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A REVIEW OF ARCHAEOLOGICAL SITE RECORDS FOR THE CANTERBURY REGION

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ABSTRACT

Existing site records for the Canterbury region provide a potentially misleading basis for site protection, if used without specialist advice. The majority of sites require verification of location and existence in the field. Some are known to have been destroyed. Others were never positively identified. Site survival rates appear to be poor. There is a lack of comprehensiveness, detail and updating. Known sites on land held or managed by the Department of Conservation and on other protected land appear not to be representative of site types and areas. The contribution of some individuals and the Canterbury Museum to site recording and protection over several decades is acknowledged. Since 1982 additions to the records have been relatively few. The general conclusion is that comprehensive recording programmes are necessary as a basis for site protection, both on land held or managed by the Department of Conservation and on other land.

1.THE PROGRESS OF SITE RECORDING

In mainland Canterbury (the Department of Conservation Canterbury Conservancy excluding the Chatham Islands), by mid-1991, 1071 sites had been recorded in the New Zealand Archaeological Association (NZAA) files. The records had been accumulated over a thirty year period (see Fig. 1). Over 90% were recorded by people directly associated with the Canterbury Museum. This broad scale collective effort merits recognition.

Prior to 1965, over 300 sites, particularly rock art, were recorded in south and north Canterbury by Tony Fomison (Fomison 1960, 1962). Owen Wilkes recorded 70 sites over a wide area. Field notes by Roger Duff and earlier investigations by others (e.g., Griffiths 1941, 1942, 1955) provided a frequent starting point. Annette Jones was active in northern Banks Peninsula (Jones 1962). Canterbury Museum staff collaborated with Wal Ambrose in the New Zealand Historic Places Trust (NZHPT) Benmore project from the late 1950s (Ambrose 1970), and followed up with the Pukaki expedition (Trotter 1969). From the mid 1960s Michael Trotter was the principal recorder throughout the region, being associated with 350 site records over a 20 year period, and initiating

projects by others such as the southern earthworks survey published by Barry Brailsford (1981). Beverley McCulloch recorded more rock art sites (e.g., McCulloch 1968). Canterbury Museum Archaeological Society projects in the mid to late 1970s explored the coastal belt from Kairaki to Woodend (c. 100 sites), the Redcliffs–Sumner area (over 30 sites), and parts of Kaitorete Spit (c. 90 sites). Ross and Marion Lane recorded sites in the Ashburton area. Since the late 1970s some occurrences have been written up by Sally Burrage (c. 30 sites). Results of recent explorations on Banks Peninsula by Chris Jacomb are being processed.

University and NZHPT site recording projects, significant nationally since the mid 1970s, have been few in Canterbury. Small numbers of coastal sites were recorded by Wayne Orchiston (1974), and earth ovens (umu ti) were sought in south Canterbury by Barry Fankhauser (1986; c. 20 sites), for doctoral theses. In 1980 Brian Vincent explored the lower Waitaki for the NZHPT (Vincent 1980: c. 20 sites).

In contrast with the steady progress of inventory over the previous 25 years, averaging over 40 new site records per year, since 1982 about 2 Canterbury site records per year have been entered in the NZAA site recording scheme (see Fig. 1). These recent records have generally related to NZHPT and Department of Conservation (DoC) statutory and management issues, and, in contrast with the rest of the file, are mainly sites of European association, in the Christchurch urban area or in national parks and reserves. Generally, therefore, the majority of site records are now over 20 years old.

Although it might appear from the site record file that site recording in the Canterbury region has all but ceased for a decade, many sites have been revisited since 1980. For example, a project of photography and fencing of South Canterbury rock art sites was carried out from 1981 by staff of the Department of Lands and Survey, Timaru, and Phillipa Graham of the South Canterbury Regional Committee of NZHPT, with grants from NZHPT (Gould n.d.). Various small investigations and inspections have taken place on coastal sites throughout the region. Unfortunately the results of such work (mainly updated information or condition reports) have not usually been filed in the site recording scheme.

In recent years DOC has commissioned inventories of historic and archaeological sites in the Canterbury high country (Whelan 1989, 1990). These inventories have not been exhaustive, but have concentrated on selected historic sites thought to be typical or representative. No searches for recorded or unrecorded archaeological sites were conducted as part of these inventories. Records of the selected historic structures have not yet been filed in the NZAA site recording scheme.

2. THE PATTERN OF RESULTS

Archaeological features recorded (Fig. 2) are predominantly middens (401 occurrences), oven evidence including earth ovens or umu ti (434 occurrences), and rock shelters and rock art (366 occurrences). Pits (on ridges and in defended pa), some of which might be for food storage (35 occurrences), and horticultural evidence (stone rows and borrow

