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## PREHISTORIC MAN IN THE NORTH CANTERBURY DOWNLANDS

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### INTRODUCTION

In early September, 1969, a localised scatter of fire-reddened stones was exposed near Weka Pass, in a paddock that was being deep-ploughed for the first time (see Figure 1). The land-owner, Mr W. Williams of Christchurch, reported this find to me, and on 20 September we carried out a one-day rescue excavation at the site (S61/31, at grid reference 120232. Note that this site was incorrectly listed as S61/2 in Orchiston 1975:25).

### INVESTIGATION OF THE SITE

The site was located on an elevated knoll near the floor of a broad dry valley, which in preceding years had been swampy in places (hence the fact it had not been ploughed previously). Removal of the turf and topsoil revealed a single oven, 1.25 metres in diameter, and this was sectioned to produce the following stratigraphy:

1. Ploughed turf and topsoil.
2. A stratum of tightly-packed, angular, limestone oven-stones (mostly between 76 and 200 mm. maximum dimension), extending down for 203 mm. at the oven's centre.
3. A sterile deposit of charcoal-blackened loess-soil admixture.
4. A 38 mm. thick continuous layer of charcoal.
5. Sterile loess into which the oven had been dug. This was fire-reddened, and contained small pockets of charcoal.

At its centre the oven reached a depth of 305 mm. No faunal remains or artefacts were found during the excavation, nor had been revealed in the vicinity during ploughing.

The ovenstones were composed of local glauconitic limestone, and ranged in colour from red, through yellowish, to white. Mr D. Gregg suggested (private communication, September 1969) that these colour differences were due to differential availability of oxygen during firing. A charcoal sample from Stratum 4 was identified by Dr B. Molloy as *Podocarpus totara*, a species which was once very common in the region (Harris 1955; 1969:337-8; J.A. Johnston 1958:70-1; W.G. Johnstone 1961:6, 8; Moar 1970; Molloy 1969:349-50; Molloy *et al* 1963: Figure 1; Speight 1910:413), and another sample (incorporating bark) gave a radiocarbon date of  $919 \pm 42$  b.p. (NZ 1286), which converts to  $1089 \pm 42$  A.D. when the corrections of Michael and Ralph (1972) are applied. (It should perhaps be mentioned that the former date was inadvertently listed for site S61/24 in Moore and Tiller's 1975 paper (site 18 in Figure 2), but that they corrected this error in their 1976 paper).

Elsewhere (Orchiston 1975:25) I have suggested that this site was used by a mobile party for a single cooking episode, and that the absence of midden bones or shells within or adjacent to the oven is evidence that the preparation of plant foods was involved. Regrettably, flotation equipment (see Jarman, Legge and Charles 1972) was not available in Christchurch at the time, otherwise an investigation of the sediments from Stratum 3 could have been carried out to test this proposition.

#### OTHER LOCAL SITES

Trotter and McCulloch have carried out extensive field surveys in the southern part of the North Canterbury Downlands, especially in regions where limestone of the Amuri and Weka Pass groups crops out (see Gregg 1964), and have recorded considerable evidence of prehistoric human occupation in the form of paintings on the walls of rock shelters and strata containing midden material in their floors (McCulloch 1968; 1973; Trotter and McCulloch 1971; 1973). The isolated oven reported above lies along the natural line of access between two clusters of shelters, one on Omihi Creek, and the other in the Timpendean area (refer to Figure 1). Timpendean, itself, was first investigated one hundred years ago (Haast 1877; see, also, Haast 1882a; 1882b; Hutton 1882; Maskell 1882; Stack 1882), and excavations in its floor by Haast (1877) and more recently by Trotter (1972) have produced evidence of a lengthy list of forest, forest-fringe, and riverine birds, as well as the bones of the Polynesian rat, Polynesian dog, and "imported" coastal products (fish, including barracouta; seal bones; and several species of marine shellfish).

That Timpendean and other occupied Downlands shelters served as temporary encampments during fowling activities, focussed primarily on Podocarp forest and forest-fringe avifauna, seems an inescapable conclusion from the evidence at hand (which is examined in detail in Orchiston 1974: Section 3.5). Shelter sizes for the most part necessitated small exploitation parties, and the presence of barracouta, plus inhospitable climatic conditions in winter, suggest that these activities were confined to the summer months.

Whilst forests flourished, access to the area from the coast must have been by way of the bed of the Waipara River which, being a "lowland river", never witnessed those annual summer floods brought on by melt-water from the Southern Alps. To the contrary, the Waipara was prone to dry up considerably (sometimes altogether), as this area experiences summer moisture deficiency (Garnier 1951). It is therefore significant that there is an Archaic site (S68/11) on the southern bank of the river at the mouth. This is situated on the "Amberley Strand Plain" (see Speight 1911; Jobberns 1937), and was discovered in 1959 during the ploughing of a paddock that gave no surface indication of its subsurface contents. Most conspicuous, following this disturbance, were three discrete occupation areas, each approximately one-quarter of an acre in extent. One contained ovenstones, blackened soil and charcoal, together with argillite, chalcedony, orthoquartzite, porcellanite, and quartz flakes. Another simply comprised a scattering of shells, while the third was characterised by ovenstones, soil with a very high charcoal content, and many midden bones (mostly moa), some shells, and a few stone flakes. Near these three areas were two isolated 2.5-3 metre diameter ovens, a metasomatized argillite Duff (1956) 4A adze and two adze fragments, and several sandstone polishers. In all, occupation was scattered over about 22 acres.

The Waipara River mouth Archaic site appears to have been used intermittently as a "transit camp" by small parties en route to or from the avifaunal resources of the hinterland, and the full range of rocky shore and sandy shore shellfish excavated at Timpendean (pipi, cockle, trough shell, top shell, two species of mussel, and two species of paua) was readily available nearby. Once hinterland deafforestation was widespread (primarily as a result of anthropogenic fires - see Cumberland 1962) and the Downlands ceased to attract prehistoric man, the river mouth site was no longer used.

## CONCLUSION

During the first few centuries of South Island Maori occupation, the opulent stocks of Podocarp forest and forest-fringe birds found in the southern part of the North Canterbury Downlands attracted man, and small seasonal fowling parties gained access to the area via the bed of the Waipara River. Sometimes a party would stop off at the camp site situated near the river's mouth in order to stock up on local fish and shellfish, before proceeding inland. In 1969, a small isolated oven dating to the 11th century A.D. was excavated near Weka Pass. This lay in a valley linking two areas of limestone shelters, and was probably used in the preparation of a single meal by a small travelling party en route either towards the coast, or to shelters further inland (in the Timpendean region?).

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