



NEW ZEALAND  
ARCHAEOLOGICAL  
ASSOCIATION

## ARCHAEOLOGY IN NEW ZEALAND



This document is made available by The New Zealand Archaeological Association under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

To view a copy of this license, visit  
<http://creativecommons.org/licenses/by-nc-sa/4.0/>.

## NEEDS FOR ARCHAEOLOGICAL RESEARCH AND SITE PROTECTION IN THE CANTERBURY REGION

Aidan J. Challis  
Department of Conservation  
Wellington

The purposes of this paper are to encourage archaeological research and site protection in Canterbury, and to identify specific projects which merit attention. This research is necessary because archaeological knowledge of the Canterbury region is lacking in quantity and reliability, because the scale of site destruction has been very large, because most recorded sites are not on land managed by the Department of Conservation and are vulnerable to the impacts of ongoing land use and land development, because sites of Maori origin are culturally significant to the Maori community, and because archaeological sites should be better understood in order to be given appropriate consideration in planning processes generally.

Knowledge of the archaeology of the Canterbury region has recently been reviewed (Challis 1992; 1995). This knowledge is less extensive and less precise than that available for Otago or Southland (cf. Anderson 1982). A great deal of work has been done by archaeologists associated with the Canterbury Museum, particularly relating to moa-hunting and rock art. However, university research programmes and Historic Places Trust site recording projects, significant in many other parts of New Zealand since the 1970s, have been few in Canterbury. Only two archaeological doctoral theses with a substantial or total focus in the Canterbury region are known to have been undertaken: Wayne Orchiston (1974) considered settlement patterns and artefacts, and Barry Fankhauser (1986) investigated the exploitation of the cabbage tree (*Cordyline australis*) in South Canterbury.

Because of this relatively limited research attention, few themes of importance in Canterbury are well understood. Few midden deposits, settlement sites, or defended pa have been scientifically investigated. Stone resources exploited in the pre-European period are not well defined and no stone source sites have been investigated in detail. The use and chronology of horticultural sites and the distribution of plant food sources have not been studied. A typological and seriation study of artefacts provenanced from Banks Peninsula northwards has been undertaken (Jacomb 1995), but the chronology and processes of change from the so-called Archaic material culture to the Classic Maori have not been defined by stratigraphic excavation. The archaeology of the European contact period in the Maori context has been scarcely touched upon. Sites of European origin have hardly been recorded at all. Very little is known of the archaeology of some localities, such as coastal North Canterbury north of the Ashley River including Gore Bay.

Unfortunately, the publication of some archaeological research has been incomplete and some published information is now known to be unreliable. Some of the apparently more important investigations which have taken place in Canterbury remain unpublished. Some excavated assemblages and faunal samples remain unanalysed and unidentified. Some published identifications are of uncertain reliability on account of advances in knowledge of taxonomy.

Existing archaeological information is therefore potentially misleading because of limitations in the quantity, reliability, and representativeness of the data. The interpretation of sound data is constrained by inadequate understanding of the broader context. Any conceivable new research project would extend and might overturn the existing understanding.

Archaeological sites in Canterbury have succumbed to high rates of destruction (Challis 1992: 4-11). Many sites lay in areas which have been affected by natural processes: marine erosion particularly from Taumutu to the Ophi River and from Pareora to the Waitaki River, river erosion and aluviation at river mouth sites, and wind erosion on Kaitorete Spit. Many sites on Banks Peninsula have been extensively damaged by fossickers. Few sites on the Canterbury Plains or the coastal flats have escaped damage by European farming processes. Sites in the hill country were frequently small and fragile, and many have been destroyed by farming operations or by flooding or dam construction associated with hydro-electric power development.

The comparatively low numbers of surviving intact sites and their comparatively minor visibility in the Canterbury landscape may have contributed to a supposition that ongoing land use and land development is now having a relatively low impact on the archaeological resource which remains. Canterbury has been regarded as a low priority for archaeological protection and research programmes (New Zealand Historic Places Trust 1983: 4.1). On the contrary, the scale of site destruction has been such that any undisturbed evidence of occupation prior to the mid-nineteenth century, however fragmentary, in any environmental context in Canterbury, should be regarded as a significant source of information about human activity. It is argued that the relative paucity of intact sites itself provides justification for vigilant site protection programmes and a challenge for research.

