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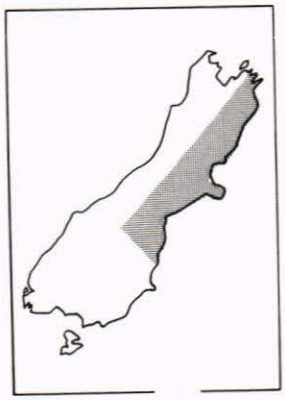
THE FIRST THOUSAND YEARS

Regional Perspectives in New Zealand Archaeology

Edited by Nigel Prickett

CANTERBURY AND MARLBOROUGH

Michael Trotter



From the very beginning of archaeological research in New Zealand, the eastern coast of the South Island has produced important, if at times controversial, evidence on the prehistoric occupation of the country. It is in this part of the island that the earliest, the largest, and the most sites occur, and it is here too, that many aspects of cultural and ecological history can best be studied.

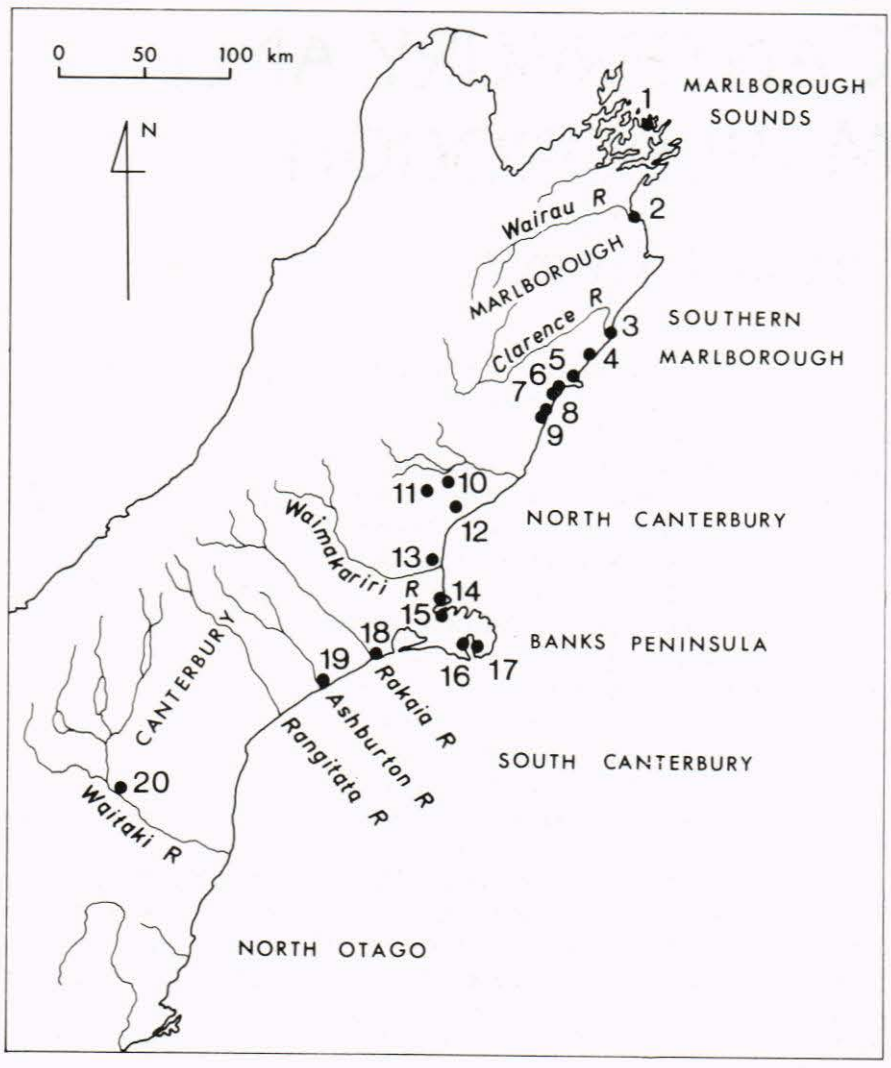
This chaper discusses the somewhat attenuated region along the eastern coast, from Titirangi in Cook Strait to the Waitaki River in South Canterbury (Fig.5.1). To date, over 1000 archaeological sites have been recorded here, but with the exception of rock drawing areas, no large parts of the region have been intensively or systematically surveyed; most investigations have been limited to individual sites selected for their expected returns of material and data, or because of their imminent destruction. The information available thus comes from biased sampling, and it is to this factor that the somewhat wary approach adopted here towards synthesising a prehistory of the region may be attributed.

Except in South and North Canterbury where inland rock shelters occur, the majority of sites including all those of large size are on the coast itself. While such a distribution may be favoured by the recording and investigational methods that have been employed, sufficient work has been done in the hinterland to indicate a true locational bias towards the coast, especially those parts of it where quantities or varieties of food occurred naturally. Hence, over much of the region the pattern of occupation tends to show concentrations near stable river mouths, particularly those with large estuaries, and along rocky coasts that are backed by suitable habitational areas such as sheltered raised beaches.

Inland, the distribution of recorded small sites shows a positive correlation with favourable preservation conditions, particularly with rock shelters. However, as such places also provided favourable conditions for habitation and especially for shelter, their distribution cannot be attributed solely to preservation.

With a few exceptions, site frequency falls off rapidly as the relief and roughness of the terrain increases. Sites do occur on foothill margins, but appear to be rare over 150 m above sea level except in a few instances. No sites have been recorded above the bush line, which averages about 1000 m above sea level.

