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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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KAURI POINT SWAMP

An interim report by Wilfred Shawcross

The excavation of this site during the 1961-62 season has been briefly described in Volume 5, Number 1 of this Newsletter. Since that time work has commenced upon the study of the artifacts, in particular the combs and obsidian, and a final season of excavation, lasting two months, has been carried out. The complete study of the site has not yet been completed, but it is already possible to describe some of the material and outline an interpretation.

The swamp is a small one and gives no visible indication of archaeological deposits. Indeed, at first sight, it appears to be nothing more than the waterlogged bottom of a gully whose steep profile might make it liable to occasional scouring. However, if these deposits had existed since that time it would be reasonable to expect to find at least a scatter of artifacts. But the more interesting possibility was that if the swamp had been developing during the period of occupation it might have grown over and have preserved the organic remains which do not otherwise survive when abandoned in the open air. Not only would these conditions result in preservation but they would also stratigraphically seal a cultural layer, or sequence of layers, and enable a link to be made between the swamp deposits and the sequence of occupations, which was being established for the Pa site.

The method by which part of the swamp was selected for excavation has already been mentioned in the article referred to above. It will only be added here that the final season's excavations have entirely confirmed the results of the systematic but simple method employed and have shown that the exact position and area of the site had been discovered in the original survey.

The techniques employed in the excavation of swamp sites are perhaps not as fully evolved nor as widely known as those used upon dry land. While some systematic excavation of such sites has been carried out in New Zealand, notably the work of Dr. Duff at Waitara, (Duff, 1961:303), it is in Northern Europe that this aspect of Archaeology is most highly developed. Undoubtedly, the best known example to be published in the English language is the excavation of Star Carr (Clark, 1954); while, more recently, Thatchem, another British site, has been excavated. (Wymer, 1962:329). The Thatchem excavation, apart from its importance in Prehistory, is interesting for the use of a coffer dam round part of the excavation, which enabled work to be carried out to a depth of eight feet below the surface of the water.

At Kauri Point methods of excavation were evolved by those working on the site and adapted to the particular conditions. Broadly speaking, there were three problems encountered, of which the first was water. The water would not only flood the excavation, but by its constant percolation redeposited debris in any hollow in the surface being excavated. In the first season, when the depth of the section was little more than a foot, the

water was diverted and carried away by drains. However, during the second season, when the section reached a depth of over four feet, the drainage had to be assisted by a small pump, obtained with funds supplied by the University. The excavation surface conformed to the slope of the water-table, falling from the highest point on the margin of the swamp to the sump placed in the centre. In fact, the water controlled the level because, if the excavator dug too deep, it would well up into the hole and flood it. The second problem was due to the quantity of material preserved. This required that excavators had first to clear an area and then work from that space upon a new area, while at the same time continuous recording of every step in the excavation had to be maintained. All woodwork was uncovered and left standing upon pedestals while it was recorded and only then could it be removed to reveal the materials below it. The third problem was due to the fragility of the materials which had been preserved. For example, it was found that the usual excavating tool, the pointing trowel, was too clumsy and so a major proportion of the excavation had to be carried out with plasterers' small tools. Even so, the excavator had to work very cautiously and it is considerably to the credit of the excavators that so few of the artifacts which were recovered should show any marks of recent damage.

STRATIFICATION.

One of the most interesting results of this excavation was the demonstration that differences in stratification could be discovered and that they could be employed in a stratigraphic study of the relationship between the swamp site and the dry-land site. It must be stressed here that the section used in this discussion (fig.1) is a schematic one and that a thorough study of the swamp sediments has not yet been completed.