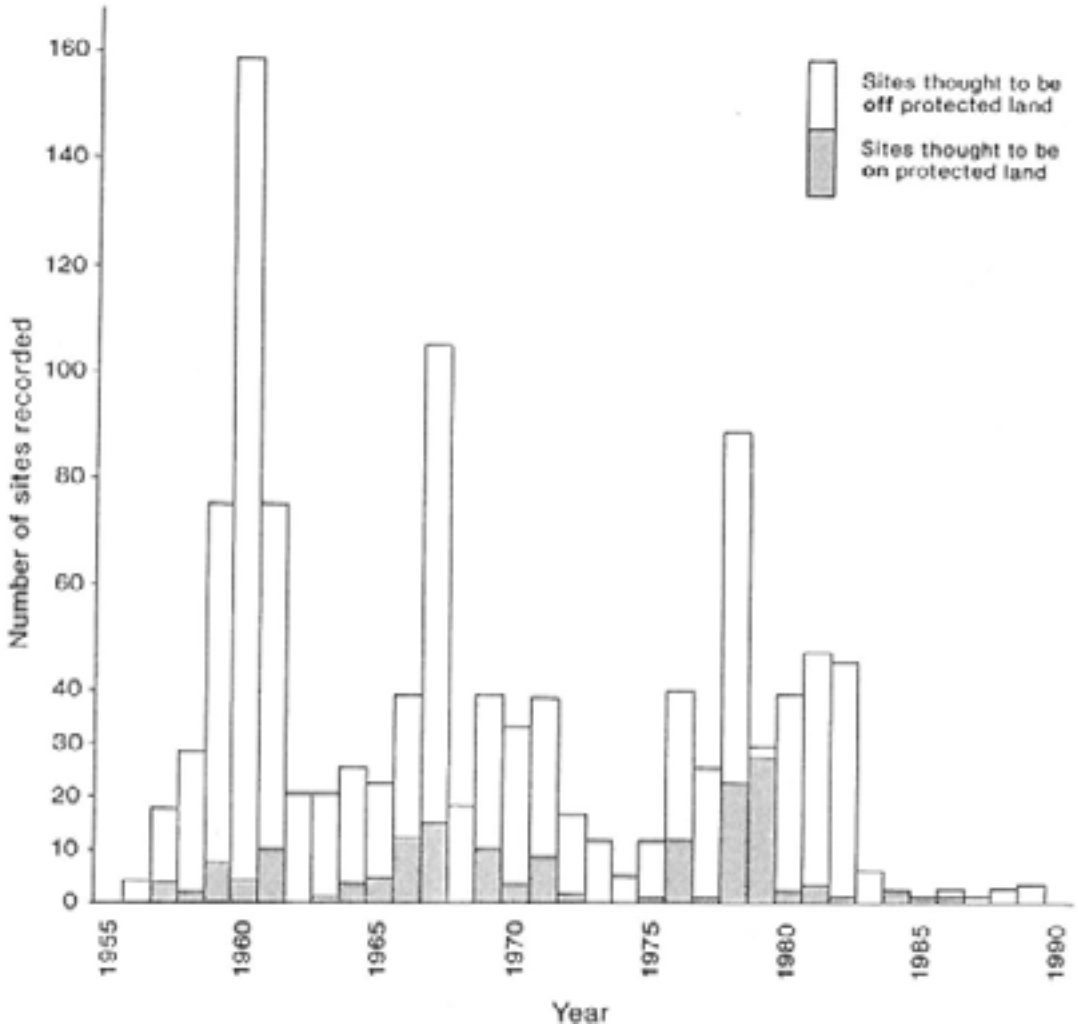

Fig. 1 Year of site record, NZAA site records, Canterbury Region.

pits, 20 occurrences) are present in the coastal zone from Taumutu northwards. Defended pa (up to 26 possible, some of which may be European rural structures) and terrace sites (27 occurrences) are also mainly coastal, whereas stone source sites (6 recorded) are in the foothills. Sites of European age have been recorded relatively infrequently (51 occurrences of all types), but are known to be common (e.g., 40 early saw mills and 9 dairy factories on Banks Peninsula: Ogilvie 1990: 5). Because of the relatively small numbers of earthwork sites (defended pa, historic goldfields, etc.), the archaeological landscapes of Canterbury are less immediately visible than those in other regions.