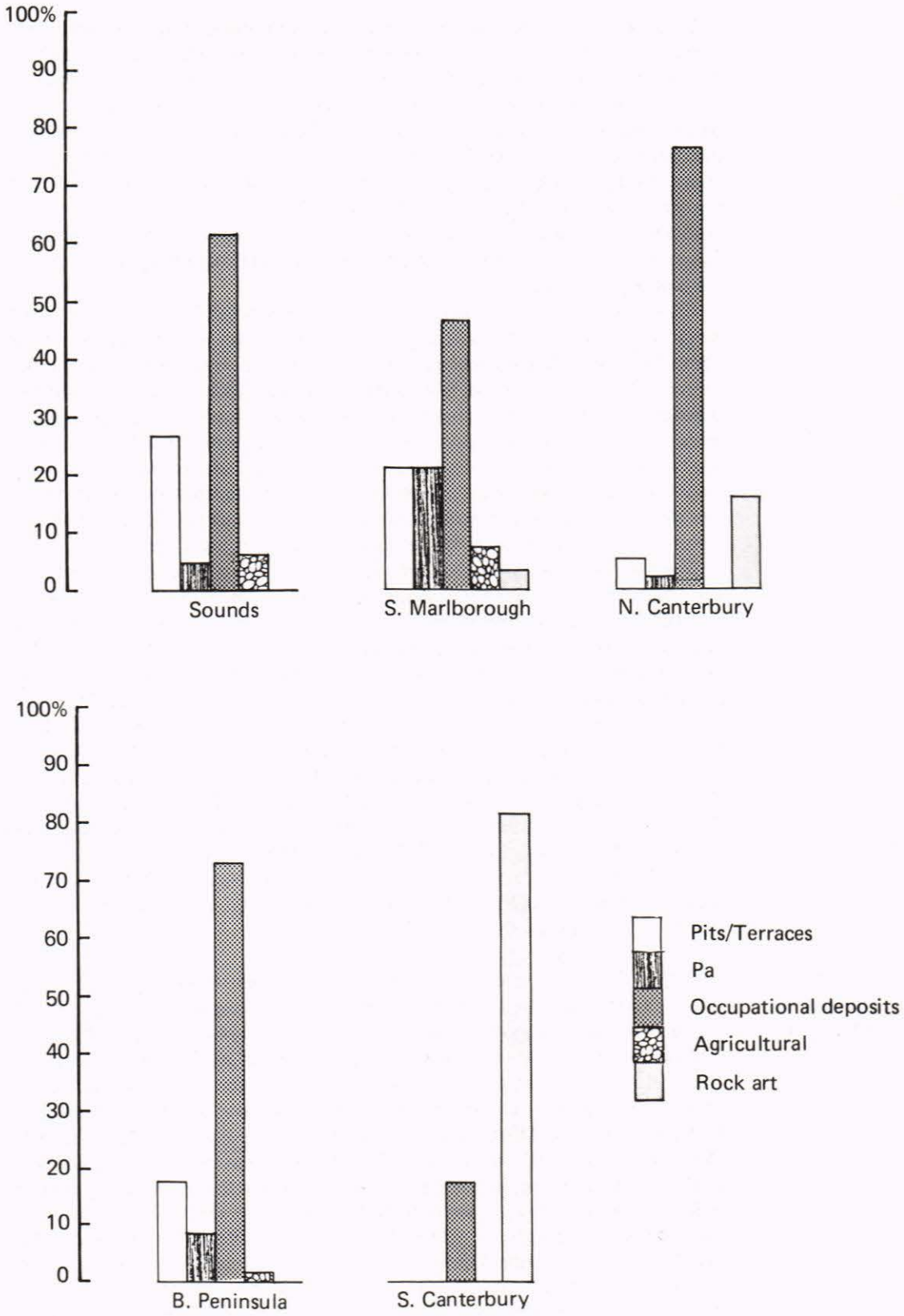
Recorded prehistoric archaeological sites in Canterbury and Marlborough are thus mainly distributed in a strip varying in width from less than 100 m in parts of the Marlborough Sounds and Banks Peninsula, to forty or fifty kilometres wide on the Canterbury Plains and the downlands of South Canterbury. From north to south is a distance of 500 km, but the region includes almost 2000 km of shoreline with a variety of sandy beaches, deep sounds, indentations, peninsulas, sheltered bays and rocky coasts. For convenience it may be divided into five



5.1 The Canterbury - Marlborough region. Numbered sites are: 1. Titirangi; 2, Wairau Bar; 3. Clarence; 4. Rakautara; 5. Takahanga, Avoca, Kaikoura; 6. Peketa; 7. Omihi; 8. Claverley; 9. Lagoon Flat; 10. Pentland; 11. Timpendean; 12. Teviotdale; 13. Kairaki, Hohoupounamu, Kaiapohia; 14. Moa-bone Point, Redcliffs, Moncks Cave; 15. Ripa Island; 16. Onawe; 17. Takamatua; 18. Rakaia; 19. Wakanui; 20. Aviemore.

physiographical areas — the Marlborough Sounds, central and southern Marlborough, North Canterbury, Banks Peninsula and South Canterbury (see Fig.5.1). The distribution of recorded sites within these areas is as follows:

	Area sq. km	Coastline km	Number of Sites
Marlborough Sounds	1100	1100	191
Southern Marlborough (south of the Sounds)	1800	182	134
North Canterbury	6000	180	253
Banks Peninsula	1300	290	218
South Canterbury	4200	140	292



5.2 Percentages of site types recorded in the Marlborough Sounds, southern Marlborough, North Canterbury, Banks Peninsula and South Canterbury areas.

Because some areas have been searched more thoroughly than others, the number of sites recorded does not necessarily bear a very close relationship with the total number that actually does occur. The distribution of types of site recorded within each area, however, should be fairly representative. If the sites are divided into five broad classes according to their main physical characteristics, the distribution is as shown in Fig.5.2. These classes are (a) pits and terraces on spurs or ridges, (b) pa sites, (c) occupational deposits such as fire debris, food remains or artefacts, (d) stone and earth walls generally considered as being associated with gardens, and (e) rock art sites. As well there is a total of four rock source sites not included in the graph, three in South Canterbury and one in the Marlborough Sounds.

These site classes have been based on the files of the New Zealand Archaeological Association site recording scheme, but it has been necessary to use some discretion in accepting the types as recorded. For instance the term 'pa' has been used by various recorders for fortified villages, unfortified villages, naturally defended or artificially defended refuges, and (in ignorance) for European sheep folds. Small round pits have been called 'ovens' in Canterbury, but 'kumara pits' in the Marlborough records. Divisions between site types adopted here are to some extent arbitrary; ovens (which are included in occupational deposits) grade into pits, pits into terraces, and terraces into pa sites. Sites that have a combination of features have been put into the category of their dominant feature.

There is a correlation between some site classes and natural features. Rock art sites occur most frequently in South Canterbury where there are numerous weathered limestone formations that provide shelter, a suitable smooth light-coloured surface for drawing on, and subsequent protection for the art work. Pits and terraces are most common in the Marlborough Sounds and in Banks Peninsula where the deeply dissected landscapes provide numerous ridges and spurs on which they are usually situated. They are also fairly common in southern Marlborough, which has a much more abrupt coastline than the Sounds or Banks Peninsula, but the dominant site class here is the pa (45% of all east coast South Island pas occur in Southern Marlborough, mostly in the Kaikoura area). One would expect climate to be a controlling factor in agricultural sites, and this doubtless does account for their absence south of Banks Peninsula, but their virtual absence from the whole of North Canterbury is less easily explained. There is thus a certain amount of evidence that the distribution of some classes of site is due to cultural, rather than natural factors.

Summary history of investigations

During the 1850s some observations were made of archaeological sites, notably moa hunter remains at Redcliffs, and the Kaikoura moa egg,[1] but no archaeological investigations, as such, were made until Julius Haast became interested in the large site near the mouth of the Rakaia River in Canterbury.[2]

In 1869 Haast investigated the Rakaia Mouth site after ploughing had bought artefacts, fire remains, and midden bones to the surface, and on the basis of his findings he proposed that a period of Moa-hunter occupation had preceded the Maori occupation of New Zealand (Fig.5.3). Over part of the site Haast found cooking places, bones, and flaked stone tools; in another area were ground or polished tools, including greenstone. He interpreted this distribution as indicating two separate occupations, one by palaeolithic Moa-hunters, the other by neolithic Maoris. The terms 'palaeolithic' and 'neolithic' had come into use in Europe during the previous decade and Haast used them here to refer to two cultural groups, one of which he believed had achieved a higher degree of technology in that it used abrasive methods in shaping and finishing stone tools. Haast, who was the founder of the Canterbury Museum, was later to revise his opinions of the Moa-hunters' technology when his workmen found at least one polished stone

5.3 Distinctive argillite adzes and implements of orthoquartzite and greywacke, found by Julius Haast at the Rakaia Mouth moa-hunter site in 1869 (Canterbury Museum).

adze at a Moa-hunter cultural level in Moa-bone Point Cave near Christchurch in 1872.[3] He may have modified his opinion, too, as to the relationship between Moa-hunters and Maoris; in 1882 he stated that he had never denied that the present day Maoris were the successors of a former race. or races, inhabiting New Zealand, but he maintained that the first inhabitants had lived a long time ago and that they had some Melanesian affinities.