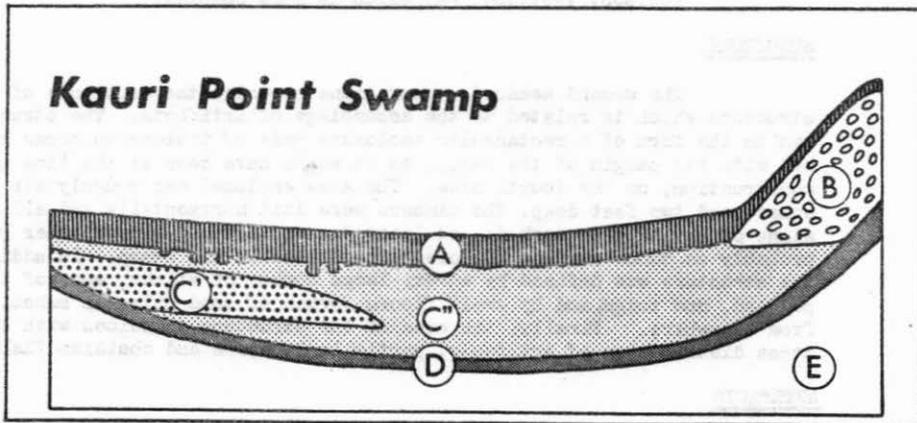


fig. 1.

Layer A., which is the uppermost and most recent, is a dark peat with little inorganic content. It contains metal artifacts and a quantity of bark of Pinus Radiata.

The formation of A. appears to have been separated from the preceding layers by some erosion.

- B., is the foot of a shell midden which has spilled down the northern flanks of the Pa site. The relationship of this deposit to the occupation sequence of the Pa has been discussed by Golson (Golson, 1961:24) and by Ambrose (Ambrose, 1962:62). While, in reference to the swamp stratigraphy, the present evidence is that Layer B., rests upon Layer C., and is therefore more recent.
- C", is the main deposit in the swamp. It is a mixture of organic and inorganic substances and is without any obvious structure. It contains a small number of Prehistoric artifacts and a much larger number of stones which have been introduced by man.
- C', is the deposit associated with the cultural remains. It is otherwise distinguished from C", by an apparently higher proportion of inorganic matter. Layers C" and C' were both formed at the same time, though it would seem that C" continued to be formed after the deposition of C' had ceased.
- D., is a buried soil horizon, which was discovered in four separate sections of the swamp and adjacent deposits. In each section it is found to overlie the "natural" base.
- E., is the "natural" base, which is to be related to that of the Pa (Golson, 1961:28), but which is more complex.

STRUCTURE.

The second season's excavations revealed the existence of a structure which is related to the assemblage of artifacts. The structure was in the form of a rectangular enclosure made of timbers on three sides and with the margin of the swamp, as it would have been at the time of construction, on the fourth side. The area enclosed was roughly six feet square and two feet deep. The timbers were laid horizontally and all showed signs of having been worked; at least two of them had served other purposes, probably as canoe strakes, before being placed in the swamp. In addition, the structure was defined by a very large number of sticks, some of them pointed, and twigs, and by small floors formed of wood chips or subsoil carried from elsewhere. Finally, the area of the structure coincides with the dense distribution of artifacts, particularly combs and obsidian flakes.

ARTEFACTS

The two most numerous classes of artifact present in the site were obsidian flakes, of which 13,250 were recorded from the area, and combs, heru; all of the simple wooden type cut from single pieces of wood. (Fisher, 1962:47). A preliminary study of the obsidian indicates that at least 75% of the flakes showed signs of use, characterized by series of small fractures along edges. An interesting discovery was that edges formed by hinge-fractures

frequently showed signs of use, and from the direction of fractures formed by such use it would appear that some specialized activity was involved. Probably the most generally interesting and attractive artifacts belonging to the site are the combs. (Plate 2, figs. 2, 3, 4 and 5). 330 large identifiable fragments were recovered during the two seasons, in addition to several thousand teeth and small fragments. The combs discovered during the first season, with one exception (Shawcross, 1962: fig. 8) gave the impression of a simple, entirely abstract design. However, the second season produced a considerably greater variety of designs and decorations, which became all the more puzzling until, during the preparatory study of cleaning and photographing, two fragments, from different points in the excavation were put together. The reconstructed comb (fig. 2) is clearly the profile of a head and provides the key to the interpretation of almost all of the profile and surface decorations on the other combs. It is possible to construct series in which certain features of the head are discarded while others are retained and developed, as may be seen in figs. 2, 3, 4 and 5. But such series can be misleading if they are based upon beginnings and endings which are assumed and unverifiable. However, the very existence of such a series of artifacts is of the greatest interest.

