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DENDROGLYPHS FROM LAKE KOHANGA-PIRIPIRI, EASTERN WELLINGTON

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INTRODUCTION

Dendroglyphs, or simplified motifs incised into the trunks of living trees are an extremely rare form of Maori art in the main Islands of New Zealand. The announcement therefore in the "Dominion" of July 1, 1961, of the discovery of dendroglyphs in a remote part of the Wellington area established an unexpected record of this art form in the North Island of New Zealand. Previously, the only example known was recorded from Inland Patea (Batley, 1957: 210), and took the form of an outline facial mask carved into the trunk of a cabbage tree (Cordyline australis). This dendroglyph probably had special significance and served as a rahui. Beyond New Zealand it is only the Chatham Islands that retain a spectacular arboreal gallery of stylised incised ceremonial art forms (Jefferson, 1955), that are unique within Polynesia.

The Wellington dendroglyphs, following their discovery, received a full and illustrated coverage by the "Dominion"; the material for the article being supplied by Mr G. L. Adkin and Dr T. Barrow. Nothing further has been published on these carvings, and, as their existence appears not to be widely known beyond Wellington, it seems worthwhile presenting full details to further establish the record and thus provide New Zealand field archaeologists with information which could lead to similar discoveries elsewhere.

SETTING

Lake Kohanga-piripiri, the site of the dendroglyphs, is the first of two small lakes situated in Fitzroy Bay, immediately east of Pencarrow Head, at the eastern entrance to Wellington Harbour. Both these lakes (Kohanga-piripiri and Kohanga-te-ra) occupy the lower reaches of two small valleys which were originally narrow arms of the sea. By the formation of gravel bars these inlets became cut off from the sea, and through successive tectonic uplifts that the Wellington crustal block has undergone in late geological times they have become further dammed by multiple storm-breach build-up. By their increased elevation through successive uplifts (the last being in 1855 A.D.), the levels of both lakes have become consequently lowered and their former extent reduced (Adkin, 1959: 30). The sheltered and secluded aspect of these lakes has long suggested their likely importance as seasonal habitation or even refuge sites in the prehistory of Wellington. Examination of these lake shores by members of the

Wellington Archaeological Society has established the presence of a range of small site types which attest to past occupation, while Falmer (1963: 128-130) has recorded evidence of extensive occupation on the old beach flats at the southern ends of both lakes. The abundant remains of small groves of karaka trees (particularly important in the Wellington area for food - Best, 1942: 53), around the margins of the upper reaches of these lakes as well as the evidence of plentiful supplies of birds and eels in the past (Palmer, 1963: 127), support the belief that these lakes were important sites for seasonal occupation.