One of the men who worked under Haast on the Moa-bone Point Cave dig was Alexander McKay, whose careful work, followed by a published report,[4] was unique in nineteenth century archaeological investigations in New Zealand. Most of the digging at this site, and others that Haast investigated, was done in his absence — he obtained his information from sections exposed, and from the reports of his workmen.

An important site that Haast had investigated was the Weka Pass (Timpendean) rock shelter in North Canterbury. Rock drawings there, like most of those in the South Island, were very different from the known Maori artwork of the 18th and early 19th centuries; Haast found them to have closer similarities with symbols of Tamil or Buddhist origin.[5]

Haast's synthesis of New Zealand prehistory was by no means universally accepted and indeed much of it was hotly debated by many of his contemporaries, some of whom made different interpretations of the available evidence, while others devised profound hypotheses on a basis of a minimum of data and a great deal of imagination. Controversies between Haast and his contemporaries make fascinating reading in the *Transaction of the New Zealand Institute* and the *New Zealand Journal of Science* of the 1870s and 1880s, and have been summarised by Roger Dugg and H. von Haast.[6]

By the end of this period however, there appears to have been fairly widespread support for the view, as put forward by F. W. Hutton in 1891, that the moas had been exterminated by peaceful tribes of Maoris less than 500 years ago in the

South Island and a little earlier in the North, in both cases extinction occurring fairly soon after the arrival of man.[7]

Interest in archaeology now waned, its place being taken by greater attention to 'traditional histories'. The process of compiling histories from stories told by Maori informants had actually begun with the European settlement of New Zealand — Edward Shortland and James Stack being prominent on the eastern coast of the South Island — but it was not until the latter part of the 19th century and first quarter of the 20th century that these had much effect.

Probably as a result of feedback from Haast's published beliefs that the Moa-hunters had Melanesian physical characteristics and a comparatively primitive culture, collectors of Maori traditions were able to publish accordant descriptions of the first New Zealanders. This led to a widespread acceptance of the theory that the first human inhabitants of New Zealand were not Polynesians. This belief still persists at a popular level, the mythical race being referred to as the 'Moriori'.

With a return to a more scientific approach to investigating prehistory, H. D. Skinner of the Otago Museum was able to show in the 1920s that the culture of the Moa-hunters did not differ significantly from that of the later Maoris. Skinner's evidence was the material from three east coast sites; a sand dune at the mouth of the Shag River which was largely dug by David Teviotdale, Moa-Bone Point Cave, and Moncks Cave near Christchurch.[8] His basic conclusions are still acceptable today. Skinner's approach was mainly through artefact typology, and this strongly influenced archaeological investigations for several decades. He did very little digging himself, but encouraged and supported David Teviotdale's field work between 1920 and 1940, mostly on Otago sites but with some minor excursions into Canterbury and Marlborough in 1928 and 1935. Excavating was done mainly with grubbers and shovels at this time.

No one since Julius von Haast has had a greater impact on the study of prehistory in New Zealand than Roger Duff with his book *The Moa-hunter Period of Maori Culture*.[9] With its publication in 1950 began a new era of archaeology in New Zealand. Duff's simple division of Polynesian culture into Moa-hunter and Maori provided an explanation for most problems of the day. For many workers it provided a basis for further research; for others it provided a stimulus for opposing ideas. Basically Duff proposed that Polynesians had arrived in New Zealand between the legendary visits of Kupe in A.D. 950 and Toi in A.D. 1150, and established a culture based largely on the hunting of a medium-sized species of moa. Later, in A.D. 1350, a fleet of canoes from Hawaiki brought agriculture and a new way of life with them. The newcomers mixed with the Moa-hunters and from them came the Maori culture as recorded by the first Europeans to visit New Zealand. The early and late periods could be distinguished by their artefacts, particularly adzes and ornaments. Duff's hypothesis was based to a very large extent on sites on the eastern coast of the South Island. Of particular importance was one at the mouth of the Wairau River — the Wairau Bar — near Blenheim, which was treated as a 'type site' for Moa-hunter culture. This site had been discovered by Jim Eyles in 1939, and most of the investigations that were carried out by Duff and Eyles were concentrated on the large number of burials found there. Traditional digging methods with grubber and shovel were used, but recording methods were better than had been adopted by Teviotdale in Otago. More important was that Duff's interpretations and hypotheses were based upon his own field work and personal observations.

In 1955 Robert Bell and Duff excavated part of a pa site at Claverley; this was one of the first investigations to be made specifically to obtain information on structures. Duff and Bell also looked for evidence of structures at Wairau Bar, but were unable to determine any pattern in the array of post holes uncovered.[10]

During the summer of 1957-58 two organisations that were to become very

important in New Zealand archaeological research were involved in field work in the region. The New Zealand Historic Places Trust arranged for W. Ambrose and Frank Davis to record archaeological evidence (especially rock drawings) that was to be destroyed by the construction of the Benmore hydro-electric dam on the Waitaki River,[11] and members of the newly formed New Zealand Archaeological Association carried out further excavations in Moa-bone Point Cave. The latter was organised by Roger Duff and supervised by Jack Golson, but little undisturbed deposit was found. Many important artefacts, especially those of normally perishable materials such as wood and flax, were recovered, however, and the project provided useful training in excavation techniques, recording, and the interpretation of stratigraphy. Some of the local amateurs who had worked in Moa-bone Point Cave formed a group that was later to become known as the Canterbury Museum Archaeological Society.

Two Canterbury Museum employees who were involved in archaeology in Canterbury and Southern Marlborough in the early 1960s were Tony Fomison, best known for his records of Maori rock art, and his successor Owen Wilkes. Although both excavated, very little of their work has been published.

In 1965 Michael Trotter, who had previously been working in North Otago, joined the Canterbury Museum and continued to investigate archaeological sites in Canterbury and Marlborough, usually with the assistance of volunteer workers, often from the Museum's Archaeological Society. He concentrated on obtaining reliable data, in several cases re-investigating sites that had first been dug last century.

