WHITE ISLAND.

A party from Rotorua consisting of members of the Photographic Society and others visited the island during the weekend of 19th- 20th November 1966.

The main interest of the island is of course in its spectacular volcanic activity and landscape. An immense steep-walled crater, breached to the sea at one end, dominates the island and within it are numerous vents and hot springs still actively pouring out steam and sulphurous gases. Periodically (and we were lucky to witness it!), solid matter in the form of fine ash is erupted. Great heaps of andesitic rubble form a trail down the crater floor to the old sulphur factory - the site of the tragic 1914 lahar which buried all 11 of the factory workers. The fresh rock is a coarse dark andesite, but in many places it has been thermally altered to a reddish colour.

Apart from volcanic activity, White Island is notable for its gannet colonies, its grey-faced petrels, and its remarkably impoverished flora. Off-shore islands frequently have unusual species, but the striking thing about the White Island flora is its small size - 13 or 14 species only being presently recorded, half of them introduced.

Within the crater walls, not a single macroscopic plant is to be found - not even a moss or lichen. The swirling sulphurous gases and steam, and the periodic outbursts of ash, must be highly toxic to life. A hot stream empties into the sea in Crater Bay, and deposits from it form a rusty film on the shoreline boulders. Seaweeds are absent, at least in the littoral zone, from this particular part of the coast, but a few molluscs, Nerita melanotragus and Cellana sp., are able to survive in a rusty condition. On other parts of the coast away from this hot water influence, a species of Ulva, a few red seaweeds, Ecklonia radiata and a Carophyllum sp. were seen.

The first plant encountered on descending from the 500 feet high crater rim to the shore near the Otaketake gannetry is, surprisingly, a fern - Histiopteris incisa. Small sickly isolated plants grow in rock crevices, sheltered from the volcanic gases. Occasionally a few pohutukawa (Metrosideros excelsa) seedlings are found in similar crevices. A belt of pohutukawa scrub is the first real vegetation, and it occupies a zone, perhaps a chain wide, before giving way abruptly below to taller and probably older pohutukawa. The scrub is at first of scattered bushes, but becomes thicker down towards the trees. Within these taller stands, only four other species are found. Histiopteris incisa generally forms a dense ground cover beneath the trees, but in one area, the old wooden building at the Ohauora camp site, its place is taken by the introduced inkweed (Phytolacca octandra). At the coastal edge of the forest, the trailing succulent Chenopodium allanii and the grass Poa anceps occur commonly.

Around the gannetries at Otaketake and Ohauora (I did not visit the one at Te Matawiwi), the flora is richer. Bushes of Coprosma repens, healthy and vigorous, fringe the cliff tops and forest edge, and there are masses of ice plant (Disphyma australe), on the cliff tops. Apart from Chenopodium allanii and the grass Poa anceps, which are both common, the only other plants growing in the nitrogen-enriched soil near the gannets are six introduced species : Phytolacca octandra, Solanum nigrum, Erigeron canadensis, Sonchus oleraceus, Cirsium lanceolatum and Coronopus didymus. These latter two - Scotch thistle and swine cress - are apparently newcomers to the island, for neither is recorded in the 1959 D.S.I.R. Bulletin [x] describing the island. The same publictaion records Cakile maritima from Ohauora, but it was overlooked this time.

Clumps of Phormium tenax were observed along the cliff tops of the north coast.

At the time of the visit the gannets were on their eggs, but already a good many had hatched. A single young grey-faced petrel was found in its burrow at the Ohauora camp site. On the boulderу shore of Crater Bay itself, there is a colony of nesting red-billed gulls. A single starling was seen at the Otaketake gannetry.

Apparently the kiore, or Maori rat, is on the island, but none were observed. Of other forms of life, a spider and an earwig were seen amongst the old timber of the factory, flies of various types were present, and on pohutukawa was found the cicada, Melampsalta sericea.

That, briefly, is White Isalnd. An unexciting flora and vegetation, interesting bird-life, and altogether one of New Zealand's most remarkable off-shore islands.

M.D. Wilcox

x "White Island". D.S.I.R. Bulletin No.127, 1959, by W.H.Hamilton and I.L.Baumgart.

CONSERVATION AT THE CROSSROADS.

On Saturday, May 14th., 1966, the N.Z. Nature Protection Council, through the medium of its sponsoring body, the Royal Forest and Bird Protection Society of New Zealand, convened a meeting of its member societies and associated bodies to discuss aspects of Conservation which had been brought to a head as a result of recent Government actions in respect of certain national assets for which, it was widely felt, the Nature Conservation Council was not performing its intended functions in a wholly satisfactory manner. Some fifteen societies were represented, including the Auckland Botanical Society which was represented by the undersigned. In addition a number of observers attended, mostly representing Government Departments.

Topics for discussion on the agenda were:

1. National Parks.
   Discussion centred around the inviolate nature of National Parks and the desirability of:
   (a) requiring submission of all proposed encroachments to be heard by public commission.
   (b) the Authority being responsible directly to Parliament
   and (c) the legitimate uses of Parks.

2. Scenic Reserves.
   The greater vulnerability of these was discussed and the need therefore for an "alert and vital public", and due public notice of changes of status proposed.

3. State Forest Parks.
   The need for a mandatory Advisory Committee rather than the present optional provision for such was emphasized. The present policy of "comprehensive stocktaking" was discussed, and also the need for greater publicity.