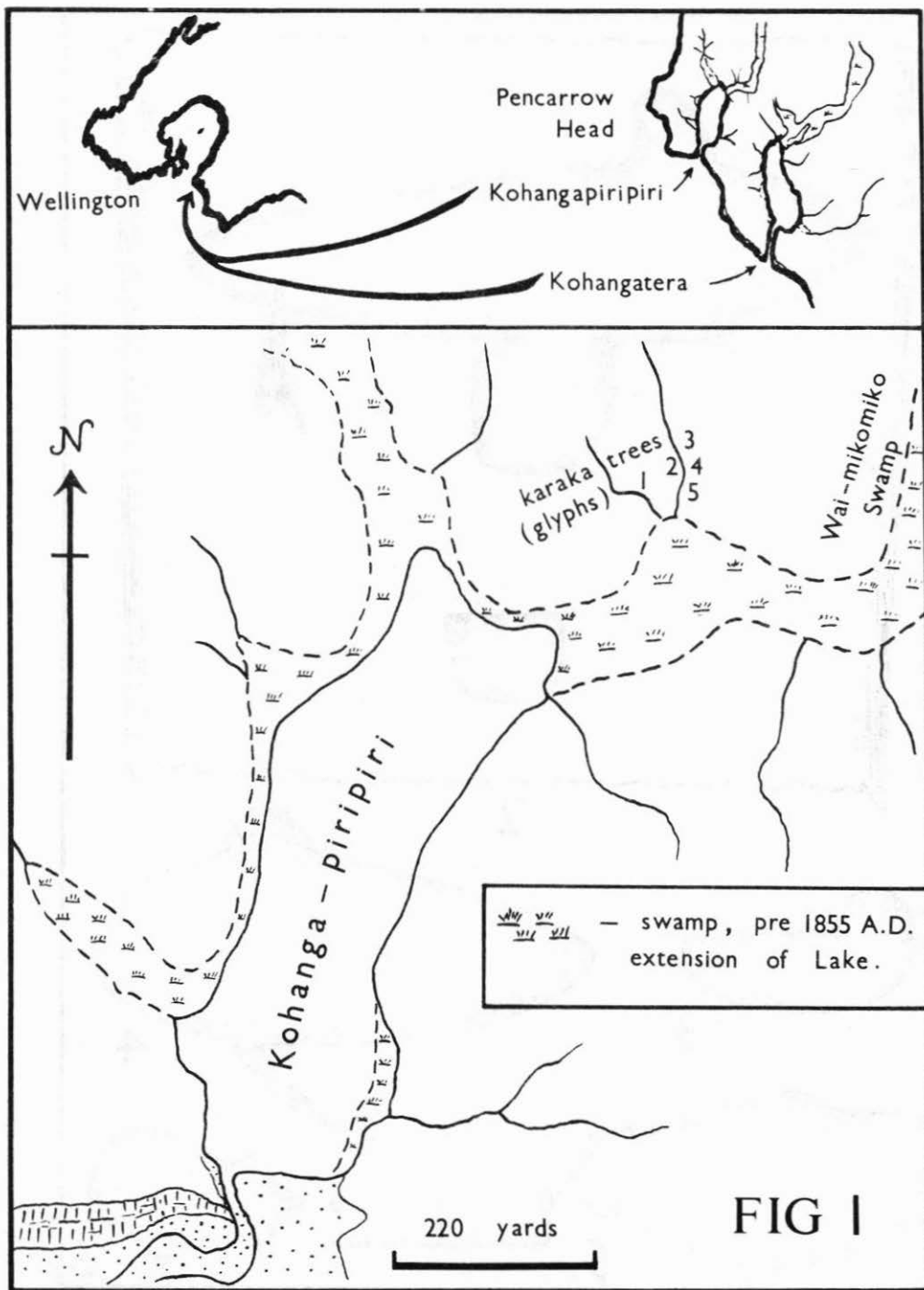
The discovery of dendroglyphs was first made by Messrs G. Bull and G. L. Adkin on September 27, 1959 while they were exploring the head of Lake Kohanga-piripiri along the northern side of the swamp-filled north-east arm which follows the lower course of the Wai-mikomiko Stream (Fig. 1). A small gully on the north-west side of the swamp contains a solitary karaka tree which bears the main motif, and approximately two chains north-east of this over a small spur several of the karaka trees in a small grove of five trees carry further markings.

