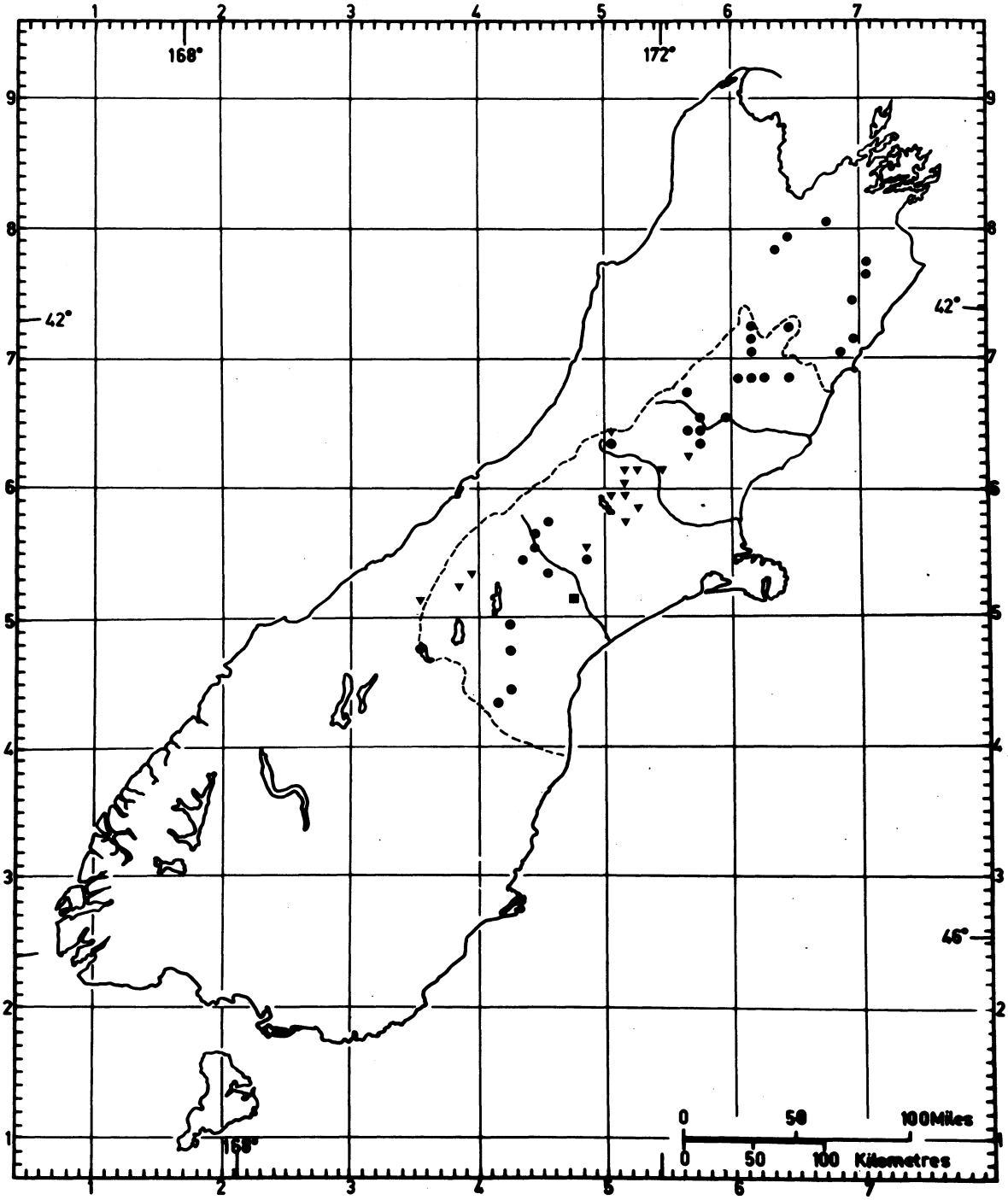
(b) Put the bottoms of the wetted plants into a plastic bag, held with a rubber band, not too tight, and with the plant tops poking out.

(c) Wrap all this in some shock absorbing material, honeycombed cardboard, or air cell plastic, or thin foam rubber etc. and send to me at Dunsandel Road, Dunsandel.



Map 1 Hebe lycopodioides var. lycopodioides ●

Hebe lycopodioides var. patula ▼



Map 2 Hebe tetrasticha ▼ Hebe cheesemanii ● Growing together ■

MAP 1 - HEBE LYCOPODIOIDES

Hebe lycopodioides is a yellow green whipcord which grows in tussock and grass mountainsides above the bush line, usually above about 3,500 feet. It is widespread from Dun Mountain east of Nelson city, to the Kirkliston Range in South Canterbury, and as far south as the vicinity of Lake Wakatipu.