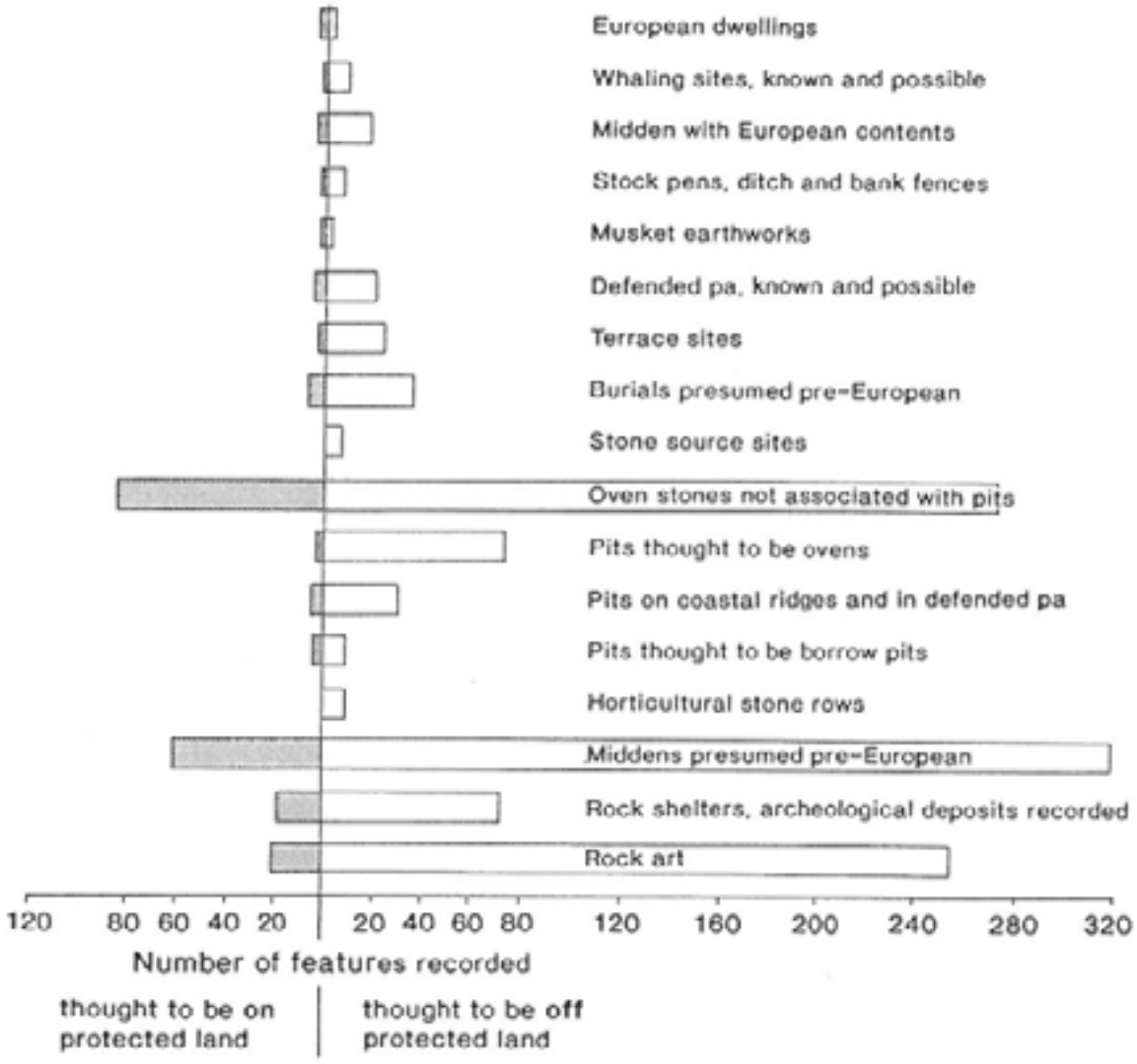

Fig. 2 Features recorded on NZAA site records, Canterbury Region

The distribution of recorded sites (Fig. 3) shows nucleations inland in north and south Canterbury (mainly rock art sites), an orientation towards the coast from Waipara to Rakaia, and a thin scatter elsewhere. Of the total records, 52% are located within 4 km of the coastline, 8% are further from the coast on the Canterbury Plains, and 40% are inland in hill or valley country.

On the north Canterbury coast, sites have been recorded near the mouths of rivers and streams, notably the Conway, Medina, Waiau, Jed, Hurunui, Blythe and Waipara Rivers, and in coastal Gore Bay and at Napenape. Records are generally over 20 years old. Stratified sites have been recorded near the mouth of the Motunau River and on Motunau Island. From Waipara to the Heathcote River, recording has been intensive in places, particularly in dune belts seaward of the Cam River north of Kairaki. The rock

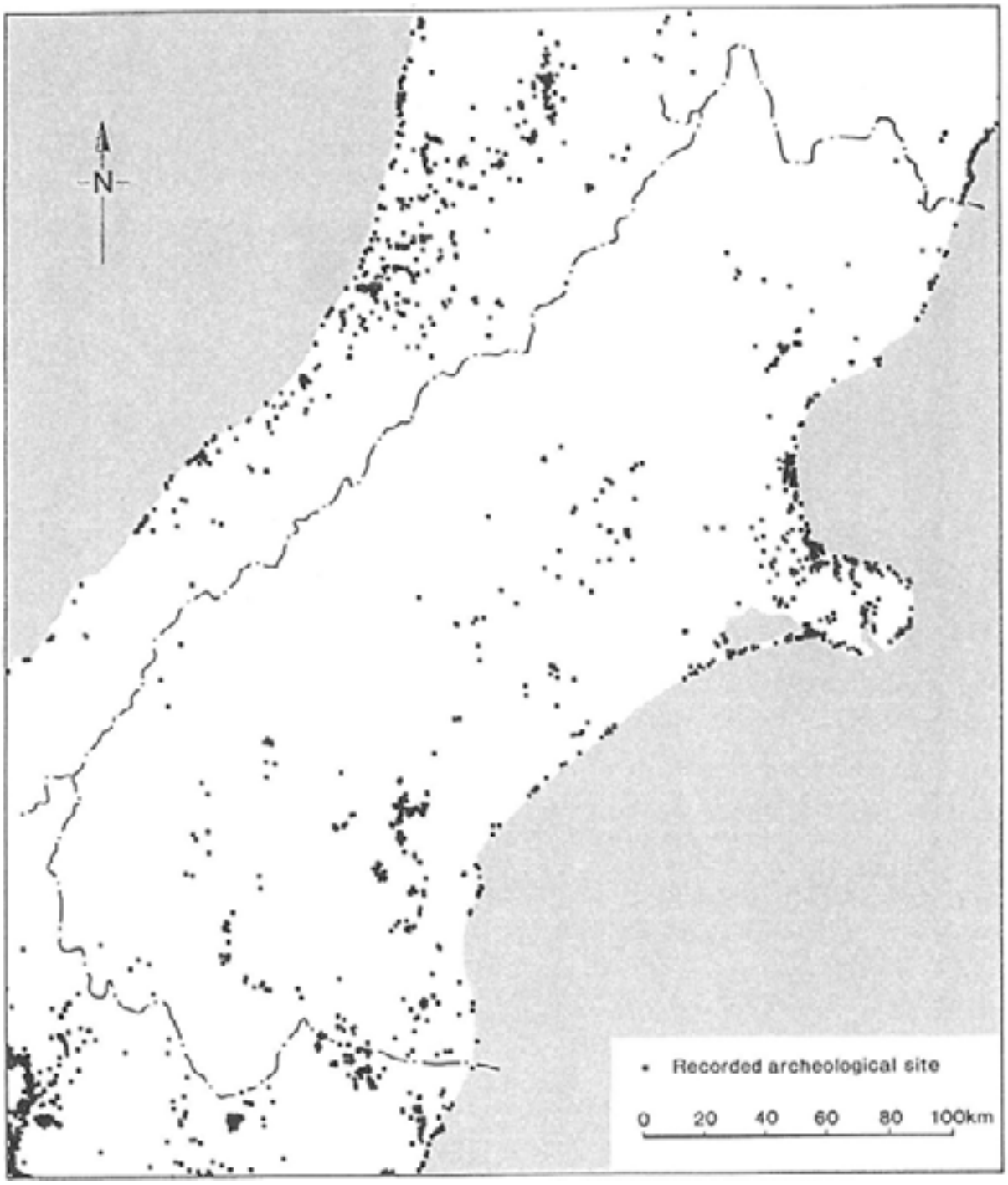

Fig. 3 Distribution of NZAA site records, Canterbury Region.