Another find, which may appear startling to those accustomed to examples of Maori art preserved in museums is the wooden figure (Plate 3) which came from the base of the excavations. This is simply the natural fork of a tree which has been roughly adzed to indicate the joints of the legs and the divisions of the trunk. There are no indications of arms and it is a matter of interpretation whether the uppermost division represents a head or just the neck, from which the head is missing. In either event, this end must have been partially decayed before the figure was deposited in the swamp.

Other artifacts include a large number of fragments of gourds, of which several, though badly crushed, are capable of being reconstructed. The size of the gourds varies, but at least one, with thin walls, can have been no larger than an orange and appeared to have been used as a container for red ochre (kokowai). Another almost complete gourd was found to contain 60 flakes of obsidian and a pebble, which is considered to have been the hammer-stone used for detaching these flakes. (Plate 4). This discovery supports other observations that the obsidian flakes were to be found together in clusters, as if they had been put into the swamp in containers.

Another form of container, of which several examples have been recovered, was the basket. These are very fragile and have still to be studied, but their size appears to have been small and their workmanship remarkably delicate.

In the first season two wooden vessels were discovered (Shawcross, 1962: figs. 2 & 3). The second season added another of a different form to these. It resembles a hollowed-out fern-root beater with a small handle and is made out of a well-preserved, dense wood, heavily smeared with red ochre.



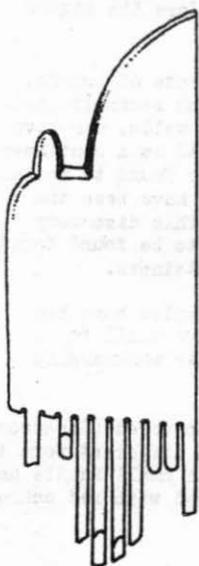
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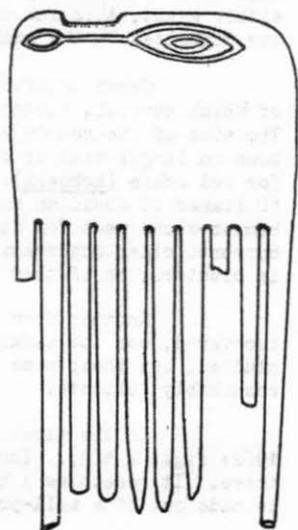
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4" 10 cm.

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4



5

There are the fragments of at least two "bugle-flutes", putorino or "trumpet-flutes" (Dodge & Brewster, 1945: 48) without any decoration and made from a dense, dark wood. All of the fragments are broken at the mid-vent and two distal ends and one proximal are recognizable.

Among the remaining artifacts so far identified are an adze haft and parts of the shaft and barbed point of a wooden spear. Finally, seven pieces of worked kauri gum came from the site. All but one are either spindle or rod-shaped, about 1" long by $\frac{3}{8}$ " diameter, and have been finished by grinding or some method of chipping and bruising.

FUNCTION.

At the present stage of research the interpretation of the function of the site is mainly speculative. However, one theory, that it was the site of a comb factory, seems unlikely, for the following reasons. The presence of wood-chips has already been noted, but these were introduced from elsewhere in order to provide temporary floors, as was also the subsoil. Had there been any sustained woodworking activity there would have been a considerably greater quantity of waste, including off-cuts, as everyone with any experience of a carpenter's workshop will know that a relatively small volume of solid wood is the source of a large number of chips and shavings. Instead, it is certain that all of the combs had been completed and subsequently broken, some even showing signs of re-use, before they reached their last position in the swamp. The artifacts appear to have been deliberately placed within the rectangular structure, probably over a period of time, and as a precaution against something. It is well known that among the Maori the head was tapu (Buck, 1950:349) and thus a hair ornament would become contaminated and presumably would require a special means of disposal, rather, as in our own culture, the disposal of atomic waste cannot be left to chance, but must be handled in sealed containers and stowed in inaccessible places. It seems probable that the obsidian found in this site had served some similar, specialized purpose and had therefore to be disposed of in the same manner.