Principal excavations made during the next twelve years were at Moa-bone Point Cave, Omihi, Kairaki, Hohoupounamu, Aviemore, Rakaia Mouth, Redcliffs, Takamatua, Timpendean, Kaiapohia, Wakanui, Teviotdale, Avoca Point, Takahanga, Peketa, and Titirangi.[12] Much recording was undertaken of Canterbury sites in the late 1960s and of Marlborough sites in the mid-to-late 1970s.[13]

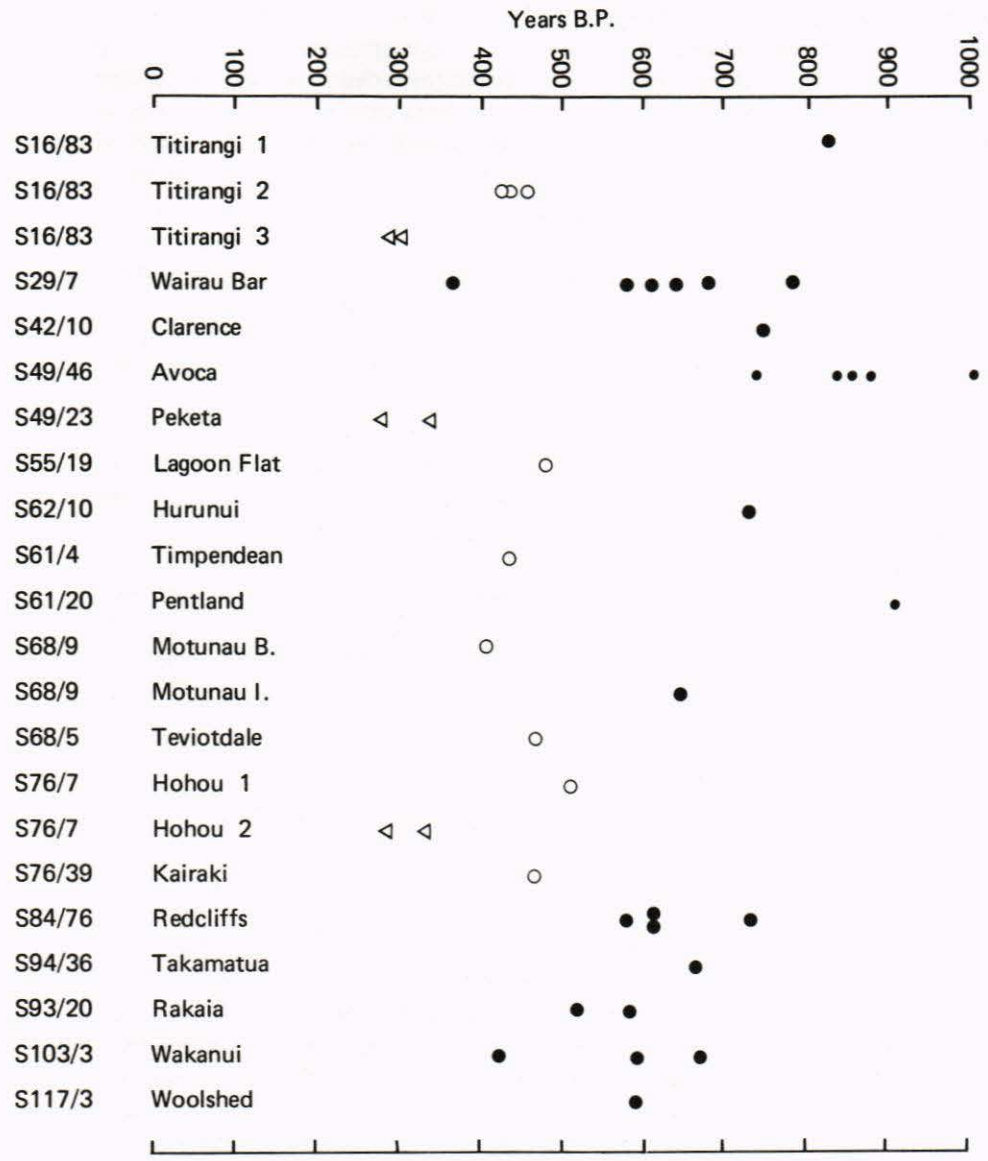
Beverley McCulloch worked with Trotter in investigating prehistoric rock art, of which the majority of New Zealand sites are in this region.[14] One of their major conclusions was that most New Zealand rock drawing sites were occupied 500 or more years ago. Both parties had previously worked independently in recording rock shelters (in North Canterbury and North Otago respectively) and they also collaborated in other joint projects, as at Clarence, Lagoon Flat, and Titirangi.[15]

In the late 1970s field investigations were concentrated on agriculture and on regional aspects of the prehistory of the eastern coast of the South Island, with a view to obtaining data for a comprehensive synthesis of South Island prehistory.

Sites and cultural history

Despite the vast upsurge in archaeological research in recent decades no new major syntheses of prehistory have been published since Duff's monograph of 1950.[16] Nevertheless, much new data are now being obtained and the time is not too far distant when we can expect this to be presented and incorporated in a comprehensive synthesis of South Island prehistory. In the meantime Michael Trotter and Beverley McCulloch, D. R. Simmons and Roger Green[17] have provided recent summary interpretations of some of the work of contemporary researchers.

Orthodox thinking on cultural history is still largely influenced by the two-period division, although several writers have recently proposed sub-divisions.[18] Data from the main sites that have been investigated along the eastern coast can be incorporated into this somewhat generalized framework which starts when man first set foot in the South Island some 900 or 1000 years ago. At this time almost all the region was covered with forest[19] which supported abundant bird life, including a number of species of moa and other birds that are now extinct. The checklist of New Zealand birds[20] gives twelve South Island moa species out of



5.4 Radiocarbon dates from the organic fraction of bone and marine shell. Sites are listed from north to south. Small dot signifies Exploration period sites; large dot, Moa-hunter; open circle, Transition period; and triangle, Classic sites.

a New Zealand total of twenty-four, while Ron Scarlett[21] lists eighteen for the South Island alone, although six of these are doubtful true species. Recent workers such as Joel Cracraft,[22] however, suggest that the total number of biological species may be greatly reduced, perhaps to fewer than thirteen for the whole of New Zealand.

It is reasonable to assume that the initial exploration of the region would have been made by a small group of people and that their motivation would have been essentially that of curiosity rather than a need to locate supplies of food and stone. Such a group may have stopped at the Pentland Downs Shelter in North Canterbury. The people who camped here brought shellfish with them from the coast some 19 km to the south-east, they made a fire, caught birds, and drew on the rock face with a piece of charcoal. Shell from the shelter has been radiocarbon

dated as 910 ± 132 years B.P.[23] Cultural evidence from such small sites as Pentland Downs is generally very sparse and it is not until we can examine the site of larger or more permanent camps that much useful data on the occupants can be obtained.