shelters of the Sumner–Redcliffs area have been recorded in detail. By comparison, inventory of Banks Peninsula generally is incomplete. A recently published map (Ogilvie 1990: 10) shows fifty sites not recorded in the NZAA file. There are concentrations of evidence around Lake Forsyth, at Birdlings Flat and near Taumutu. Intensive recording on some parts of Kaitorete Spit has led to nucleations of records.

Further south, evidence has been recorded near the mouths of major rivers and smaller streams, particularly the Rakaia and Rangitata, the Lee River, Jollies Burn, Wakanui, Hakatere, Jaine's Gully and the Hinds River. Records from the Timaru area are generally very dated (Griffiths 1941, 1942, 1955; Mason and Wilkes 1963). In the coastal zone as a whole, however, the Rakaia River mouth, parts of Kaitorete Spit, Sumner–Redcliffs, Brooklands to Waikuku, and the Waipara River mouth have been searched intensively (Trotter 1967, 1972a, 1975a, 1975b, 1979; Palmer 1980: fig. 4). With some exceptions, site records require systematic updating in the field.

Sites recorded on the Canterbury Plains are almost entirely oven evidence, particularly near the Waimakariri, Rakaia, Rangitata and Ashburton Rivers, and west of Lake Ellesmere. Nucleations in the Westerfield, Oakleigh and Flemington areas are notable. There are broad zones where no sites have been recorded. That these gaps do not indicate lack of evidence is suggested by the publication of distribution maps of the Ashburton area and the Lake Ellesmere hinterland showing dozens of sites not recorded in the NZAA files (Trotter 1973: fig. 1; Orchiston 1974: fig. 2.155). It is likely that a similar situation (known sites not present in the files) pertains elsewhere (e.g., the lower Waimakariri plains).

Rock art sites dominate among inland records (Fig. 4) and are concentrated in geologically distinctive localities: Motunau, Weka Pass, Castle Hill, Mount Somers, Tekapo, Pukaki, Benmore, and the South Canterbury hills from Geraldine to Waimate (Trotter and McCulloch 1971: 28). In general the records are brief, have not been updated as a result of subsequent visits, and contain no comment on the possibility of archaeological deposits. Isolated ovens, find spots and rock shelters are recorded elsewhere in the foothills (e.g., Orchiston 1975: 25), and there are concentrations of earth ovens in South Canterbury (Fankhauser 1986). Lithic source sites have been located at Miro Downs (L35/23, quartzite, Griffiths 1960), Surrey Hills (K36/1, silicified tuff, Orchiston 1974: 2.65), Mount Alford (K36/2, porcellanite), and Grays Hills (I38/1, I39/1, orthoquartzite, Trotter 1970b). Generally, although the Benmore, Aviemore and Pukaki areas have been explored in some detail (Ambrose 1970; Trotter 1969, 1970a), elsewhere rock art and stone source areas in particular require follow-up survey to define the location, extent and condition of sites.

In general, therefore, while recognising that substantial efforts have been made, there are few localities where site recording has been comprehensive. Studies in other regions of New Zealand have shown that detailed fieldwork considerably increases the number of sites known, and contributes significantly to a fuller understanding of the archaeological heritage and priorities for its protection. For example, a recent pilot study in North Otago led to a 300% increase in rock art sites recorded (Allingham n.d.).

3. THE LIMITATIONS OF LOCATION DATA

Relocation of sites in the field on the basis of existing records is often difficult. Evidence is found to be absent where it is supposed to be present, but is discovered elsewhere (Gould n.d.: 3). There are two general contributory reasons for this: first, misleading