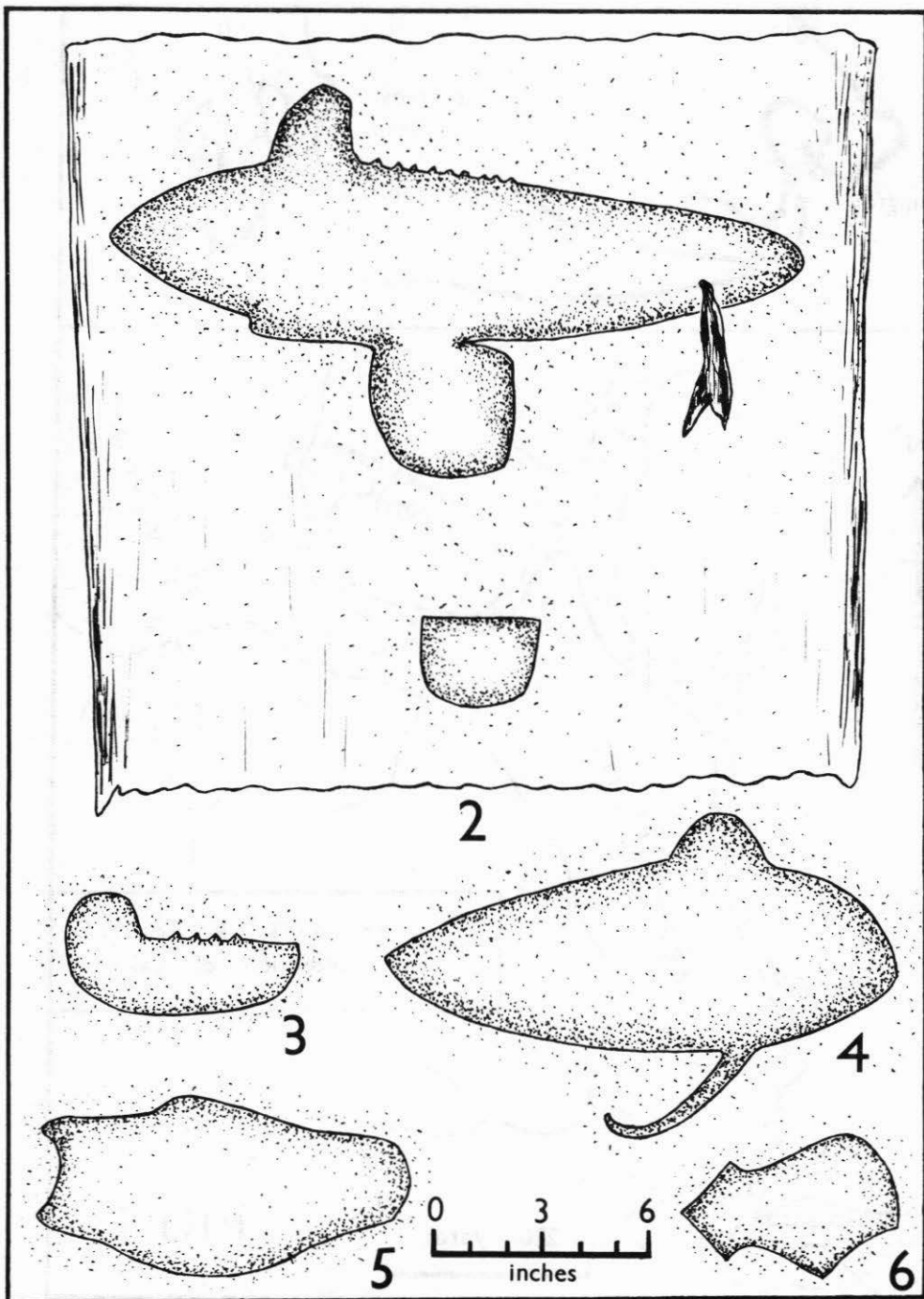
#### DESCRIPTION

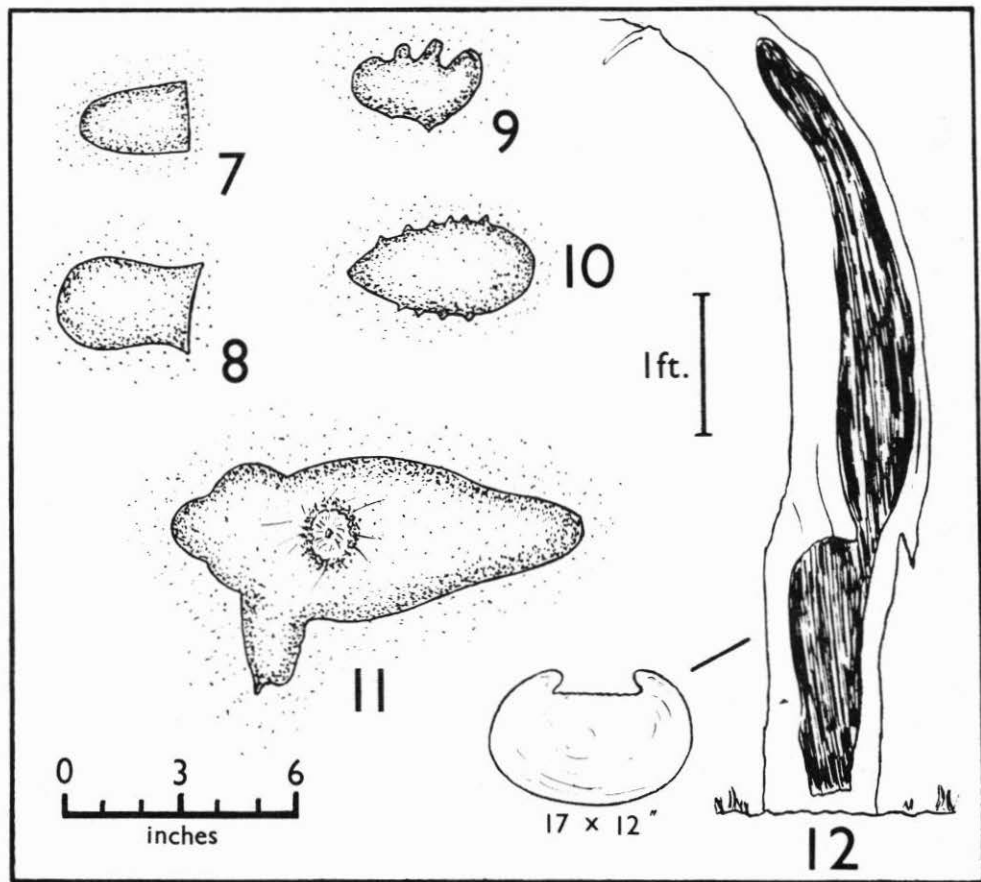
The markings herewith described as dendroglyphs are subtle features on the trunks of the karaka trees, as other marks such as stripped bark and scarred areas produced through damage by falling rocks from higher ground, breaking branches and stock damage, along with the inevitable assortment of modern European carved initials are dominant on the bark. However, by a careful examination of the trunks, carved areas which have subsequently regrown can be distinguished on the bark. The apparent method used to create the dendroglyphs appears to have been by the cutting of an outline of each motif through the bark into the sap-wood followed by the removal of the area of bark contained within the outline. Through the course of time these scars have become healed with a new growth of bark covering the exposed sap-wood, but the original glyph can still be distinguished as bark regrowth has not reached the thickness of that of the surrounding trunk. The motifs appear then in negative relief about 5 mm. below the trunk surface but have a normal bark covering. Unlike the more modern mutilations which show no sign of regrowth, these dendroglyphs suggest considerable age.

The glyphs illustrated in Figs 2-11 represent the more prominent and important art motifs that occur on the trunks of the karaka trees. Possibly a more thorough search of the trunks could produce further but less obvious carvings, but a point is reached where natural scars showing a similar regrowth to that of the glyphs cannot be confidently distinguished from some of the artificial cuts (like Figs 7-9) which do not lend themselves to any obvious interpretation.

TREE 1: The most important dendroglyph in the group is to be found on this tree. This was figured in the "Dominion". Situated on the north-east side of the trunk six feet from the ground, this motif measures 19 inches







