

THE VEGETATION OF THE RUAHINE MOUNTAINS.

A hundred years ago Colenso made his first ascent of the Ruahine Range, which includes the type localities of many of his species. Some 70 years later Mr. B. C. Aston published an account of the plants of the parts of the Range that he visited from 1911 to 1914. On June 19th last our Society heard from Mr. Druce a summary of the results of work carried out in the area during recent years by a small group of enthusiasts under the leadership of Mr. Norman Elder of Havelock North.

Reaching a greater height than the Tararuas (the highest points are New Hikurangi and Rangio-te-Atua, both just under 5600'), the Ruahines show several sharp differences from the range south of the Manawatu Gorge. The most striking is the presence of Nothofagus cliffortioides in place of the N. menziesii of the Tararuas (due to the drier climate), the abundance of shingle slips, and the higher maximum timber-line -- about 4400' compared with 4000' for the Tararuas.

The contrasts in vegetation within the Ruahines themselves were illustrated by descriptions of ascents of the range from different aspects.

In the southern Ruahines, stretching from the Manawatu Gorge to a little north of Dannevirke, the range rises abruptly from the plains, the forest being kamahi-rimu-rata to nearly 2000'. Then kamahi is dominant to about 3000', above which is a tight scrub of Olearia colensoi. (It was on the Ruahines that Colenso met the leatherwood for the first time.) No beech has been seen here at all, its absence and the consequent lowered timber-line (3000') being thought due to persistent fog. In one year the fog was down on about 260 days.

The central and eastern Ruahines may be approached from Waipawa by crossing about 30 miles of plains. Here the climate is somewhat drier, and there is less fog. The land is farmed to about 2000'. The forest is of red beech (N. fusca), then mountain beech (N. cliffortioides), giving way at about 4400' to open tussock.

In the western Ruahines, red beech, together with a certain amount of mountain beech, reaches to about 3500', then Libocedrus, which is absent from the Tararuas, comes in an open association with scrub. Above 4000' there is scrub followed by tussock. The comparative rarity of N. cliffortioides is probably due to the greater amount of fog on the western slopes of the range. N. menziesii is found in a small part of the western Ruahines and nowhere else. On the south-west end of the range, above red beech, there is Dacrydium biforme, followed by extensive Olearia colensoi scrub.

The northern Ruahines are not so rugged as much of the main range, and are characterized by the forest covering being discontinuous. The north-eastern part has been much altered, but even so the now scattered Nothofagus probably never completely covered the range. In parts there is evidence of forest destruction by pumice showers. The north-western part consists of an extensive limestone plateau between 3000' and 4000', with typical cliffs, potholes, etc. Most of the area is dominated by the red tussock (Danthonia rigida), not the snow tussock of the rest of the Ruahines. Insufficient rainfall and the very boggy nature of much of the flatter parts probably contribute to the discontinuous nature of the forest, which, when it occurs, may be red beech, mountain beech, or Libocedrus. The north-western Ruahines have provided many new species records, and the Reporua Bog seems to have been a particularly happy hunting ground, yielding some 20 species rarely if ever found elsewhere in the North Island -- e.g. Goum leiogonum, Lycopodium papulosum. This region occupied the attention of a party of eleven for five days last Christmas.

Altogether some 600 species of plants have been listed for the Ruahine Range, and Mr. Druce brought along part of his very fine herbarium collected there. Included were such elusive little things as Siphonidium, Elatine, Gratiola, and Tetrachondra, as well as the more showy Ranunculus insignis, Leucogone leontopodium (Odelweiss), some of the eight species of Myosotis, several species each of Goum, Drosera, Gentiana, Pterostylis, and a host of others. A good set of plant photographs and views added further interest.

The Society was fortunate to have this preview of the results of an original vegetation survey, a full account of which we look forward to seeing in print

H10 5

before long