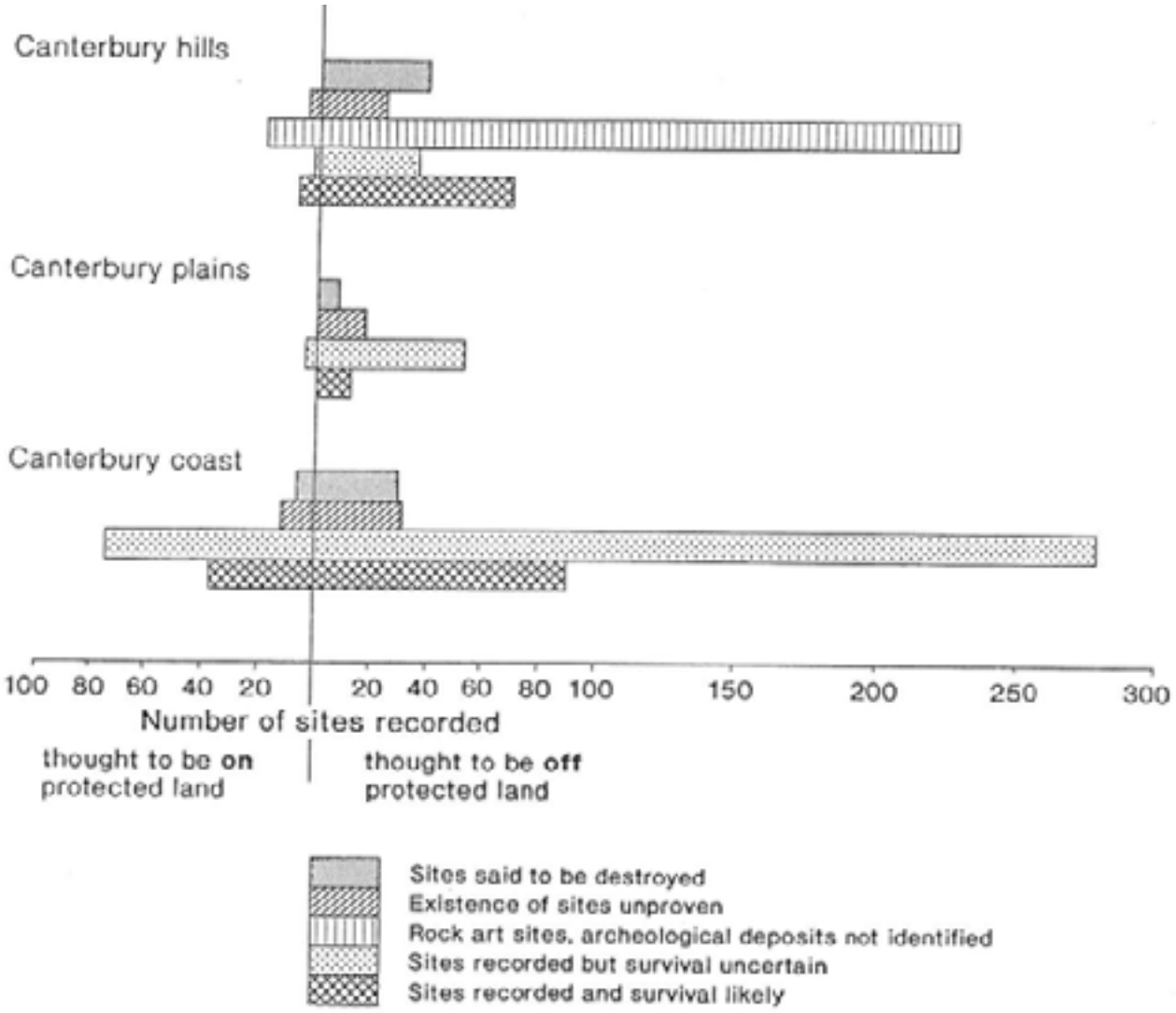

Fig. 4 Site existence and survival from NZAA site records, Canterbury Region.

grid references and a lack of other data to assist relocation; and second, processes of site destruction.

Although NZMS1 Series topographic maps produced using aerial photographs and plotting instruments were phased in from the early to mid 1960s, for many areas these were not available until the late 1960s to mid 1970s. Given that site recording in Canterbury began commendably early, about half of the site records were therefore located with reference to Provisional 1 Mile Series (dating from 1940s) or Interim NZMS1 Series maps. These were generally compiled by plane table mapping and pre-existing survey records. Grid references derived from such early maps for sites recorded in Canterbury have been found to be commonly 200 yards at variance with the grid references for the same topography on later maps produced photogrammetrically (Davina Didham, site records assistant, Canterbury Museum, pers. comm. 1991). In consequence, through no fault on the part of the original site recorders, metric grid

references for the current NZMS260 Series topographic maps, calculated by computer from uncorrected Provisional and Interim Series grid references, are also in error in up to 95% of cases. Accordingly the site distribution plots on metric cadastral maps used for planning purposes (New Zealand Historic Places Trust 1985, 1986a, 1986b, 1986c) are inaccurate. Determining exactly where a recorded site might have been located, using different editions of NZMS1 maps, NZMS260 maps, county inventories and both metric and imperial site numbers and grid references, can be inconclusive. Because of these limitations of location data, mapped plots of recorded sites, although useful as a general guide to recorded distributions, can be seriously misleading in relation to cadastral boundaries.

In recognition of this problem, during 1991 at the Canterbury Museum, NZMS1 grid references for all Canterbury NZAA sites records have been checked against the descriptive and diagrammatic information available (Davina Didham pers. comm.). Grid references have been updated and errors and missing records have been followed up. Amongst priorities identified by this procedure for checking in the field are parts of Banks Peninsula and the north Canterbury coast.

Computer plotting of site distribution is normally programmed to fill or outline the appropriate scaled 100 _ 100 m square. Accordingly, to maximise the accuracy of such plots, grid references should be calculated as co-ordinates relating to 100 _ 100 m squares, and not estimated to the nearest 100 m (Sheppard 1985: 188).

4. THE SURVIVAL OF THE EVIDENCE

On the basis of existing site records it is possible to draw preliminary conclusions about the likelihood of the continued existence of sites at recorded locations (see Fig. 4).
(1) Some sites were destroyed or in process of destruction at the time of recording (8% of recorded sites). (2) In some instances the existence of an archaeological site was not established at the time of recording, the evidence being hearsay, surface finds of artefact material, suspected sites, features of possibly natural origin, or otherwise unlocated data (8% of sites). (3) Rock art records commonly include no reported related archaeological deposits (23% of recorded sites). (4) Frequently, although a site was present at the time of recording, ongoing processes of deterioration referred to in the record render its survival uncertain (41% of sites). (5) In the remaining 20% of records a site existed at the time of survey, no continuing processes of disturbance were recorded, and there may be some confidence that the site still exists. Of this 20%, the existence of about a quarter of them might be verifiable on aerial photographs, being earthwork sites, built structures or burial grounds, but the remaining three quarters would require field inspection to verify existence. On this basis, there can be some confidence of the existence of archaeological evidence at the specified locations for about 20% of site records, but to be certain of their existence and location, something over 85% of records would require verification in the field. (It has been concluded earlier in this paper that the majority of site records are now over 20 years old.)

