

PALMERSTON NORTH --- 21 - 30 January 1967 --- F.M.Warren

After a somewhat poor week, Saturday was glorious - a wonderful start, a good takeoff, and the bus was right on time. During a pleasant and uneventful journey we stopped at Te Awamutu's little gem of a park for lunch, then on to Ohakune Junction for the night, where many members greeted mine host as a long lost friend. We sorted ourselves out to our various rooms, and exploring parties set out to view the mountain, which treated us to a very lovely sunset glow. Some of us went bush track exploring, and were taken tenderly by the hand and helped across ditches by a charming Maori boy, husband to the waitress at the hotel.

SUNDAY - After a propulsive entrance to breakfast (half of us not realising the time) we got away to a good early start. We had a glorious drive down the Mangaweka Gorge, the bus emptying itself to allow us to view the beautiful Raukawa Falls; then on to Wanganui - a most select city where the dogs attend hydatid clinics (nothing so ordinary as a dosing strip). We arrived at Bushey Park to have lunch in the grateful shade of a brake of shelter trees, having passed beautiful Virginia Water with its fringe of water lilies. The old house with its 220 acres of bush, is the proud possession of the Forest and Bird Society. Built on the Edwardian style with a delightfully high, cool stud; on a terrace with lawns and gardens in a native bush setting, it is furnished with period furniture and has a striking stained glass window in the entrance hall and a huge, many windowed lounge. During a walk through the bush we met with many surprises. There was an amazing number of pukatea seedlings along the track. Asplenium bulbiferum was large and abundant, also A. falcatum, A. flaccidum, Thelypteris pennigera, Pteris macilentia, Phymatodes diversifolium and scandens, but no filmies, probably owing to the dry nature of the bush. Kawakawa was plentiful, very tall with much larger trunks than usual, and we were amazed at the several huge mahoe, growing easily 25 to 30ft with trunks some 2ft in diameter. We saw at least 7 very large rata (M. robusta), one 42ft in girth, and another with branching stems like elephants legs. We saw several Hoheria sexstylosa, both juvenile and mature, which we do not find in the north, also some very large tawa, rimu, miro, and rewarewa. In all a very interesting reserve. We were sternly marshalled back to the bus in good time - we must arrive at Massey with a margin for changing and unpacking, each of us to our own single room. There was some excitement on arrival; a little trouble over difficult doors, squeals of mirth and consternation from the washrooms, and a great scurry and flurry (dinner at 5pm) but we made it. After dinner we met Miss Campbell, our leader and organiser, and Professor Thomas gave us a most interesting talk on the growth of the University, from a small department of D.S.I.R. in 1920 to a full university at the present time. He explained that although there was only a very small department for pure botany, many of the other departments overlapped into it.

MONDAY - An early start after an excellent breakfast - down via Palmerston North, Woodville, Pahiatua and Eketahuna, (dropping a small contingent at Mt. Bruce to see the birds) to the start of our days walk from the Bannister Hut. Miss Campbell had arranged an elastic programme to suit all ages and inclinations. We started out (most of us) to cross the river by a delicate looking swing bridge. A couple of souls had a go at fording the river, got wet, and then wetter. Some roamed close to the hut, while those who felt able climbed up through the beeches, puffing and blowing on their first day out. Nothofagus fusca, menziesii, solandri and truncata were abundant. Our goal was a lookout on a rocky spur with a lovely view up to Mt. Holdsworth, some 2500ft further on. The Powell Hut was in full view above the bush line. We could look down our valley to the stream where the bus was parked, and beyond across the plains of the Wairarapa. Up another beech-clad valley were all the main peaks to the west. We descended then to Donnelly's Flat, tired but triumphant. Beside the beeches, other large trees seen in the area were kamahi, rimu, miro, pukatea and tawa. Smaller trees and shrubs etc. noted were Myrsine australis, putaputaweta, tarata, Olearia rani, rangiora, lancewood, wineberry, supplejack, pokaka, Griselinia littoralis, Phormium colensoi, Euphrasia and Pratia; and the Coprosmas - microcarpa, foetidissima, robusta, lucida, australis, banksii and colensoi. The last two named were new to most of us. Ferns observed beside the track were Blechnum capense and minus, Hymenophyllum demissum, multifidum, flabellatum and dilatatum, 2 Hypolepis (1 black stemmed), Lindsaea trichomanoides, Rumohra adiantiformis, Trichomanes reniforme, Paesia scaberula and 2 tree ferns (Cyathea dealbata and smithii).