Archaeological research is necessary not only in the interests of understanding past human activity. Archaeological sites also constitute a largely untapped source of information about environmental change. They can be particularly informative about processes of change in coastal, lacustrine, and riverine environments because of their more frequent location on coastal deposits, lake margins, and river terraces. All undisturbed midden deposits containing fish bone, shell, or marine mammal bone are of potential importance to an understanding of marine environments. Any surviving archaeological bird

## ARCHAEOLOGICAL RESEARCH AND SITE PROTECTION IN CANTERBURY

bone deposits are of the greatest importance for contributing to an understanding of past species distributions, patterns of habitat change, and the role of human predation in extinctions.

A preliminary assessment has been made of the number and representativeness of recorded archaeological sites on land managed by the Department of Conservation in Canterbury. Such sites should be less vulnerable to the destructive impacts of ongoing land use and land development than those on other land. About 12% of recorded sites in Canterbury lie on land managed by the Department of Conservation (Challis 1992: appendix 1). Sites with midden and oven evidence are proportionately well represented, but the sample is concentrated in a few localities, particularly on Kaitorete Spit where most sites are known to be in a severely deflated condition. There are also well known examples of defended pa sites, rock shelters and rock art on land managed by the Department of Conservation, but most other site types are represented in very small numbers. Whaling sites, and pit sites thought to be earth ovens, are poorly represented, and stone source sites and horticultural sites are not represented at all.

Preliminary assessment therefore suggests that almost 90% of recorded sites in Canterbury are on land managed by the Department of Conservation, that those that are on it are not representative of the range of types of site and area, and that some that are on it are in poor condition. This assessment was subject to doubt in many cases because of inadequacies in existing site records and lack of comprehensiveness in field survey, leading to uncertainties about site location, survival, and extent. Systematic archaeological site survey, condition reporting, and significance assessment is required on land managed by the Department of Conservation.

Archaeological sites relating to pre-European occupation in Canterbury are culturally and historically significant to the present day Maori community. The ancestral connection links them to the larger picture of group identity. Through archaeological study, the information which the sites contain furthers an understanding of aspects of life and environment. The Ngai Tahu Maori Trust Board has endorsed the publication of policies on the protection and investigation of archaeological and rock art sites (Tau *et al.* 1990: 4.31-32). Included is the policy that all sites of interest to Ngai Tahu Whanui should be given formal protection, and the policy that all sites which may be affected by development activities should be investigated.

In summary, therefore, current archaeological knowledge of the Canterbury region is insufficient and in some respects unreliable. The rate of survival of archaeological sites in the field is low. Sites on land managed by the Department of Conservation are relatively few and unrepresentative. Archaeological sites are an indispensable source of evidence of past human

occupation and associated environmental change. Sites of Maori origin are culturally significant to Maori. All of these factors support the case for a renewed commitment to archaeological field recording, investigation, and site protection programmes in Canterbury.

The following list indicates some specific projects which merit attention. No precise indication of priority is given. The interests and functions of individuals and organisations, and the expertise and institutional resources available to them, will determine their own sense of priority and appropriateness.

**(1) Field recording projects**

All site types and all areas merit field recording or re-recording to establish the existence and extent of surviving archaeological evidence. All results should be filed in the New Zealand Archaeological Association site recording scheme. The following projects merit attention.

- (a) General recording of the Canterbury Bight coastal area, with particular reference to defining the survival and extent of moa-hunting sites.
- (b) General recording of the North Canterbury coastal area from the Ashley River northwards, with particular reference to the identification of moa-hunting sites and stratified deposits.
- (c) General recording of Banks Peninsula harbour areas, particularly Lyttelton Harbour, Port Levy, Pigeon Bay, and Akaroa Harbour, with attention to the identification of stratified deposits of successive occupation.
- (d) General recording of the Timaru vicinity, with particular reference to the identification of stratified deposits.
- (e) Recording of the environs of Waihora (Lake Ellesmere), with particular reference to oven sites and possible horticultural sites (note Orchiston 1974: 2.241-242, fig. 2.155).
- (f) Recording of unrecorded parts of Kaitorete Spit, with search for stratified deposits (note Palmer 1980: fig. 4).
- (g) General recording of the west-facing Banks Peninsula margin and adjacent plains, with particular reference to pit sites and oven sites.
- (h) Recording of the survival and distribution of recognised plant food species and remnants, particularly karaka, cabbage tree, and raupo.
- (i) General recording of the margins of the Canterbury Plains and the foothills,

## ARCHAEOLOGICAL RESEARCH AND SITE PROTECTION IN CANTERBURY

with particular reference to oven sites and pit sites.