Gross topographic patterns of site survival are suggested by the records. In the Canterbury hills, excluding rock art sites at which archaeological deposits are not identified, 42% of recorded sites appear to have been destroyed or damaged, compared with 70% elsewhere. These figures exclude sites the existence of which is unproven. The estimates are compatible with Michael Trotter's calculation 25 years ago that 65% of recorded sites in the coastal part of Canterbury had been destroyed or damaged (Trotter 1966: 124–125).

Of the processes of destruction noted on site record forms (Fig. 5), farming practices such as ploughing are the most common (28% of references to destructive processes), followed by erosion (25%) and fossicking or excavation (20%). Various forms of construction (18%), quarrying (5%) and forestry (4%) are also significant. The impact of these processes varies from area to area. On the Canterbury Plains, farming practices make up 80% of recorded destructive impacts. Of construction activities, building and roading are more destructive in the coastal zone and dams have greater effect in the hill country. Erosion affects 32% of sites where destruction is noted in the coastal zone. Overall, sites on the Canterbury Plains appear to have been the hardest hit (Fig. 4): in only 12% of records is survival apparently likely, compared with 18% of sites in the hill country and 23% on the coast. These figures are estimates from site record information, much of which is now old. The present condition of most sites requires definition in the field. For example, further field work would be necessary to define the extent and relative significance of any surviving evidence of moa-related sites on the Canterbury coast as a whole.

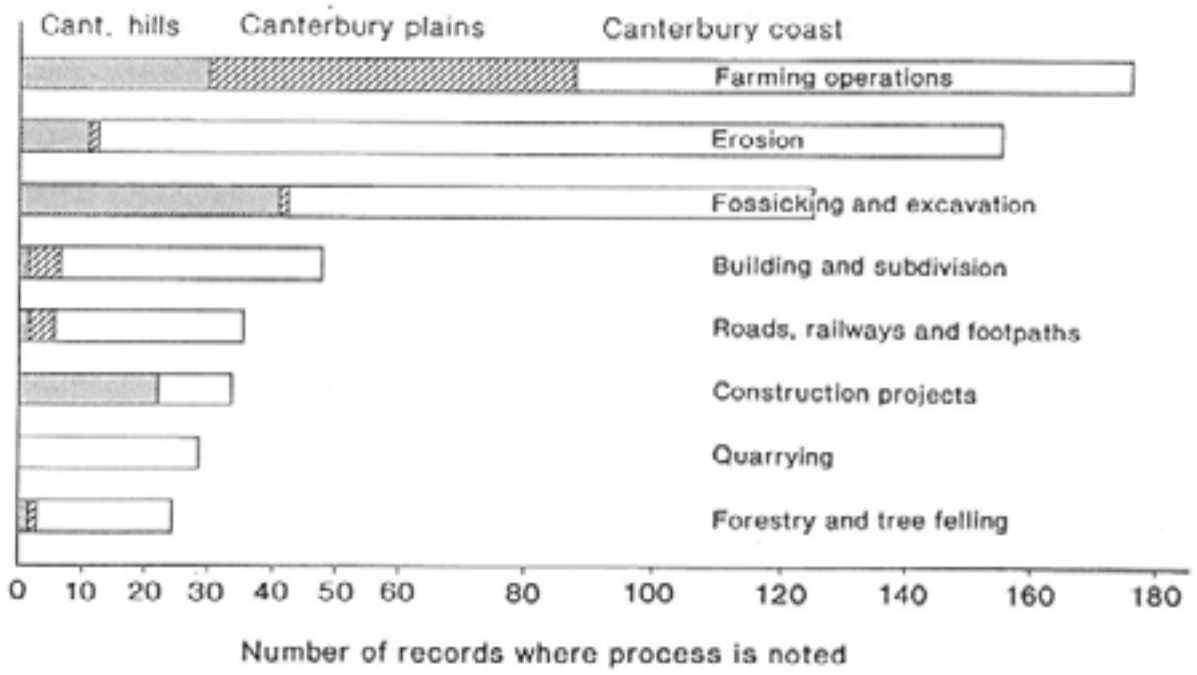

Fig. 5 Site destruction processes as recorded on NZAA site records, Canterbury Region.

The rate of deterioration of rock art sites has generally been regarded as serious (Fomison 1962: 121; Gould n.d.: 3; Trotter 1966: 120). For 276 rock art sites recorded, processes of destruction are noted on site record forms as follows: flaking or other deterioration of rock surface 129; retouch such as crayon, paint or chalk 62; stock rubbing 33; destroyed 17; seepage 13; vandalism 10; and fading 6. These figures are drawn from records which are generally brief and not structured as condition reports. In only one case are observations of successive visits filed for comparison: at J38/148, Opihi River, Don Millar recorded drawings readily discernable from a distance of 8 m and in comparatively good condition in 1951, but noted marked deterioration to poor condition through seepage, moss growth and discoloration, with only 20% still visible from 8 m, in 1967.

On the basis of this assessment of site record data, site survival rates appear poor. Because of processes of destruction, about 85% of recorded sites require verification in the field. This, with limitations in location data, means that mapped inventories of recorded sites plotted against cadastral boundaries are unreliable as a planning tool. The records do not represent the existing, the surviving or the visible archaeological resource, although a proportion of them are a part of this.

