

slope ended and the water began. What was this weed that packed the lake so tight? I pondered several mornings and at last could stand the suspense no longer - I took the car. To my surprise I found that the bulk of the weed was the floating fern Salvinia.

This plant is one of nature's more picturesque liars. It doesn't look anything like a fern. The roundish entire fronds are produced on a floating stem in whorls of 3 - 2 floating, 1 submerged. The upper surfaces of the floating fronds are covered with unwettable hairs which presumably help to keep the plant on the surface. It has no roots, but in order (once again presumably) to maintain balance and keep the green fronds uppermost, the submerged frond in each whorl has been much divided into a root-like organ not unlike the rooting system of the water hyacinth Eichornia.

Tiny water snails abounded and scattered through the mass of fern were the white flowers of Egeria and odd islands of Myriophyllum. The minute Lemna minor was everywhere and Polygonum hugged the shoreline. Among the Lemna and looking much like a larger version of it was Spirodela oligorrhiza. These two plants are easily identified. Apart from the size, which only matters when they occur together, the Lemna is green below with a single descending root, while the Spirodela is purple below and has several descending roots.

No doubt there were many other plants of interest but I was on my way to work. I did stand however for a fascinated moment to watch the Pukekos walking about on the 'surface' of the water - how solid was my lake!!

JULY, 1972.

TRACKS OFF SCENIC DRIVE.

A.D. MEAD.

Alongside the Scenic Drive about midway between Titirangi and Waiaatarua, the Auckland Regional Authority is developing an area to serve as a headquarters for the Centennial Park administration and as an information centre. On arrival of the bus, Mr P. Jew, Director of Parks for the Regional Authority, gave us a short talk describing the purpose and the proposed lay-out of the centre, illustrated by a plan. There will be a building in which will be displayed maps, photographs and descriptive literature; with alongside car parking and a bus lay-by, grassed picnic area and plots of typical Waitakere trees and shrubs, labelled. Youth parties will be provided for in a separate building enclosed in the bush. Tracks, some already formed, will lead in different directions in the surrounding bush. This block of Centennial Park land, between the Scenic Drive and Oratia, contains a considerable number of mature timber trees, kauri, rimu, kahilatea, totara and miro, which surprisingly and fortunately escaped the miller, as well as a rich assortment of native trees and plants generally.

After the talk we proceeded, under the leadership of Miss Marguerite Crookes, through regenerating scrub grading into original

bush, to the first of our objectives, an unspoilt stand of mature kauri trees on a knoll, among a dense growth of Astelia and Gahnia. The latter plants, and especially the big cutty-grass, Gahnia xanthocarpa, were carrying ripe seed heads and Miss Crookes described the method of identification from the seeds. Among the kauris were a few plants of the fan fern, Schizaea dichotoma. In a swampy patch alongside the track were some pukatea trees with their characteristic buttresses. The senior ranger, Mr W. Beweridge, accompanied us on the morning round and described how he had collected rimu seed by laying out scrim under the trees, and compared the very much more rapid germination of the seed in prepared soil in the nursery with its rate naturally.

We returned to the bus for lunch and a plant demonstration from our leader, after which we moved a quarter of a mile further along the Drive and entered a barely defined trail (not a formed track but planned to be linked up eventually) on a spur with numerous kauris, not in a grove but spread along the ridge, varying from small to medium in size. One oddity on this trail was what appeared to be a hybrid Asplenium lucidum with lugs on the pinnae. Returning and moving the bus a little further on, we visited another stand of kauri on a knoll reached by a well graded track from the Drive, through good mixed bush. This group of kauri is suffering from too easy access, the ground round them being tramped bare. Alongside the track is a small tree of Pseudopanax edgerleyi, showing intermediate as well as adult leaves. The bristle fern, Selenodasium elongatum, also occurs by this track.

AUGUST, 1972.

PIHA : WINSTONE AND HOME TRACKS.

E.M.D.

Saturday, 19th. August, defied all weather prophets and, instead of the promised downpour with wind to match, we enjoyed the sunshine and mild temperature of an early spring day. The tracks were in excellent condition despite previous wet weather.

A full bus load left Auckland for Piha. The main party left the bus at the entrance to Winstone Track and followed this to its junction with Home Track. After crossing the Kitekite Stream we had lunch in the sun overlooking a wealth of forest in the valleys beyond and then continued on our way to the Glen Esk Road, where later in the afternoon we rejoined those of our party who had elected to remain in the bus until it reached Piha.

The vegetation on both tracks is very typical of the region encompassing the western slopes of the Waitakere Ranges down to the Piha coastline. Variations in plant population and growth are largely due to the height above sea level, exposure of the ridges to wind, the relatively warmer conditions nearer sea level and to the sandy nature of the soil near the beach and sand dunes. Looking over the valleys one sees large forest trees, particularly in areas where milling has not been extensive in earlier days. Secondary growth is proceeding apace, and the increase