

Hedyocarea arborea  
 Knightia excelsa  
 Leptospermum ericoides  
 Leptospermum scoparium  
 Melicytus macrophyllus  
     "    micranthus  
     "    ramiflorus  
 Metrosideros fulgens  
     "    perforata  
 Myrsine australis  
     "    salicina  
 Nestegis cunninghamii ( lanceolata? )  
 Nertera dichondraefolia  
 Olearia rani  
 Paratrophis microphylla  
 Parsonsia capsularis ( heterophylla? )  
 Phyllocladus trichomanoides  
 Pittosporum tenuifolium  
 Podocarpus ferrugineus  
     "    hallii  
     "    spicatus  
 Pseudopanax crassifolius  
 Pterostylis banksii  
 Ranunculus hirtus  
 Rhopalostylis sapida  
 Ripogonum scandens  
 Rubus cissoides  
 Rubus australis ( juvenile )  
 Schefflera digitata  
 Tetrapathaea tetrandra  
 Vitex lucens

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LABOUR WEEKEND AT THE BAY OF ISLANDS

J. BEEVER

Leaving Auckland at 5 p.m. on the Friday we made a good trip to Paihia and arrived at the Fourways Hostel at Haruru Falls soon after 10 p.m. Our host and hostess gave us a warm welcome and a light meal which was a surprise and much appreciated. Early walkers next day

were able to inspect the nearby falls on the Waitangi River which makes its final leap into the waters of the Bay of Islands at this point.

Our trip on Saturday took us around the forest clad slopes of the Ngaiotonga peak to the rugged east coast at Taupiri Bay, then back across to the outer Bay of Islands sheltering behind its arc of islands. We made a detour to Rawhiti where we had lunch on a lovely beach, then rejoined the route and continued to Manawacra which completed the circle. From there we retraced our route round the upper harbour and back through Opua and Paihia to the hostel. Our botanizing took place mainly on the saddle near Ngaiotonga and at another stopping place in the vicinity.

Those of us accustomed to the Waitakere bush immediately found differences which took some time to sort out. In fact it was not until the Monday visit to Puketū that we found juvenile towai and Ackama rosaefolia, with a seedhead, growing alongside one another so that we could distinguish the two. Another Northland plant new to many of us was the Alseuosmia banksii which was quite plentiful here. It is a small shrub with leaves and yellowish flowers both much smaller than those of the A. macrophylla common in the Waitakeres, but the odour is still there. The Bay of Islands is the type locality for this species and it is not found south of Auckland.

Our attention was taken by the kauris on the Ngaiotonga saddle, not because of their size or the twin-bole specimen labelled for tourists, but because they provide a sad example of the effect on majestic trees of bleeding for gum. This pernicious practice, which became very popular towards the end of last century, was done by climbers who climbed by means of a rope thrown over a branch. Later, steel spikes in the toes of boots and small pick-like hooks in the hand became popular and enabled them to reach the branches quickly to fix the rope on firmly. A.H. Reed says, "the bleeder, beginning just below the branches and lowering himself by stages, tomahawk in hand, chopped a number of incisions in the bark some ten inches in length by three in width about two feet apart horizontally and three perpendicularly. A few months later a return visit was paid, the exuded gum was chipped off, and a fresh series of gashes made, the operation being usually repeated twice a year."

In September 1905 a government regulation forbade the practice in any State or other forest, making a person liable to a fine of £25 for each tree bled and damages against him for damage to the tree and for theft of gum. In December 1905 a Mercury Bay bushman was convicted of bleeding 80 kauris for 16 cwt. of gum. This must have been a test case in the Supreme Court and his fine of £20 was therefore light but more substantial fines were promised in future. Thus the practice died but the results are still there and trees we saw showed large holes some two or three feet across and a foot or two deep to the rotting wood beneath. We could only guess at the depth of rot in the trunks but the cuts were very old for the callus had long ago healed around the edges of the cuts. Some trees also were pockmarked where spikes and picks had entered, enabling climbers to mount the tree.

Other trees that appeared more plentiful than is usual further south were Mida salicifolia and Persoonia toru. Allan states that P. toru has a similar range to the kauri and that M. salicifolia is more common in the north of its range, the North Island. This would agree with our observations. The large difference in the flowering dates of some clumps of Clematis paniculata was most noticeable. Both fully

developed seeds and flowers were seen only a few miles apart and both appeared to be C. paniculata. In any case most C. paniculata near Auckland had well finished flowering.