5. RECORDED SITES ON PROTECTED LAND

An inventory of archaeological sites on land held or managed for protection or conservation purposes would be of help in determining the proportion and representativeness of sites which might be less at risk than those on other private land. It has proved difficult to list such sites on the basis of existing records for reasons discussed. DoC maintains an index of land which it holds and manages (Department of Conservation 1991), and has compiled record maps on which such land is marked (Department of Conservation n.d.). Also included on the maps and in the index are reserves managed by district councils (such as scenic reserves and gravel reserves) and private land subject to protective covenants of various kinds. For the purposes of this review, land marked on these record maps is termed protected land. Comparison of these maps with the plotted site inventories published by the NZHPT (New Zealand Historic Places Trust 1985, 1986a, 1986b, 1986c) gives a preliminary list of sites which may lie on protected land (Appendix 1). This is subject to doubt in many cases because of site location or site survival uncertainties, and is not to be treated as definitive.

On this basis possibly 166 recorded sites (16% of sites recorded in the Canterbury Conservancy, see Fig. 4) might lie on protected land. Of these, 7 are said to be destroyed, the existence of 15 is unproven, the location and existence of 81 requires verification, 45 are likely to exist, and for 17 it can be stated confidently at this stage both that they exist and that they lie on protected land. Of the 166 sites, 80% lie in the coastal zone, 18% in hill country and 2% on the Canterbury Plains (Fig. 4), so that the plains (and to a lesser extent the hill country) are seriously under-represented in the sample which is in any case small.

Of these 166 sites, 113 may lie on land held or managed by DoC (noted on Appendix 1). Some are well known: defended pa at Onawe, Oruaka and Pa Island, Banks Peninsula, and the ditch and bank enclosure at Waipara; river mouth sites at Rakaia, Waiau and Motunau; rock art sites at Raincliff, Castle Hill and Weka Pass; sections of coastal duneland with oven and midden sites at Kaitorete Spit and Woodend; and early European sites, the first Hermitage and the first Ball Hut, Mount Cook National Park. Evidence has been recorded on other coastal land, notably at Napenape, Rangitata River mouth and Ashley River mouth, Quail Island and Motunau Island.

A preliminary indication of the possible representativeness of archaeological features recorded on protected land may be seen in Fig. 2. Sites with midden and ovenstone evidence appear proportionately well represented, but the sample is concentrated in localities, particularly Kaitorete Spit (57 sites in Appendix 1). There are well known examples of rock shelters and rock art on protected lands. Most other feature types appear to be present in very small numbers. In particular, whaling sites, and pits thought to be earth ovens, appear to be poorly represented, and stone source sites and horticultural stone rows are not recorded at all on protected land.

This preliminary assessment suggests that at least 84% of recorded sites are off protected land and that sites on protected land are not representative of types of site and area. The conclusion is that site protection strategies are necessary both on and off protected land. It should be noted that all the conclusions of earlier sections of this review about the limitations of site records (problems with location data, uncertainty of site survival, and lack of comprehensiveness) also apply in general to protected land in Canterbury.

6. RECOMMENDATIONS

This review has shown that existing site records provide a potentially misleading basis for site protection, if used without specialist advice, because of problems with location data, uncertainty of survival of recorded sites, and lack of comprehensiveness, detail and updating. It has also been shown that known sites on protected land appear not to be adequately representative of site types and areas.

The majority of sites require verification of location and existence in the field. Some are known to have been destroyed. Others were never positively identified. Site survival rates appear to be poor. The efforts of some individuals and the Canterbury Museum in site recording and protection over several decades are acknowledged. However, in comparison with some other regions, archaeological activity in recent years has been notably limited. Although the Canterbury Museum, DOC and the NZHPT each have continuing commitments to archaeological heritage management, and co-operate in particular situations, no ongoing strategy for site recording and protection has been pursued. Canterbury has been regarded as low priority by NZHPT on the grounds of the relatively low impact of predicted land use changes on archaeological sites (New Zealand Historic Places Trust 1983: 4.1). The comparatively minor landscape impact of archaeological sites in Canterbury, particularly on land held or managed by DOC, may also have influenced the situation.

It has recently been argued that, on the contrary, the relative paucity of sites itself provides justification for archaeological protection programmes (Hughey 1989).

It is suggested that, because of apparently high rates of attrition and the limitations of existing knowledge, a systematic strategy for recording of the archaeological heritage of Canterbury is necessary. Part of this would be the definition of archaeological resources on land held or managed by DOC, particularly in the coastal zone. In the absence of comprehensive inventory, the risk of loss and the need for protective management cannot be accurately assessed. The gaps in existing records are so extensive that priorities identified for recording may not be the right ones.

A renewal of long term commitment to site recording is therefore recommended. A medium term programme lends itself to cumulative contributions by all interest groups, including societies and volunteers. It should be organised and co-ordinated regionally, in the context of a structured archaeological management service (as set out for the Nelson– Marlborough region: Challis 1991). Priorities could then be reassessed and more accurately defined in the light of accumulated progress.

The following structured series of recommendations is suggested.

6.1 Procedural recommendations

6.1.1 General strategy

- A structured archaeological management service should be developed for the Canterbury region (cf. Challis 1991).

6.1.2 Land held or managed by DOC

- A systematic medium term programme of recording of archaeological sites should be begun as soon as possible. It is recommended that coastal lands should be the first priority, beginning at the north of the Conservancy (Conway River).

- A programme of condition reporting of recorded sites should be implemented and followed up by preventive stabilisation where necessary. A five year inspection interval is recommended.

6.1.3 Private land

- A systematic medium term programme of survey should be begun as soon as possible. A priority listing is suggested under 6.2.