(48 cms.) in length (Fig. 2). (Trunk diameter at this point is 22 inches.) It is interpreted as a "fish" with prominent dorsal and ventral fins. Immediately behind the dorsal fin is a series of nine notches. Two inches below the lower edge of the ventral fin appears a further "fin" marking similar to the one which forms part of the fish. On the opposite side of the tree lower down on the trunk, three further motifs occur. Fig. 4 is recognisable as a further fish design with an elongated ventral fin. Figs. 3, 5 and 6 are glyphs that are less distinct in outline and cannot readily be likened to any obvious piscine form. However, Fig. 3 appears to show four serial notches, while it has been suggested to the writer that Fig. 5 could be a fish with an open mouth.

TREE 2: This tree in the small adjacent gully has motifs reproduced in Figs 7-10. Figs 7 and 8 on the south side of the trunk resemble "ventral fin" motifs as seen in Figs 2 and 11, but are arranged horizontally. Fig. 9 is not identifiable. Fig. 10, on the north-east side of the trunk possesses serial notching on opposite sides. Another marking noticed is a small circular cut about one inch in diameter. Both this tree and trees 4 and 5 have had a considerable portion of bark removed vertically down the trunks for several feet, down to the sap-wood. Sometime in the past this has caused the tree to bend over during growth (Fig. 12) and the bark regrowth has produced bulbous margins to the cut. On tree 4, the removed bark strip is about five inches in width. This bark stripping appears to be an old feature and may date from the period of the dendroglyph carving.

TREE 4: Exhibits a further fish-form motif (Fig. 11) with large ventral fin and bulbous head. General body outline however agrees with those in Figs 2 and 4. Within the body of this glyph is a central "hole", with raised border and irregular radiating bark growth lines extending from it. This trunk also has a large array of modern mutilations.