CONCLUSION.

The significance of the site lies, not in the assemblage of artifacts, interesting though it is, but in the relation of the site to the occupations of the Kauri Point Pa. Using the terminology advocated by Golson (Golson, 1959:31) the swamp site becomes an archaeological component in which an assemblage of artifacts was collected together, probably over a length of time, rather than at an instant. This would accord well with the existence of the series of comb decorations which yet do not appear to show a uniform change from the lowermost to the uppermost deposits. This component may be linked by means of the shell midden to the period, or periods, of occupation prior to its formation. In short, the artifacts which have been described, were in use at the beginning of the time during which the Kauri Point pa site was occupied. A more precise statement must await the completion of the study of that site, when evidence will also be available for the chronological age of the deposits.

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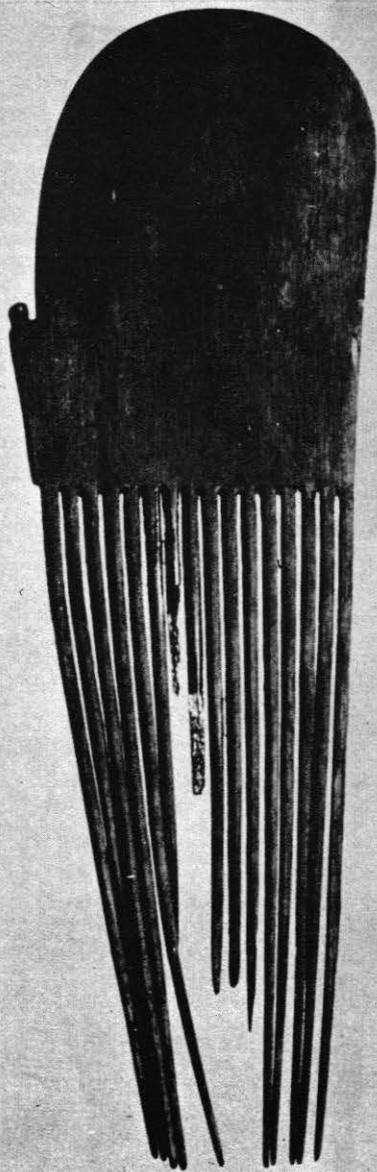
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Our Society has experienced the utmost kindness and co-operation from the people of Kauri Point, who took our intrusion in their stride and helped us to overcome many of the difficulties of a large camp. I am particularly grateful to Mr. E. Noble, who drove me all the way to Auckland when I failed to recover from an illness.

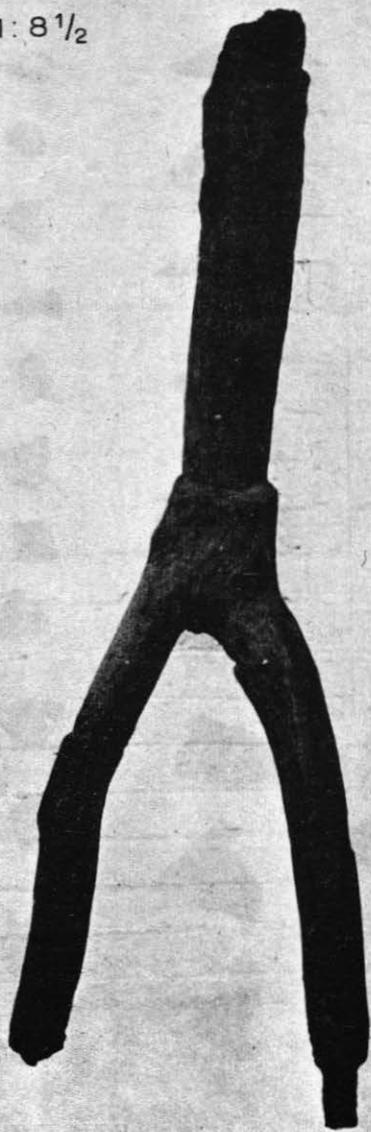
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kauri point swamp