One of the earliest sites to have provided archaeological evidence on the cultural history of the region is at Avoca Point in Kaikoura (see Fig.5.4). This site has been radiocarbon dated on moa-bone, two species of shell, and charcoal, to about 860 radiocarbon years Before Present. The principal foodstuffs consumed were shellfish, seals, and selected birds, including three species of moa, a weka and a goose, all five of which later became extinct. Small numbers of both inshore and offshore fish were also eaten. Apart from flakes of flint, artefacts were few, and although relatively undiagnostic, some showed affinities with those described by Duff for the Moa-hunter cultural period.[24]

Fragments of adzes at Avoca Point were of the material commonly called argillite, which occurs on D'Urville Island and the adjacent mainland. Sources of this rock were located early during the human occupation of New Zealand and for some centuries it was very popular for the manufacture of wood-working tools. A site within the present study area where adzes were manufactured is at Titirangi some 30 km by sea from an argillite source. In an excavated area of less than 15m^2 about 60 adzes and over 6000 flakes of argillite were obtained. The adzes were of small to medium size and were not particularly well shaped; many were found standing upright in the sand. It is suggested that larger and better quality adzes had also been made here and that those found by excavation were what remained of a craftman's wares after the best had been selected. A sample of moa bone from the bottom level at Titirangi had a radiocarbon age of 830 ± 90 years.[25]

5.5 A wind-eroded cooking area at the 750-year-old Clarence River mouth Moa-hunter site (M. Trotter and B. McCulloch).

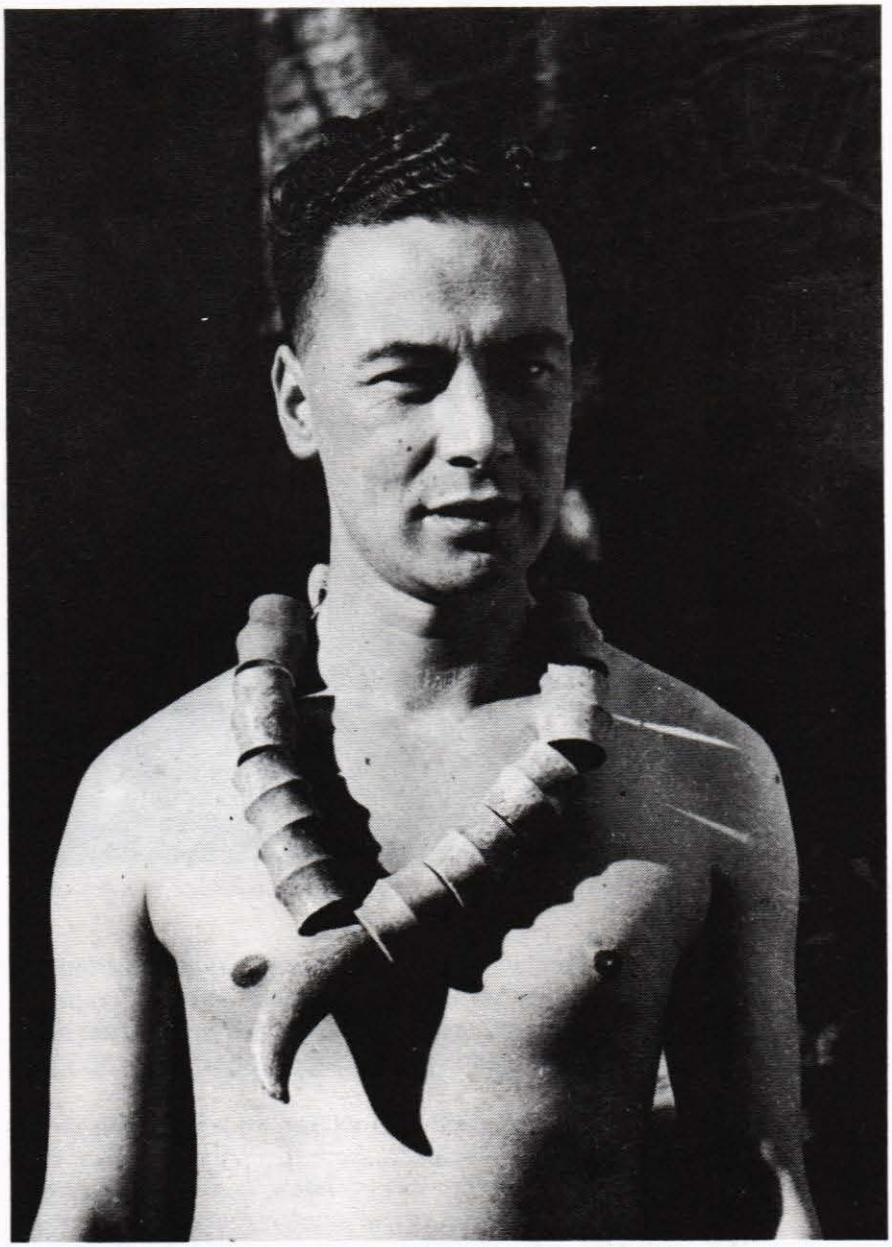
5.6 The remains of a stone line at the 750-year-old Clarence River mouth Moa-hunter site (M. Trotter and B. McCulloch).

A site at the mouth of the Clarence River in Southern Marlborough is the earliest evidence of large scale occupation (Figs 5.5 and 5.6). Although much eroded by wind and flooding, it appears to have covered an area of some 90,000 m^2. Different activities, such as adze shaping, other manufacturing processes, and cooking, were carried out in specific parts of the site. A low stone wall on silty soil is similar to those widely considered to be indicative of agriculture. Only little midden material has survived but there is enough to show that the inhabitants ate moa, seals, dogs, shellfish, small birds and fish. Artefacts include some that are diagnostic of Moa-hunter culture — the minnow lure, a bone reel, and adze types — but more interesting is the experimental use of local stones, including a hard siliceous limestone and an argillite for adzes. Use of both these materials appears to have been abandoned, due presumably to the greater suitability of other rocks. Radiocarbon dating places the Clarence River site at 750 ± 50 years B.P.[26]

