



**LEFT: The South Fiord of Lake Te Anau, looking towards the Murchison Range**

fauna, whose history can be traced back a paltry few hundred years, the geologists of the party will tap with their hammers at the rocks of the so-called Fiordland complex, composed mainly of molten (but not volcanic) material, and talk nonchalantly of 300 million years periods.

In other parts of Fiordland, much scientific work has been done in recent years—by full-scale expeditions, by small parties of enthusiasts like the scientists of Otago University, who were working behind Lake Monowai in 1953, by members of the Geological Survey, and even by individuals.

This latest expedition may make no big discoveries. And even if it does, they will no doubt be treated with that caution which is scientifically so commendable but journalistically so frustrating. Nevertheless, it is certain that from the observations made and

**D**OES the three feet high bush moa still live in some unexplored valleys in Fiordland? There is only one way of finding out for certain, and the Canterbury Museum is taking that way when it sends a party into the Murchison Range behind Lake Te Anau for three weeks at Christmas. Although the main aim of the expedition will be to make further exploration of the region where the notornis was recently rediscovered, the scientists taking part will also keep a sharp lookout for possible traces of the bush moa. This trip will have behind it rather more encouraging evidence for the continued existence of the moa than did previous searches.

The story begins one night possibly less than a hundred years ago, when a Maori hunting or reconnaissance party sheltered beneath an overhanging cliff face, no doubt from the usual cold rain of Fiordland, in a valley at the Te Anau end of the Murchisons. There they cooked and ate the flightless birds they had run down during the day—among them the takahē, the kiwi, the flightless owl, and the bush moa itself—and flung the bones with replete carelessness on to the bedding of tussock and beech leaves.

Bored with waiting for the birds to be cooked, perhaps, a member of the party idly took a charred stick from the fire and doodled on the wall. He drew a stylised human figure with outstretched arms and then a group of three heart-shaped designs linked by lines. The following morning the Maori must have looked doubtfully at his fire stick with its three rubbing faces blackened with use, and then thrown it down on the floor as worn out. In the rush of packing, another hunter apparently forgot his plaited flax sandal, worn for warmth in this dismal climate. Other odds and ends, such as weka lures and materials for preserving birds, were probably discarded as expendable material. Then

they scrambled back on to the ridge behind the valley, pushed their way through the thick beech forest to Te Anau, and followed the long and hazardous route to their home in the north.

The relics of that hunting party, forgotten by their former owners, lay in the shelters undisturbed till 1949. Then they were discovered by Ken Miers, a field officer of the Internal Affairs Department Wild Life Division, in the valley now widely known as Notornis Valley. Immediately the date of the party's visit became important, for if it were recent, historically speaking, the chances of the moa's survival would be increased by just that much. Were the marks on the moa bones made by metal instruments, and hence in the post-European period? Are the wall designs purely Maori? Can the design of the sandals be attributed to any particular tribe or period? Scientists, among them Dr. Roger Duff, of the Canterbury Museum, are still trying to answer these questions by comparing the articles with similar ones whose origins are known. Though the final answer is yet to be found, the evidence is at least not discouraging. The notornis still survives; does the moa? Possibly the expedition this Christmas, which will be broken up into sub-parties in order systematically to cover the area from Coronation Peak across to the Sounds, will find out.

But fascinating though the prospect of finding a moa is, it is not the main aim of the expedition. This is to find the limits of the notornis country at the western end of the Murchisons. The range, and indeed the habits of this bird, rediscovered in 1948 after fifty years of "extinction," are still largely unknown, and this year's trip will be a continuation of last year's, when the scientists entered 23 valleys and found notornis, or signs of the notornis in 11 of them. Another question about the notornis which the scientists hope to answer is why they are found in some valleys and not in others. Are there, for instance, topographical, climatic or vegetation features common to the in-

habited valleys and absent from the uninhabited? The rare kakapo, or ground-parrot, too, is of interest to the ornithologists, for the solitary and nocturnal habits of the bird make it very difficult to study.

Baughan Wisely, a zoology lecturer at Canterbury College, and a veteran of most Fiordland trips in recent years, will lead the expedition and direct the classification of the flora and fauna of the area. With an advance party, he will establish a base camp on Coronation Peak by Christmas Eve, when up to 900 lb. of food and supplies will be dropped by air on a 3500 feet high plateau on the north-west side of the Peak. On December 27 the main party will travel by launch up Lake Te Anau to the head of the South Fiord, from where it is an 11-mile walk to base camp.

The maps still write "Unexplored" across this part of Fiordland—and with considerable justification. Two men in the 1890's and another two deerstalkers in 1949 saw something of the area. But just how little work has been done is shown by the fact that Coronation Peak was discovered only last year by the Canterbury Museum expedition, although with its 6000 feet of rock and beech forest it is one of the highest peaks in Fiordland. Thus, another aim will be to map the broken and rugged territory.

While naturalists study and collect specimens of the flora and

the specimens humped back to the laboratories, more knowledge will be gained, albeit slowly and with much discomfort, of this sandfly-ridden but fascinating part of New Zealand.

(A member of the NZBS will accompany the expedition for part of the journey with a portable tap recorder. On-the-spot interviews and descriptions of the country—as well as accounts of any discoveries made—will be recorded for later broadcast.)



**BAUGHAN WISELY, leader of the party, examines and measures an old wapiti head—a photograph taken on the 1949 New Zealand-American Fiordland Expedition**