Sunday, our second day, was very enjoyable, involving a trip to the Forest Sanctuary in the Omahuta Forest where eight very large kauris in a quite small area form a group that would compare in size and quality with the best to be seen anywhere. They are all named and the Forest Service pamphlet gives details of their size. The largest, Kopi, had unfortunately blown over a few months ago but although it was sad to see such a monarch laid low yet close inspection allowed us to get a better impression of what a giant kauri is really like. Kopi is presumably the tree A.H. Reed in his book "The Story of the Kauri" called Omahuta and of which he said, "Judged by its timber content therefore Omahuta may be said to be the largest tree in New Zealand." It certainly is, or was, one of the big four - Te Matua Ngahere, Kopi, Tane Mahuta and Toronui - the others all being in the Waipoua Forest. Its fall was apparently due to rot at the base where a hollow had existed large enough to accommodate a colony of bats. It is not known what happened to the bats after the fall. A photo we took of the trunk near the base with people standing alongside gives one a better idea of what 14 ft. diameter means than looking at the vertical tree. In falling it had cleared everything in its path and left a space large enough to hold about four or five tennis courts.

The other kauris were all impressive, each being over 140 ft. in total height and varying from 5 to 10 ft. in diameter, with heights of clean bole from 35 - 70 ft. long. There were also plenty of other items of interest, notably the Alseuosmia linariifolia which we soon found a short distance along the path, with both red berries and smallish yellow flowers tinged with red. If we thought we now had Alseuosmias all clear we were soon disillusioned for we found plants with leaves and flowers of all sizes and colours intermediate between A. linariifolia and A. macrophylla or even A. quercifolia. Cheeseman had a point when he wrote, "A. macrophylla is at once distinguished by its large leaves and flowers. The three others present a very varied series of forms, all of which are exceedingly difficult of discrimination."

Another Northland plant which many of us saw flowering for the first time was Metrosideros albiflora. Its large leaves and large white flowers then in full bloom made it easy to distinguish. Among the vast range of plants present we noticed Eugenia maire and pukatea among the trees, and a lovely Thelymitra as well as some late flowering Pterostylis probably P. graminea. Mrs Wills had an odd find when an insect fell on to her lap during lunch. It turned out to be an Elephant weevil which usually lives on Nothofagus.

On the way back to the hostel we called at Waimate Mission House with its old plantings of exotic and native trees. As luck would have it we were able to identify for the caretaker the only unlabelled tree, a Chinese Elm, Ulmus parvifolia.

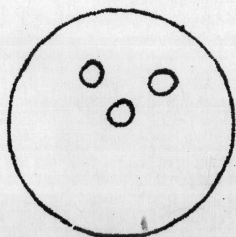
Before returning home on Monday we spent the morning at Puketi Forest in the Manginangina Scenic Reserve where although the kauris with one exception were not as large as at Omahuta, yet there were many more of them. As Puketi is really the eastern half of the block of forest of which Omahuta forms the western half, the bush was in general rather similar, but we found the Alseuosmia banksii again and only a little Metrosideros albiflora. As mentioned before we were able to settle the

Ackama - juvenile towai difficulty. Griselinia lucida was present near the lunch tables and the leaves seemed to be very large indeed. We wondered if this was an environmental variant and later found that Hooker in 1864 had described a variety beta as "very robust", based on specimens of A. Cunningham from Bay of Islands and of Sinclair, Auckland. Allan had not seen the specimens and thought that perhaps they were only young shoots of G. lucida, but our observations would tend to confirm that a very large leaved form grows there. Perhaps it has an origin like that of the large leaved plants on off-shore islands.

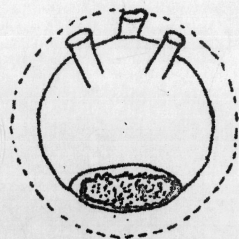
A PYRITES IMPREGNATED COCONUT FROM COOPERS BEACH

E.D. HATCH

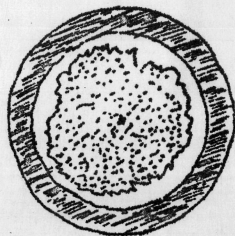
Cocos zeylandica Berry, is a walnut-sized coconut of roughly Miocene age, which is washed up fairly frequently on Coopers Beach in Northland, from an eroding off shore fossil plant bed. These little coconuts are remarkably well preserved for their 20 million years, vary from 20-40 mm diameter and are usually scoured by tumbling in the surf. While rounded in outline most are flattened vertically. This is normal in fossil fruits and due to the immense pressures of the overlying rock. I found one however which was quite spherical and this had me puzzled. Why hadn't it collapsed under the weight like the others? I tried to cut it in half and the shell of the nut ( some 6 mm thick ) cut easily enough, but I might thereafter have been sawing cast iron. I ruined two hacksaw blades before I turned to the emery disc. This was more effective and I found that the hollow interior of the nut was lined with an irregular layer ( 0.5-2 mm thick ) of iron pyrites, a hard glistening silver-yellow crystalline substance. The eyes of the nut were also lined with the crystal, so that the whole thing stripped of its coconut shell, looked like one of those magnetic mines that used to float around during the war, a hollow metal ball with 3 horns.



the nut showing the 3 eyes by which it may be recognised



the pyrites cast showing the ground off base and the 3 tubes which lined the eyes



the ground off base showing the shell layer, the crystal lining & the hollow interior