The Mt. Bruce party saw the following birds - 2 pairs of takahē; kiwi; weka, pigeons, saddlebacks, bellbirds, pukeko, brilliant green parakeets with scarlet atop the head, and blue, grey, paradise and scaup ducks. Tui and grey warblers were heard. The sanctuary is in its natural state, with the trees enclosed. The birds have ample room to fly freely and appear to be contented. Food is placed on raised and covered platforms. The paths through the parklike tawa forest are excellent, with painted wire netting safeguards erected at dangerous places. Many of the larger trees are labelled. In the bush they saw and recognised tawa, bushlawyer, several Coprosmas, mahoe, wineberry, Fuchsia, miro, rangiora, hinau, rimu, poroporo, totara, Hoheria, (which somehow looked different), lancewood (very large), a kaikomako with a huge trunk, several ground and tree ferns.

We got home only just in time to scramble in to dinner. The evening was spent discussing our finds and Mr. Greenwood talked a little about the Tararuas.

TUESDAY - We travelled to the western Tararuas through Shannon and Tokomaru, turning in to the hills on the outskirts of Shannon. Again suitable expeditions had been planned for all. Even the non-walkers seem to have had a good gardening session with Mrs. Pond, whose husband owned the farm that we crossed to reach the bush. The climbers set off up to the Waiiopehu ridge

a wonderful climb through thick bush, with a most able guide who, I believe, did not really expect us to reach it. However we did, and went along the ridge for a short distance. The bush we passed through on our climb was rain forest, quite different from that which we saw on the previous day on the Mount Holdsworth side. If a few kauris had been added to the scene we could easily have imagined that we were in the Waitakeres and not in the Tararua, provided of course that one did not look too closely. The ground was covered in ferns. Blechnum and various filmies, together with large patches of kidney fern and lovely clumps of Lindsaea trichomanoides, the first time Miss Barr had seen it growing in this type of bush. At a higher level we found banks of Blechnum nigrum with fronds 9" -12" long. This fern was growing in profusion from 1500' upwards, as was also Todea hymenophylloides and Leptolepia novaezelandiae. On the top of the ridge some of the many trees uprooted in the famous storm of 1936 were seen. These now have vertical stems growing from the horizontal trunks. Other trees and ferns found on the climb which do not grow or are rarely seen in the Auckland area were - Weinmannia racemosa, Pseudowintera colorata, Neomyrtus pedunculata, Hymenophyllum peltatum and bivalve.

Miss Campbell's slow pack managed somehow to catch up with the fast pack led by Mr. Wilde, dropped back again, followed the track until lunch time and then returned. We noticed Coprosma foetidissima and Dawsonia superba. Two things struck us forcibly - an enormous miro which we guessed to have a diameter of 6ft - and a solitary specimen of Lygodium articulatum some 18" high. How it got away down here out of its habitat is a mystery. Someone suggested that an Aucklander had brought it down on his boots. Leaving the track we made our way to a small gully out of which a stream flowed. The owner of the farm had told Miss Campbell that it was quite a good place for ferns. It was! Leaving out the tree ferns, of which there were several varieties, we listed 24 species. Hymenophyllum scabrum, flabellatum, flexuosum, dilatatum, ferrugineum and demissum. Trichomanes venosum and reniforme. Phymatodes diversifolium, Grammitis heterophylla, Thelypteris pennigera, Pasia scaberula, Asplenium flaccidum, falcatum, lucidum and bulbiferum. Blechnum patersonii, capense, nigrum, discolor, lanceolatum and fluviale. Rumohra adiantiformis and hispida.

The few who elected to remain behind were taken by the farmer to 2 spots which yielded much of interest.