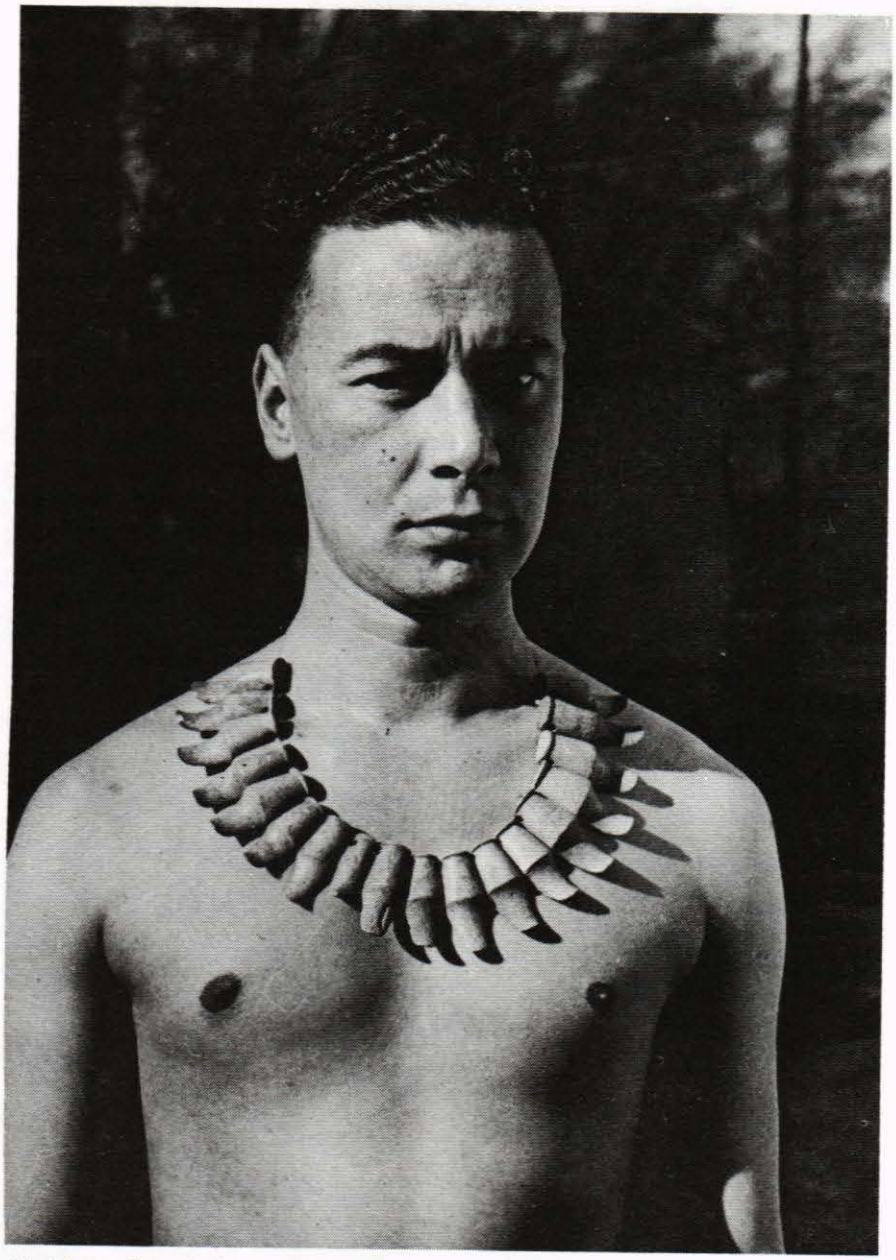
The principal site of the Moa-hunter culture period as described by Roger Duff (roughly equivalent to Golson's 'Archaic Phase'[27]) must be Wairau Bar, as it was from here that Duff obtained his critical data. Although several lines of evidence suggest that some small, but detectable, cultural changes may have occurred between the first occupation of this site and its final abandonment as indicated by the reported data, these are probably insignificant in a basic summary of cultural history as is presented here. Radiocarbon dates suggest that the site was occupied mainly between 700 and 600 B.P.

Two large and well-known sites that were first dug over 100 years ago — those at Redcliffs and at Rakaia Mouth — have both been subjected to modern investigations, and at least some scientific data are thus available for them.[28] Taking into account the absence of burials, the distance from argillite sources, and the effects of different methods of investigation, the similarities between Redcliffs, Rakaia and Wairau Bar may be seen to be greater than the differences. Differences occurring in faunal remains may be largely attributed to local environmental factors.

These three sites may thus be taken to represent the stage of greatest development of Moa-hunter culture in Canterbury and Marlborough. This was the Moa-hunter culture as described by Duff, with its sophisticated adze technology (see Fig 5.3), its reel and whale tooth personal ornaments (Figs 5.7 and 5.8), and its



5.7 Necklace of reel-shaped moa-bone units and a sperm whale tooth found with Burial Two, Wairau Bar (Canterbury Museum).



5.8 Necklace of tooth-shaped moa-bone units found with Burial Two at Wairau Bar (Canterbury Museum).

minnow lures. Artefacts of these types are found throughout New Zealand, but the particular cultural aspect that has been designated Moa-hunter was probably expressed in its purest form on these large sites and at others in the same general area. Radiocarbon dates suggest ages of about 750 to 550 years B.P. for this period.

It is notable that artefact assemblages from these classic Moa-hunter sites exhibit some notable differences from those further south. In Otago sites the distinctive minnow lure occurs only rarely, its place largely being taken by the barracouta lure, and there is a great variety of one-piece and two-piece fish hooks. The ubiquitous adze manufacturing industry of the Marlborough Sounds is virtually absent in the south, but very skilful flaking of orthoquartzite for cutting and scraping tools does occur in Murihiku. Also present in southern assemblages

is the slate knife which occurs infrequently in Canterbury and Marlborough.

While these factors, and others not listed here, might be considered as denoting regional variations in Moa-hunter culture, there appears also to be an age difference between the early northern and southern settlements sites. McCulloch and Trotter[29] have suggested a north to south movement of early settlement over a period of two to three hundred years. Although there is need for more evidence to confirm this as a general trend, further radiocarbon dates obtained since McCulloch and Trotter's publication in 1975 generally support

5.9 Typical rock shelter country — a limestone outcrop in South Canterbury in which are a number of shelters containing rock drawings (M. Trotter and B. McCulloch).

5.10 Black rock drawings of humans in a limestone shelter in South Canterbury. These drawings are believed to be 500 years old (M. Trotter and B. McCulloch).

their hypothesis. Individual dates for all archaeological radiocarbon analyses of human and moa bone collagen, and of marine shell samples have been plotted in Fig.5.4.[30]

The paucity of artefactual and faunal materials in approximately 250 rock art sites recorded in Canterbury creates difficulty in dating individual sites. Those diagnostic artefacts that have been found, however, are most commonly of Moa-hunter types, and radiocarbon dates suggest an age of at least 500 years.[31] This evidence, together with the close similarity in the style of drawings in the majority of shelters, suggests that rock art flourished during the Moa-hunter period (Figs 5.9 and 5.10).[32]

About 500 years ago the moa virtually became extinct, and most of the east coast forest was burnt off. These environmental changes are reflected dramatically in the archaeological sites.

At Kairaki and at the Hohoupounamu bottom level (in Canterbury) the occupational deposit is virtually all shell midden. Unlike the earlier sites that were at the mouths of rivers or streams, both these are on the inland side of now dry swamps or lagoons about 2 km from the present beach.

There is a greater variety of both faunal and cultural material at Lagoon Flat, where some moa bone is present (though not necessarily denoting the use of moa as food). Greenstone artefacts were found with burials here, but nowhere else on the site, thus suggesting it was a valued material. Greenstone occurs in

5.11 A cluster of pits at the Clarence River agricultural site (M. Trotter and B. McCulloch).

occupational deposits at least as early as bottom level Titirangi (830 ± 90 B.P.) but until the technique of abrasive cutting was developed, the difficulty of shaping it by percussion methods prevented its general popularity. Lagoon Flat has a single radiocarbon date of 480 ± 60 B.P.