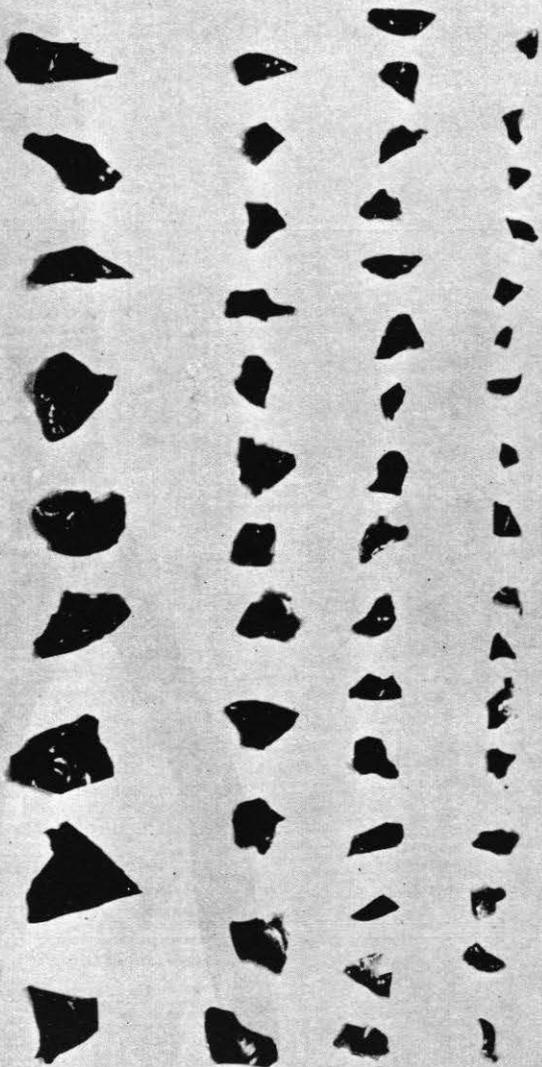
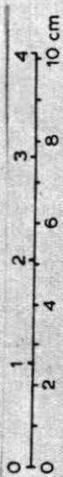
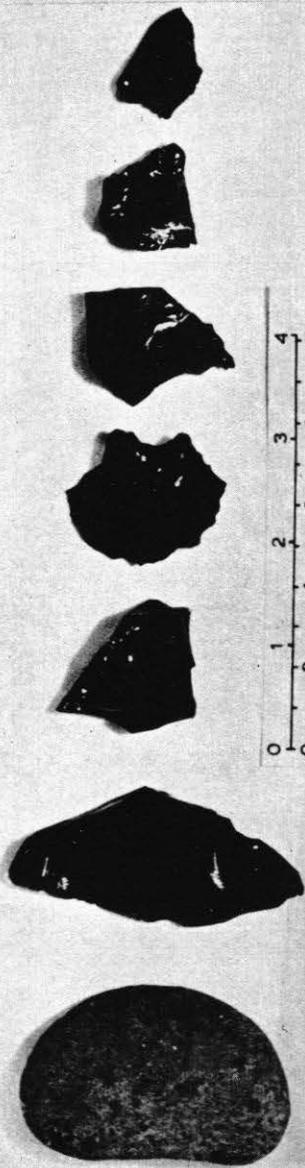
Pl. 2.

Approx. scale 1: 8 1/2



kauri point swamp

Pl.3.



kauri Point swamp

Pl.4.