There are two varieties. Var. lycopodioides is upright and straight to 1m tall, with branchlets approximately 3mm wide. The leaf edges are incurved below the tip which is long and more or less an extension of the keel. Var. patula is low and decumbent with the branchlet tips upright to 10cm. The branchlets are under 2mm wide. The leaf edges are straight and the acute tip not projected.

One gap in the distribution of var. lycopodioides, in the Lewis Pass area, is filled by var. patula. Other gaps are from Lake Sumner south to the Poulter River; and from Lake Coleridge to the Mt. Cook area except the head of the Rakaia River. Var. patula has not been collected in the middle of its range. It is known from the Lewis Pass and Mt. Technical but not again till the Hope and Amuri Pass areas north of Lake Sumner.

Many more records of this hebe are needed to get a true picture of its distribution especially from the Hurunui, the Cox and Poulter Rivers, the Rangitata River, the Two Thumb Range and the Ben Ohau Range.

MAP 2 - HEBE TETRASTICHA AND HEBE CHEESEMANII

Both these hebes are found on stable to semi-stable rock outcrops on the higher slopes, or rocky mountain tops, mostly above 2,500 feet. They are small rather similar dull green plants of the whipcord form. H. tetrasticha is known in the Arthur's Pass area and east to the Puketeraki Range, then not again until the North Ashburton River and Mt. Cook regions. H. cheesemanii is known to me from the Richmond Range east of Nelson city, to the Kirkliston Range in South Canterbury.

At a glance these two hebes look much the same and could easily be confused, but on a closer look we see the differences. The cross-section of the twig of H. tetrasticha has the form of a cross, whereas in H. cheesemanii it is square. The leaves of H. tetrasticha have straight edges with thick almost transparent cilia and rather narrow tips, compared with the rounded edges with fine white cilia and rounded tip of H. cheesemanii. H. tetrasticha has numerous flowers at the end of each twig, with the calyx and the corolla lobes the same length as the corolla tube. H. cheesemanii has few flowers at the tip of each twig, with the calyx and the corolla lobes bigger than the corolla tube. Although the inflorescences often hide the branchlet tips, they are lateral in both species.

There are some interesting points in the distribution of these two hebes. H. cheesemanii seems to be replaced by H. tetrasticha

between the Puketeraki Range and Lake Coleridge. As yet only at Mt. Peel by the Rangitata River have the two species been collected in the same area.

There are many places to look for each of the species as can be seen when you relate the empty grid squares on the map to the topographical maps.

H. tetrasticha gaps are: between Lake Coleridge and the Tasman river in the Mt. Cook region; the Lake Lyndon-Porter river area including Porter Heights ski field (I've seen it there myself but not taken a specimen!); Mt. Bealey; the Black Range above the Waimakariri road bridge; the Grey Range at the head of the Harper river; east of the Arthur's Pass H/way from Castle Hill to Lake Pearson as far east as Lees Valley, including the Broken river side of the Torlesse Range; Mt. Binser above the Mt. White road; the Ben More end of the Big Ben Range on the 13 mile bush side; any of the mountains surrounding Lake Coleridge, Kaka Hill, Mt. Cotton, Mt. Oakden and Peak Hill.

H. cheesemanii gaps are: anywhere north and east of Hanmer; north of Mt. St. Patrick to south of Fowlers Pass; the head of the Pahau River south of the Lewis H/way 4 miles west of the Hanmer turn off; the Hurunui River mountains east of the Hooligan to Hurunui Peak at the top of the Balmoral plantation; the head of the Esk river at Mt. Esk Head.

Any specimens of either species from south of Lake Coleridge would be welcome.

PARSONSIA HETEROPHYLLA - A PINK FORM

Joe Cartman

On Saturday 24th November, 1979 the Botanical Society visited forest remnants at Coopers Creek.

Among the plants growing in this area were some fine lianes of Parsonsia heterophylla in full flower. The flowers were the usual creamy white except for two plants growing near to each other. One had a faint tinge of pink to the flowers but the other was a really fine pale pink colour. The pink was on the outside of the flower tube and petals, the inside was cream with a very faint shade of pink showing through from the outside.

This plant was growing on a hawthorn tree that had been felled some months earlier. This made observation easy without resort to climbing.

Some flowers on the sunny side of the plant showed some bleaching of colour, flowers in the shade were a more pronounced pink.

Cuttings were taken and are now growing well.