- (j) Search for surviving archaeological sites in the remoter interior, such as the Upper Rangitata and Upper Rakaia.

It is understood that Chris Jacomb of the Canterbury Museum has recently directed a site survey of the Lake Forsyth area, Birdlings Flat, and the surrounding hills, and that a general comprehensive survey of rock drawing sites is in progress by Brian Allingham for Te Runanganui O Ngai Tahu.

### (2) Field investigation projects

The following archaeological themes or areas merit investigation.

- (a) Investigation of the extent, stratigraphy, chronology, and environmental context of recorded coastal moa-hunting sites.
- (b) Identification and investigation of middens with bird bone, with reference to patterns of distribution and predation.
- (c) Identification and investigation of coastal middens with marine mammal bones and fish bones.
- (d) Identification and investigation of stratified sites of successive occupation on Banks Peninsula, and investigation of their chronology, artefact materials, and subsistence activities.
- (e) Identification of promising geological areas, and identification and mapping of stone source sites and investigation of their chronology and lithic characterisation.
- (f) Identification of surviving inland moa-hunting sites and investigation of their extent, stratigraphy, chronology, and environmental context.
- (g) Identification and mapping of horticultural sites on Banks Peninsula and in coastal North Canterbury, and investigation of their function and chronology.
- (h) Location of undisturbed pit sites on Banks Peninsula, in North Canterbury, on the Canterbury Plains, and in the interior, and investigation of their functions and chronology.
- (i) Investigation of the structure, occupation, and chronology of sites recorded as defended pa.

- (j) Field investigation projects in particular archaeological landscapes, such as the environs of Lake Forsyth, the Timaru vicinity, the Gore Bay vicinity, the Port Levy vicinity, and the Homebush vicinity.

**(3) Further study of existing archaeological collections**

Past investigations and existing faunal and artefact collections merit full analysis and publication.

- (a) Full publication of past investigations, through assistance to the original investigator if feasible, particularly Tumbledown Bay (Allingham 1988), Pentland Downs (Trotter 1982: 90), Wakanui (Trotter 1977: 359), Hohouponamu (Burrage 1975), Kairaki 13 (Trotter 1982: 90, 96), and Greenstone Island (Orchiston 1979: 173).
- (b) The re-identification of existing archaeological collections of faunal material, particularly moa bones, other bird bones, marine mammal bones and where necessary fish bones.
- (c) Reanalysis of existing collections of lithic materials, in relation to (2e) above.
- (d) Study of the form, function, distribution, and chronology of adzes apparently peculiar to Canterbury (Orchiston types J3 and K3; Orchard 1974: 2.180-186).
- (e) Comparative study of provenanced artefacts from particular sub-regions, to define local characteristics.

Note that the Panau site has been written up by Chris Jacomb of the Canterbury Museum (Jacomb 1995).

**(4) European archaeology**

European archaeology has been accorded little significance or attention in Canterbury and merits improved status and increased activity. Less than 60 of the many known European archaeological sites have been recorded.

- (a) Identification, recording, and assessment of the archaeology of early European settlements, with particular attention to early and mid-nineteenth century artefact assemblages.
- (b) Identification, recording, and assessment of ceramic industrial sites, and building of reference collections.

## ARCHAEOLOGICAL RESEARCH AND SITE PROTECTION IN CANTERBURY

- (c) Identification, recording, and assessment of sites of rural industries and pastoralism, notably homestead sites, blacksmithing, sawmilling, lime kilns, and early dairy factories.
- (d) Recording and investigation of ditch and bank fences and stone wall systems.
- (e) Recording and investigation of military sites.
- (f) Identification, recording, and assessment of sites of early boat and ship building on Banks Peninsula.
- (g) Identification, recording, and assessment of sites associated with routeways, tracks, and passes.
- (h) Recording and assessment of urban archaeological values in Christchurch and smaller provincial towns, notably domestic, industrial, and transport sites.

It is understood that Chris Jacomb of the Canterbury Museum is recording and mapping shore whaling stations.