The weather lasted until we left the bush, when a shower of rain passed over and caused us to don parkas for a time. In the evening we had a delightful birthday celebration for Mrs. Hynes and Mrs. Moor, followed by a showing of slides by Mrs. Wormald and Miss Holloway.

WEDNESDAY - This was a day of education and rain. The education commenced at the Grasslands Division of D.S.I.R., where Mr. Thurston welcomed us, and then gave us a talk on the value of top dressing and the necessity of return. Through rain, which was by then torrential, he took us to see examples of the experiments being carried out. Next we went to the Soil Ecology and Plant Physiology department, where we were shown experiments by Mr. Greenwood. Then to Dr. Taylor's department where he was doing some most interesting work on the effect of night and day on flowering times of plants. (Chrysanthemums apparently know that they must flower as soon as they have had $8\frac{1}{2}$ hours of darkness). And all this time it rained and rained. As we were starting to look like a lot of rownd rats we were most grateful for the bus which took us back to the college for lunch. After lunch, still in the rain, we were driven in to Palmerston North to see the work being done at the government seed testing station. This proved extremely interesting. On our return to Massey some of us called by arrangement at the office of the Registrar, and learned something of the layout of the new buildings which it is proposed to erect during the next few years. In the evening Mr. Lediard showed a wonderful set of slides entitled 'Sex in plants'.

THURSDAY - was another beautiful day. What a change from the previous day's rain. We drove through Fielding, Kimbolton and Rangiwahia to Mr. Clifton's farm, where we were almost in the bush on the Ruahines. Leaving Rangiwahia the road climbed and wound, and we had a glorious panoramic view of Ruapehu and to the west beyond Taranaki to the sea. We turned off the road on to a farm track where alas the bus could not manouvre, and we had to leave Max our driver, with some of the men and Mr. Clifton Jr. to jack it away from a bank, turn it around and get it back to the farm. The main party started off across the paddocks and a bog to a stream. Once safely across this we divided at the bush edge into climbers and others. Here we heard the call of the long tailed cuckoo. We climbed steadily for some 2000ft, with glorious glimpses through the trees across the beech forest to Ruapehu, finding many trees, ferns and small plants, until we reached the point where the Libocedrus bidwillii commenced. When almost above them our guide David Wilde, found a pleasant spot for lunch. We left our packs and climbed with some effort to the tussock level, reaching the Rangiwahia Ski Club hut, where we signed the book and found some nice alpine. Then came the descent. Down we went helter skelter, wondering if we would make the steep grade up through the paddocks to the road. We did make it and were very grateful to see Mr. Clifton Snr. who took us in relays in a luxurious car to the bus, tired, but not so exhausted that a shower and a meal could not refresh us.

The flora of this region was somewhat different to that which we had previously seen. From Miss Barr's notes I am able to give a list of the more unusual plants that were noticed -

Nothofagus truncata and fusca, Pseudowintera colorata, Meliccytus lanceolatus, Hoheria sexstylosa, Polystichum vestitum, Dicksonia lanata, Libocedrus bidwillii, Phyllocladus alpinus, Hymenophyllum malingii, Todea superba, Dacrydium biforme, Olearia colensoi and Illicifolia, Cassinia fulvida, Blechnum pennamarina, Euphrasia, Oreomyrris, Gnaphalium traversii, Craspedia uniflora, Dacrydium bidwillii, Libertia pulchella, an orchid of the Caladenia type, Lycopodium scariosum and fastigiatum. Mr. Butler and I had a late start due to the bother with the bus mentioned previously, but we found plenty to interest us at a lower altitude, and returned with a beautiful specimen of Gastrodia cunninghamii. In the evening Mr. David Wilde showed us slides, first of Tasmania, then of the Hollyford Valley, Milford Sound, the Southern Alps, the Tararua and the Ruahines, to demonstrate the ecology of these regions.

