complete records when you are botanizing. If you are collecting, in a notebook which includes notes about each collecting locality, give each specimen a number (by year and including your initials is most convenient, I.E. C.B. 69 121) and label the specimen with the same number. This is known as the collectors number and it can be very useful in keeping track of localities of collection and in tracing misplaced specimens.

From the point of view of critical records, and this applies especially to the less commonplace species, species near or outside the known limit of their distribution, possible hybrids or other unusual specimens, or if you are collecting in a little-frequented area, it is esstential to have full notes and, if possible specimens which can be placed in one of the larger herbaria. These vouch for the authenticity of the discoveries. Unless the plant is rare, in which case notes should only be made, collect a specimen, preferably in duplicate, press and dry it, record the locality fully and habitat, altitude and any other relevant information.

If you have your own herbarium you may wish to keep a specimen but for critical records it is best to have at least one specimen housed in one or more of the larger herbaria such as that of Botany Division, D.S.I.R., or the University. Then it is accessible to any scientist investigating particular problems. The herbaria are always willing to accept such specimens.

It is essential for ecologists and others wanting to use distributional data to be able to refer to herbarium specimens and it is surprising how few of these there are for even some of the commonplace species (as can be seen from the Biological Flora maps).

It has been tacit until now that I have been talking about native species, but interesting distributions of intoduced plants should be treated in the same way.

SEASONAL CHANGES IN A CHRISTCHURCH LAWN

by Bryony Macmillan

Marked changes in the appearance of a lawn in the north west of Christchurch (N.Z.M.S.1. S84:960585) reflect the relative vigor of different plants in the different seasons. The lawn is unshaded and flat, on light sandy soil, and has been maintained by mowing, as short turf, for forty years. It is neither weeded nor watered.

By recording the leaves touched by a pointer lowered vertically at 10 centimetre square intervals over a fixed square metre, these figures were obtained:

	20 July 1968	10 Nov. 1968	23 Mar. 1969
Narrow-leaved and tufted plants			
Festuca rubra ssp. *commutata* Chewings fescue *Agrostis tenuis* and browntop	27	38	33

Carex breviculmis	0	0	34
Brachythecium albicans moss	28	0	1
Rosette plants			
Plantago lanceolata narrow-leaved plantain	19	21	23
Hypochaeris radicata catsear	12	25	6
Crepis capillaris hawksbeard	15	3	10
Bellis perennis daisy	1	2	1
Broad-leaved and rhizomatous plants			
Dichondra repens dichondra	7	6	7
Prunella vulgaris selfheal	2	4	0
Trifolium repens white clover	1	14	4
Trifolium dubium suckling clover	5	2	0
Cerastium holosteoides mouse-ear chick-weed	2	3	1
Oxalis corniculata	0	3	0
Achillea millefolium yarrow	0	0	1
A pinnately branched moss	2	0	0

The tufted moss Brachythecium albicans which gives the lawn its soft yellow-green patches in winter, is overtopped and obscured by the grasses, carex and rosette plants in spring and summer, when the air moisture at ground level is low. The rosette plants, unshaded by the continually mown grasses, have their leaves pressed to the ground, so preventing the spread of the smaller leaved plants.

In the dry conditions of March, the catsear and hawksbeard have purple colouring in their leaves, with conspicuous hairs on the upper surfaces. Carex breviculmis is best able to withstand drought and is vigorous when other mat-formers have wilted.

Further reading:

"Weeds of turf" by A.J. Healy in Proceedings of N.Z. Institute for Turf Culture Conferences, 1956 and 1957, 11 pp.

"The Living Garden or the How and Why of Garden Life" by E.J. Salisbury. G. Bell & Sons ed.2, 1942, 232 pp.

BOOK REVIEW

by John Thompson

"New Zealand Mosses" by Sheila Natusch

A booklet of this size can only deal with a few of the more common species of the wide variety of mosses that can be found in New Zealand. The author has a pleasant style and describes well the interesting life history of these lowly plants. She supplies much interesting information though little attempt is made towards the identifaction of the mosses mentioned.

Some of the two dozen illustrations are excellent and most of them help in identifaction of genera. Some indication of the scale of the drawings would be of further assistance.