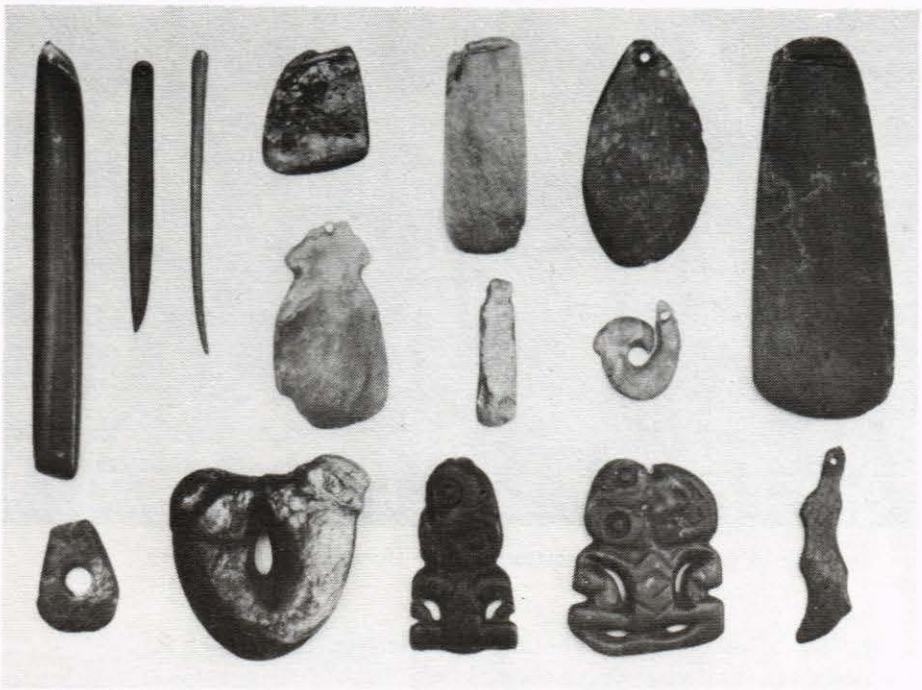
In the Kaikoura district the manufacture of one-piece fish hooks from large mussel shells was popular for a while. Sites containing these hooks have not been investigated scientifically, but an informed guess, based largely on associated material, would place them 300-400 years ago.

Up until this time the construction of shelters for dwelling or storage does not appear to have involved modifying the surface of the ground. Indeed there is no acceptable evidence for any built shelters at all during the first five or six hundred

years of human occupation. This is, of course, probably due to inadequacies in data recovery.

In Marlborough and Banks Peninsula in particular, pits or depressions which have been dug into the ground, usually on spurs and ridges, are a common feature (Fig.5.11). Many appear rather as terraces, due to the hollows having been filled in, subsequent to abandonment. Other features, which are true terraces, have a similar distribution. The pits very greatly in size and shape and only little evidence is available as to their purpose or their age. Reasons for the preferred ridge-top location could include cold-air drainage, moisture drainage, and an unrestricted view. Most of those in such positions are not associated with possible garden areas. In a few cases, such as at Peketa, the steepness of the hillsides would have provided some natural defence, and at this particular site, river boulders have been carried up and stored in strategic positions, presumably to hurl down upon intending attackers. Excavation of a terrace here revealed two shallow circular pits containing general living refuse — food remains, flakes, etc. — plus artefacts, some of which had been deliberately placed in the position in which they were found. Radiocarbon dates from one of the pits gave ages of 280 ± 50 and 340 ± 50 B.P.

Artefacts from Peketa include types that are generally classified as Classic Maori, and typical Moa-hunter types are absent (see Fig.5.12). Like 'Moa-hunter' or its near synonym 'Archaic', the term 'Classic' does not in practice appear to cover a precise period or cultural aspect, but is loosely applied to sites and artefacts dating from about this time.



5.12 A selection of Classic greenstone ornaments from the Canterbury-Marlborough region (Canterbury Museum).

A cluster of pits on a flat-topped ridge at Claverley was not well endowed with natural defences, but there is evidence here of palisading and a complex gateway which probably included a 'fighting platform'.[33] Evidence as to the use of the pits here may not be conclusive, but it does favour their interpretation as houses. The only radiocarbon date for this site which was excavated by Roger Duff[34] is 320 ±

60 B.P., but as this was from the wall post of a pit, the true age can be assumed to be younger than that.

Pits that have been excavated at Seddons Ridge (Kaikoura)[35] and at Clarence, had neither natural nor artificial defences, and although neither site has been radiocarbon dated artefacts found in them suggest an age similar to that of Peketa. The only other pit to have been excavated, one at Titirangi, yielded no evidence of age.

Other archaeological features lacking in direct age evidence are 'garden walls' which are found in Marlborough and Banks Peninsula. These are low ridges made of soil and stones, and more often than not run down gentle slopes of 5° — 8°. At Clarence a number of such walls parallel to each other covered an extensive area (many have now been destroyed by ploughing). Where the ground was stony, they were constructed mainly of stones, but when stones were not present, the walls were made of sandy soil.[36] An age of 300-400 years is suggested for this site.

Possibly earlier are several garden sites at Titirangi[37] where the walls tend to enclose rectangular plots, rather than narrow strips of land. Some of those at right angles to the dip of the slope appear to have formed the scarp edges of shallow terraces. It is generally thought that these gardens are where kumaras were grown, but the precise purpose of the walls is unknown.

Archaeological investigations have been carried out at only three sites having some form of defence. The cluster of pits at Claverley (referred to above) was protected by palisading, and possibly a steepened scarp in one place. Elsewhere in this district are other groups of similar pits which have not been investigated and for which we have no evidence of defensive works. Because of this no hard and fast rule can be applied to distinguish those that might be called pa from those that may not. Peketa is also generally considered to be a pa, but it relied primarily, if not entirely, on steep hillsides for protection. A small spur adjacent to it, however, was defended by an earth wall and this may have provided a retreat for the occupants of the main site. On Banks Peninsula, Murray Thacker investigated a pa at Pa Bay in the 1950s. It comprised a defended area with adjacent village and gardens; Thacker estimated that the site had been abandoned in the early nineteenth century.[38] Many other pa sites throughout the area have been dug by 'curio hunters'.

It seems likely that sites with earthwork fortifications are later than those where reliance for defence was placed primarily upon natural features. At the majority of these sites there is little evidence of actual occupation revealed by erosion, cuttings, or fossickers' digging. This gives the impression that they were made for use in the event of attack by people normally living nearby, but most in fact were never put to such use. Opposing this suggestion are the facts that some are ill-sited for easy defence, and some have incomplete earthwork fortifications; walls commonly go only partly across an easy approach way. Many also lack a supply of water, but except in the unlikely event of a long siege this would not have mattered. The inadequacies of these pa as forts could be explained if their real purpose was ritualistic or ceremonial, rather than for retreat in time of actual warfare.

Earthwork sites where there has been considerable occupation, judging from surface evidence, would include Rakautara in Marlborough, and in the historic period, Kaiapohia in North Canterbury. The design of more recent earthwork fortifications such as Onawe and Ripa Island on Banks Peninsula may have been influenced by the introduction of European weapons.