FRIDAY - We had a more leisurely start on this day and were taken to the Forestry Dept's unit and Bantoff, where Mr. Segar took charge of the party. We went in landrovers through the sand dune reclamations, seeing the various stages of consolidation, first by laying brush fences to stop the drift of the sand, then by planting marram grass and sowing lupin, and finally by planting pines. However the foreshore dune is still a problem and many experiments are being made. There is a species of Acacia which grows in the form of a low bush, has spreading branches which take root, and quickly forms a good cover. At one spot we saw a small lake, lying between sand and clay, which still had the original coastal dune vegetation growing about it. We lunched back at Forestry Headquarters and Mr. Segar showed us round the collection of beautiful ornamental trees growing there. The afternoon was spent at Heaton Park Station, the property of Mr. Simpson, where we saw more lakes formed by the meeting of sand dune and clay. These were surrounded by natural bush and Mrs. Hynes was fortunate enough to come across Urtica linearifolia while I found 2 large vines of Rubus squarrosus with scarcely a leaflet. Mr. Greenwood entertained us in the evening with some fine slides of the wild flowers of South-western Australia. These were much appreciated.

SATURDAY - Beautiful sunshine prevailed for our expedition to Totara Reserve by the Pohangina River. This is a beautiful spot with a varied flora and there was therefore much botanising. We walked down the Fern Walk, which is well named for a great number of ferns are to be found there. We even saw, so we believe, a nice specimen of Cyathea cunninghamii. Then we followed a track through the bush until lunch time. After lunch we drove to a higher level where beech forest grew on the ridge. Those who were more interested in the flora than the weather got caught in a short sharp shower of rain. Space does not permit me to give a full list of the plants in this reserve so I will again give only the more interesting.

Clematis hookeriana, Pennantia corymbosa, Scophora tetraptera,
Parsonsia capsularis, Coprosma rigida, Lophomyrtus obcordata,
Neomyrtus pedunculata, Fuchsia perscandens, Plagianthus betulinus,
Dicksonia fibrosa, Urtica incisa, Ctenitis velutina, Hoheria
sexstylosa, Polystichum vestitum, Asplenium bulbiferum var
tripinnatum, Asplenium flabellifolium, Gastrodia sesamoides,
Teucrium parvifolium.

The Asplenium flabellifolium was found on the ground in the heart of the bush. This was a surprise, as it usually grows in the open on rocks or rocky banks. The keen botanists were of course delighted to see the Teucrium parvifolium, as it is indeed now rare. As this was our last day at Massey, Miss Campbell came to dinner with us. Later we entertained those who had made our trip so pleasurable - namely Miss Campbell, Mr. Tony Greenwood and Mr. David Wilde. Mr. Lediard showed us a beautiful set of slides of fungi and gave us a short talk on the subject. Following a festive supper Miss Campbell was presented with a copy of Mr. Mead's recent book and a box of chocolates, as a token of our appreciation of the months of work she had put into preparing for our visit. Mr. Greenwood and Mr. Wilde were also thanked for their part in planning and guiding our expeditions. It was sad to think that this wonderful trip had come to an end.

SUNDAY - On the morning of this day we commenced our return journey, both Miss Campbell and Mr. Wilde coming to wave us goodbye. We had several stops en route to Ohakune. At one near Hunterville a nice plant of Urtica ferox grew alongside a roadside rubbish bin. We lunched beside the stream in Tahape's attractive park. Ohakune was reached in time for afternoon tea, and we later explored the bush track on the other side of the river. We were surprised to find that Leptolepia novaezelandiae grew here in abundance.

MONDAY - We left early, hoping to avoid the evening traffic into Auckland. On the Desert Road we were let loose among the subalpine plants for 20 minutes or so. Another short stop at Taupo, lunch beside the Huka Falls, and off again. And we did beat the traffic home.

FERNS AND BIRDS OF THE TAUPO PINE FOREST - W.C.Cuming

With a permit to enter the forest to collect ferns for our new 83 acre WAIPAHI BOTANICAL RESERVE, situated at the end of Shepherd Road, Taupo, a group of Society members set off with truck and trailer for the forest. The road was slushy after a 12 degree frost and ice glittered on the road sides and puddles, but the sun shone on peaceful farm land and roaring steam bores. The forest has reached maturity in this area and is being clear felled. Forestry gangs were working as we entered the forest to the sound of the saw and the crash of falling trees.