### (5) **Archaeological sites meriting protection**

All archaeological sites where stratified deposits or earthworks remain are physical features and sources of information which merit protection. If any such sites are to be destroyed they merit investigation beforehand. Field work is necessary to establish the survival and extent of the following types of site as a basis for protection measures. Some of this work overlaps with research-orientated projects listed above.

- (a) Areas with combinations and associations of field evidence.
- (b) Sites containing moa remains.
- (c) Sites containing the bones of birds other than moa.
- (d) Sites of stone utilisation and quarrying.
- (e) Sites containing remains of marine mammals, fish, and/or shellfish, and sites of ditches, weirs, and traps associated with fishing.
- (f) Horticultural sites such as stone or earth rows, heaps or mounds, borrow pits, and plagen soils.

- (g) Sites of ovens and/or pits.
- (h) Rock shelter and rock drawing sites.
- (i) Sites of occupation such as terraced settlements, defended pa, and historic kainga.
- (j) European archaeological sites, particularly early settlements, shore whaling stations, and sites of rural, maritime, and ceramic industries.

### ACKNOWLEDGEMENTS

The writer would like to thank Chris Jacomb and Kevin Jones for commenting on drafts of this paper.

### REFERENCES

- Allingham, B.J. 1988. Preliminary report on salvage excavations at Tumbledown Bay, Banks Peninsula. NZHPT Permit 1987/9. B. Allingham, Seacliff.
- Anderson, A.J. 1982. A review of economic patterns during the Archaic Phase in southern New Zealand. *New Zealand Journal of Archaeology* 4: 45-75.
- Burrage, S. 1975. The end of an era: "Hohou" closes down. *Canterbury Museum Archaeological Society Newsletter* 16: 31.
- Challis, A.J. 1992. *A Review of Archaeological Site Records for the Canterbury Region*. Science & Research Series No. 45. Department of Conservation, Wellington.
- Challis, A.J. 1995. *Ka Pakihi Whakatekateka O Waitaha. The Archaeology of Canterbury in Maori Times*. Science & Research Series No. 89. Department of Conservation, Wellington.
- Fankhauser, B.L. 1986. Archaeometric studies of *Cordyline* (ti) based on ethnobotanical and archaeological research. PhD thesis, Department of Anthropology, University of Otago.
- Jacomb, C. 1995. Panau, periodisation and northeast South Island prehistory. MA thesis, Department of Anthropology, University of Otago.
- New Zealand Historic Places Trust. 1983. Historic Places Trust: archaeological policy. Paper HP 317/1983. New Zealand Historic Places Trust, Wellington.
- Orchiston, D.W. 1974. Studies in South Island New Zealand prehistory and protohistory. PhD thesis, University of Sydney.
- Orchiston, D.W. 1979. Settlement or citadel? The basic function of the Maori pa in east coast South Island New Zealand prehistory and protohistory. *Archaeology and Physical Anthropology in Oceania* 14(3): 168-183.
- Palmer, J.D. 1980. The Kaitorete Dunes: a study of appropriate land uses with particular attention to sand mining. Department of Lands and Survey,

## ARCHAEOLOGICAL RESEARCH AND SITE PROTECTION IN CANTERBURY

Christchurch.

- Tau, Te M., Goodall, A., Palmer, D., and Tau, R. 1990. *Te Whakatau Kaupapa: Ngai Tahu Resource Management Strategy for the Canterbury Region*. Aoraki Press, Wellington.
- Trotter, M.M. 1977. Moa-hunter research since 1956. In R.S. Duff, *The Moa-Hunter Period of Maori Culture* (3rd Edition), pp. 348-375. Government Printer, Wellington.
- Trotter, M.M. 1982. Canterbury and Marlborough. In N.J. Prickett (Ed.), *The First Thousand years: Regional Perspectives in New Zealand Archaeology*, pp. 83-102. New Zealand Archaeological Association Monograph 13.

### EDITORIAL NOTE

A review of the archaeology of the Canterbury region is available from the Publications Unit, Science and Research Division, Department of Conservation, P O Box 10-420, Wellington:

Challis, A.J. 1995. *Ka Pakihi Whakatekateka O Waitaha. The Archaeology of Canterbury in Maori Times*. Science and Research Series No. 89. Price \$35 inc GST.