#### INTERPRETATION

All the recognisable glyphs appear to conform to one style; they portray fish motifs. Three of these (Figs 2, 4 and 11) lend themselves to possible identification. The noticeable features that these carvings have in common is that the motifs do not show tail outlines but have prominent dorsal and ventral fins. These latter features suggest that the stylised motifs portray whales or dolphins, and the absence of tail outlines would support this idea. These aquatic mammals possess tail fins which are arranged horizontally to the body axis, therefore in side profile tail flukes are not visible body features. Fig. 2 with its bluntly tapered head, prominent dorsal fin and large, broad ventral flipper could be taken to represent a killer whale (*Orcinus orca*), the largest of the dolphin family. This species is well known in the Cook Strait area. Fig. 4 follows the basic pattern of Fig. 2 except that the ventral flipper is long and pointed. This feature is representative of Risso's dolphin

(Grampus griseus) and the "blackfish" or "pilot whale" (Globicephala melaena). Fig. 11 also seems to feature a blunt bulging head which is also characteristic of these last two species.

The possible significance that the dendroglyphs could have held was that they commemorated the catching or the stranding of a group of dolphins or blackfish. However, they may also have had an additional symbolic purpose as well for on Fig. 11 there exists a raised and oval central area already noted. This could be a natural bark growth feature but could also be the remains of a deeper scar within the glyph due to a ceremonial piercement hole made by a fish spear or some such instrument. This along with serial notching on three glyphs (Figs 2, 3 and 10) suggests that the carvings had a ritualistic importance as well.

#### AGE AND ORIGIN

The age and origin of these dendroglyphs are factors related to the age of the trees involved, the past occupants of the area and the local geomorphology. In the "Dominion" article, G. L. Adkin considered that these carvings were of considerable age (based on the use of serial notching ornamentation - pers. comm.), while Dr Barrow expressed the opposite view that they were not necessarily of any great antiquity. The karakas themselves are not especially of large size (the largest having a diameter of 22 inches), but with this particular tree species size is not so much a function of age as it is of environment. As the karaka does not produce annual rings it is not possible to employ any dendrochronological techniques to assess age. It can be assumed, though, that these trees cannot be older than about 170 years.

A further feature present on Tree 1 also noted by Adkin and Barrow, is two carved capital letters, "A" and "N" which appear to show partial regrowth. The singularity of these two letters contrasts with the modern grouped letters which form initials and they suggest a possible intermediate stage between the fish glyphs and modern vandalistic markings. Their Maori origin at European times seems a strong possibility as single letters could refer to the single colloquial names by which Maoris of early European times were known (e.g., Arapeta = Albert; Nikora = Nicolas). They could thus be signatures of Maoris not Europeans. This line of reasoning also helps to suggest that the fish glyphs were made immediately prior to any extensive European influence in the area.

The traditionally recorded later occupants of the Fitzroy Bay territory were the Ngati-Ira (possibly with Ngati-Kahungunu mixture) who held this region until 1825-26 when they were replaced (either driven out or assimilated) by the Ngati-Awa from Taranaki. Permanent Maori occupation in the Bay, at Parangarehu, was known at least up to 1853 (Bagnell and Petersen, 1948: 219, footnote 16), but starting as early as 1847 (McFadgen, 1963: 119), blocks of land were gradually being sold to the Crown.



Depending on the assessment of age that is applied to these dendroglyphs, they could have therefore been carved during the period of either Ngati-Ira or Ngati-Awa occupancy. The trees are at present adjacent to the swamp but it is highly probable that at the time when the carvings were made they were by the water's edge, and what is now the Wai-mikomiko swamp was an open waterway which gave canoe access from the Lake well up into this main eastern valley. This situation could only have existed prior to the 1855 uplift (when this area of Wellington was raised about six feet). With this uplift, the lakes were shallowed, not by the amount of the land uplift, but about three feet, as can be seen around the margin of the lakes.

#### CONCLUSION

These dendroglyphs appear to be of authentic Maori origin and were probably executed in times immediately prior to major European contacts in the area. The portrayal of sea mammals in the motifs conforms to concepts typical of Polynesian art, but their true significance appears to be ritualistic as well as just the recording of the possible capture of sea mammals.

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