Although there is ample evidence of provisions for defence in Canterbury and Marlborough sites, there is no definite indication that prehistoric warfare actually took place. Nevertheless, the number of artefacts left lying around at sites such as

Peketa suggests that the occupants left in a hurry and travelled light, and that wooden structures had been burnt to the ground (as they have at virtually every such site that has been investigated). In some sites there is evidence that buildings had been abandoned and had collapsed or been partially dismantled before they were burnt, so the razing is unlikely to have been due to warfare. Scattered burnt broken pieces of human bone occur in a layer above the main occupational deposit in places at Peketa and in the adjacent retreat pa, and are thus probably not a result of the actual occupation of the site.

Burnt human bone is not uncommon on many sites occupied 300 to 150 years B.P. The method of burning could be traced at one near Takahanga in Kaikoura. Here, as was customary throughout most of east coast prehistory, the dead were buried in the general living area. The main criterion in selecting a burial place appears to have been ease of digging, though it is possible too that people wished to be buried in the ground in which they had lived, as is common in some Pacific Islands today. At this site, which is on a raised beach flat below Takahanga pa and was probably associated with it, evidence of general living activities and of burials was found by excavation in 1974.[39] Some time after burial, probably a few months, two or three bodies appear to have been dug up and burned, and fragments of burnt, broken bone scattered over the area. This site is thought to have been occupied about 200 — 150 B.P.

Burnt human bone is sometimes cited as evidence for cannibalism, but there is no reason why it should necessarily indicate the cooking of flesh — bones of other species were not burnt during the cooking process. No evidence of cannibalism is known in the eastern coastal region, though it is reported to have occurred after European contact.

While burial within a settlement may have been the common practice, special burial sites were also used in some instances. In cases where only a single body was involved, or as at Teviotdale where three people were placed in a cave at the same time,[40] it may well have been a matter of convenience rather than a desire to keep bodies away from a living area. At Omihi, immediately adjacent to a living area, was a special burial ground containing the remains of over 20 people. These appear to have been buried over a period of time extending well into the European era, and may have no connection with the occupational site. High on Banks Peninsula bodies or bones had been dropped down a "chimney" type rock crevice 6 km from the nearest known occupational site, but there is no evidence of age; the burials could be quite late.

Discussion

In such a brief review of the archaeology of a region as this, there is no room to discuss aspects of its prehistory in detail. For the same reason, matters that might conflict with orthodox thinking have also been avoided here. The arbitrary boundaries selected for the region under review impose restrictions, as events and changes occurring elsewhere, especially in Otago and in Nelson, obviously had a strong bearing on what happened in the Marlborough and Canterbury region. Indeed, to synthesise a detailed prehistory of the eastern coastal region, it would be necessary to consider most of the South Island. Nevertheless, the region's cultural history may be briefly summarised as follows.

Man probably first set foot in the South Island 900 to 1000 years ago. He explored it, discovered new resources and experimented with different stone and bone materials. As the human population increased, a wave of settlement pushed southward over a period of perhaps 200 years These people had a distinctive Moa-hunting culture, with regional and temporal variations (see Fig.5.13), which survived until about 500 years ago. Their detrimental effects on the forest and bird life in particular necessitated changes in their economy, and at the same time their material culture became generally impoverished. After perhaps two centur-

ies, technological and possibly agricultural developments provided an improved living standard with a revitalized material culture, which included the provision of defensible living positions. This was the Classic period of Maori culture, which appears to have been essentially the same as that recorded by early Europeans 200 years ago. Regional variations are less marked in sites of this period, probably reflecting a better communications network.

By the time of European settlement around 1840, Classic culture in Canterbury and Marlborough had passed its developmental peak and contemporary accounts give the impression that there was once again a deterioration in the living standard, probably due to the impact of European contact.

5.13 Shell and bone artefacts of intermediate age from Whalers Bay Cave, Kaikoura (Canterbury Museum).

The wish is not infrequently expressed, by both laymen and prehistorians, that another 'Wairau Bar' could be discovered and investigated by modern techniques to clarify some of the many unknowns in our prehistory. I doubt if such a discovery is either necessary or desirable. Indeed a complete ban on archaeological excavations for a few years would probably be of more benefit to New Zealand archaeology as a whole. There is a great deal of potential in already available information from past investigations, in museum collections, field note books and even personal knowledge, awaiting analysis and assessment. It does, of course, require to be treated in a truly scientific manner. Some of the problems in reconstructing New Zealand prehistory are caused, not by the lack of data, but by the perpetuation of past fallacies and the uncritical use of present-day laboratory techniques.

Some field work, however, is likely to be useful; this would include site recording on Banks Peninsula and southern Marlborough, small scale controlled excavations at important sites that have not received recent attention, and investigational projects on agriculture and fortifications.

Further research on the eastern coastal region discussed in this chapter will provide a clearer picture of the prehistory of the South Island, though it cannot be treated in isolation.

Notes

1. See Trotter, 1975d; and Dell and Falla, 1972.
2. Haast, 1872.
3. Haast, 1875.
4. McKay, 1875.
5. Haast, 1877.
6. Duff, 1956a; H. von Haast, 1948.
7. Hutton, 1892, pp. 169-170.
8. Skinner, 1923a, 1924a and b.
9. Duff, 1956a.
10. Duff, 1961.
11. Ambrose, 1970.
12. Reports of most of these have been published, though not always in great detail; see Trotter, 1966, 1967b and c, 1972a and b, 1973a and b, 1975d and e, 1977a and b.
13. Trotter, 1974a, 1975a and 1977a.
14. Trotter and McCulloch, 1971.
15. Clarence: Trotter and McCulloch, 1979; Titirangi: Trotter, 1977a.
16. *The Moa-hunter Period of Maori Culture* was republished in 1956 and 1977, the last edition containing and updating chapter by Trotter (1977b).
17. Trotter and McCulloch, 1971; Simmons, 1973, p. 55; Green, 1974.
18. See Green, 1975, p. 29.
19. Molloy *et al*, 1963; Simmons, 1968.
20. Kinsky *et a.*, 1970.
21. Scarlett, 1972.
22. Cracraft, 1976. Also comment by Trotter, 1977b, p. 365.
23. McCulloch, 1973.
24. Trotter, n.d.
25. Trotter, 1977a.
26. Trotter and McCulloch, 1979.
27. Golson, 1959.
28. Trotter, 1972b, 1975d.
29. McCulloch and Trotter, 1975.
30. In this graph (Fig.5.3) archaeological deposits have been divided into four categories on a basis of cultural and faunal evidence. "Settlement" and "Classic" are approximately equivalent to Duff's Moa-hunter and Maori or Golson's Archaic and Classic respectively. The "Exploration" category contains two sites that appear to be earlier than these cultural periods or phases (see text) and "Transition" has features of both. It is not intended that these terms be used as cultural designations.
31. Trotter and McCulloch, 1973.
32. Trotter and McCulloch, 1971.
33. Trotter, 1975b.
34. Duff, 1961.
35. Trotter, 1972c.
36. Trotter and McCulloch, 1979.
37. Trotter, 1977a.
38. Thacker, 1960.
39. Trotter, 1974b; Houghton, 1975.
40. Trotter, 1975e.