

# The Vegetation of Tasmania

At the meeting on November 15, Professor Gordon gave an address to the Society on the vegetation of Tasmania, a country which he left in 1947 in order to take up his position at Victoria University College.

Tasmania lies in the same climatic zone as New Zealand and covers roughly the same degrees of latitude as the northern half of the South Island and the southern tip of the North Island. The two countries experience similar weather with regular shifts in the wind from westerlies to southerlies. Maps were shown giving the distribution of the rainfall and the main features of the relief. Most of the western half is high country with a rainfall of up to 100 inches, whereas most of the east side, with the exception of a small area of high country in the north-east, is low or hilly with a light rainfall (as little as 10 inches in places). The distribution of the different types of vegetation is dependent mainly on the relief and rainfall, and to a lesser extent on drainage of the soil.

Sclerophyllous forest, dominated by various species of *Eucalyptus* and other tough-leaved plants, covers most of the lower and drier parts of the country on the east. In the low rainfall areas where the trees are scattered about thinly the vegetation is termed savannah, but such areas are not extensive. Actually there is a series of forests ranging from "thin" to "thick" as the rainfall increases. Grass-trees (*Xanthorrhoea*) with its tall flowering spikes is a conspicuous plant in the "thin" forest areas. At first acquaintance there appears to be a great uniformity amongst the eucalypt forests. Instead of a number of distinct types of forest, different species of *Eucalyptus* grow in different conditions and the varying nature of the forests only becomes apparent after more detailed study. As a result of the open canopy a dense shrub layer occurs in most eucalypt forests. In springtime a large number of leguminous plants may be seen in flower, the predominant colour being yellow.

In the wetter areas, mainly on the west side, dense rain forest clothes much of the country. An evergreen beech (*Nothofagus cunninghamii*), the Tasmanian equivalent of the New Zealand silver beech (*N. menziesii*), is the dominant tree, and the forest in general appearance is quite like some of the New Zealand beech forests. Several species of podocarps grow in the forest but apparently do not form pure stands; they are much sought after by "piners" (timber millers). On ridges, because of the drier soil, eucalyptus forest is often found in place of the beech; just as in the drier areas beech replaces eucalyptus on the wetter slopes. A feature of the forests in springtime is the mosaic of different colours provided by the young growth of the beech trees.

Button-grass, a moorland type of vegetation on peaty soil, is characteristic of the poorly-drained glaciated valleys in the mountains. Where the rainfall is sufficiently high the button-grass even extends up the valley sides. The button-grass plant, really a sedge, forms large tussocks or mounds which can make progress through such areas slow and tedious. Where the button-grass plains are traversed by rivers or streams, drainage of the adjacent land takes place and strips of forest grow instead of sedge.

A number of different types of mountain vegetation were illustrated by photographs. In general there is a dense scrub of tough or spiky-leaved plants above the forest. The beautiful flowers of many of them contrast strongly with their rather harsh foliage, and plants with similar leaves often turn out to belong to widely separated families when seen in flower. The deciduous beech (*Nothofagus gunnii*) is a small mountain tree but does not form extensive forests as does the other Tasmanian species (*N. cunninghamii*) already mentioned. The eucalypts of the mountains are different from the lowland species, and range in size from small trees down to prostrate shrubs. Most of the scrub is fairly tall, and low scrub, such as is frequently found in New Zealand is not usual. Mats of *astelia* (*A. alpina*, the only species in Tasmania) are to be seen in the mountains, usually in flat boggy areas. Above the scrub there are the plants of rocks, cliffs and moors, among them the New Zealand plants *Donatia* and *Phyllacne*, the latter only recently discovered in Tasmania.

In many of the photographs shown one was impressed by the magnificent scenery: the mountains with their characteristic "columnar crags and precipices" are the "bold residuals" of an ancient plateau of dolerite overlying sandstone.

The plants of New Zealand are for the most part endemic; but of the botanically related countries Tasmania is probably the closest, so we were fortunate indeed in having Professor Gordon give us such a clear and interesting account of the vegetation. A.P.D.

## Fungi

Dr. Cone has spent many of her spare hours studying and drawing the numerous fungi to be found in New Zealand. It was with great interest therefore that we listened to her talk on September 20. In her introduction Dr. Cone discussed the nature of fungi and the different groups to which they belong. For her main subject she chose the higher fungi, particularly the agarics, or mushrooms and toadstools, in which she is especially interested. By means of numerous drawings, some in colour, she gave us a very good idea of the diversity and beauty to be found in these fungi.

Following the lecture Dr. Cone kindly consented to write some notes on mushrooms and toadstools for the Bulletin. These, together with an identification key and some drawings of common species, appear on the following pages. A.P.D.