- Grants and contracts should be available to assist recording programmes by interested parties such as museums, universities and Maori groups.

6.1.4 Records

All field work which leads to the identification or re-identification of archaeological sites within the definition of the Historic Places Act 1980 should be reported and filed in the NZAA site recording scheme.

All site inspections and re-inspections should result in condition reports which should be filed in the NZAA site recording scheme, leading to dated sequences of condition reports.

Grid references should be calculated as co-ordinates relating to 100 _ 100 m squares, not estimated to the nearest 100 m, to maximise the accuracy of computer map plots.

The existence, location, condition and relative significance of sites should not be assumed without reference to detail in the site records, and (where necessary) should not be assumed without inspection in the field.

6.2 Priorities for site recording

6.2.1 Programmes which should begin as soon as possible

- Survey of the condition of existing lithic source sites (noted in section 2 of this paper) and search for unrecorded source sites in lithic source areas.

- Survey of the survival, condition and extent of recorded stratified and/or early river-mouth pre-European sites, particularly from the Conway River to Motunau, and from Wakanui to Timaru.

- Recording of archaeological sites on land held or managed by DOC, beginning with coastal lands and beginning at the north of the Conservancy.

Note: Work by Chris Jacomb of the Canterbury Museum is in progress on Banks Peninsula.

6.2.2 Programmes which should begin within 3 to 5 years

- Survey of archaeological values in the Christchurch urban area, relating particularly to nineteenth century domestic, industrial and transport history.

- Survey of unrecorded parts of coastal dune belts from the Heathcote River to the Waipara River, prioritised according to development pressures.

- Validation of records and re-survey of Banks Peninsula generally, from Godley Head to Birdlings Flat, particularly the south and east of Lyttelton Harbour, and Le Bons Bay to Akaroa.

- Validation of records and re-survey of the north Canterbury coast from Conway Flat to the Waipara River, particularly from the Waiau River to the Hurunui River.

- Follow-up survey of rock art areas to monitor art condition, define archaeological deposits and explore unrecorded evidence, particularly in South Canterbury.

- Survey of unrecorded parts of Kaitorete Spit (Palmer 1980: fig. 4).

6.2.3 Other areas where inventory should be encouraged and assisted

- The Lake Ellesmere hinterland from Taumutu to Motukaraka.

- The environs of major rivers, particularly the Waimakariri.

- Coastal areas from the Rakaia to the Waitaki River.

- 6.2.4 Other research which should be encouraged

- Recording of sites of European age, particularly mills and coastal industries.

- Follow-up of the sources of published and unpublished distribution maps which show unrecorded sites.

- Recording of artefact provenance as a guide to site location.

- Systematic examination of areas where the ground is disturbed, for example by ploughing, forest clearance or demolition.

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APPENDIX 1

Recorded archaeological sites possibly on Canterbury conservation land units

Site No.	Land Unit No.	Description
H36/1	H36001 or 003	First Hermitage. Ritchie 1985. DOC.
H36/2	H36002 or 001	First Ball Hut. Bedford 1985. DOC.
H37/2	H37001 or 005	Birch Hill Homestead foundations. DOC.
H38/1	H38011 or 012?	Lake Pukaki, find spot. Trotter 1969: 2. DOC.
H38/8	H38024?	Ohau Bridge, SH8, find spot. Area destroyed. DOC.
J38/19	J38152?	Hazelburn 51 rock shelter. Covenant?
J38/20	J38061?	Hazelburn 63 rock shelter. Covenant?
J38/54–57, 134?	J38115	Raincliff, rock shelters 28(?), 29–31, 135. Department of Lands and Survey 1984. DOC.
J38/92	J38149	Waitohi 101 rock shelter. Covenant?
J39/31	J39057?	Pareora River, find spot. Timaru D.C.
K34/1–7	K32032	Castle Hill, rock shelters. DOC.
K38/1	K38051	Rangitata fishing huts, oven. Eroded. DOC.
K38/3	K38043?	Rangitata River mouth, ovens. Eroded. DOC.
K39/7	J39044?	Patiti Point, hearsay oven. Timaru D.C.
L37/3	L37023?	Rakaia Island, hearsay oven. Canterbury R.C.
L37/4	L37025,026,027	Rakaia River mouth, ovens, middens. Trotter 1972a. DOC.
L37/14	L37072?	Hakatere, oven. Erosion, roading. Ashburton D.C.
M33/3–5	M33045?	Mt Donald, rock shelters. Open Space Covenant.
M33/11–13	M33038?	Weka Pass, Timpenean rock shelters. Trotter 1972b. DoC.
M33/20	M33047?	Pyramid Valley, rock shelter. Trotter and McCulloch 1971: figs. 57–58. Open Space Covenant.
M34/20	M34098?	Ashley River, moa-hunter site? DOC.
M35/2	M35109?	Halkett, ovens. Canterbury R.C.
M35/3,4	M35110?	Halkett, ovens. Road works? Canterbury R.C.
M35/5	M35158?	Yaldhurst, oven. Bulldozed. Canterbury R.C.
M35/20	M35925?	Woodend beach, burial? Eroded. DOC.
M35/25	M35309?	Brooklands, oven, midden, pipe trenched. Christchurch City.
M35/26	M35564?	Waimairi, midden, ovens, bulldozed. Christchurch City.

Site No.	Land Unit No.	Description
M35/29–36	M35067?	Kairaki, middens, roading, pine trees, cultivation, erosion. Waimakariri D.C.
M35/118	M35035?	Woodend, midden. DOC.
M35/135–137	M35064?	Kaiapoi, middens, ovens, roading. Waimakariri D.C.
M35/290	M35302?	Stewarts Gully, burial, midden, destroyed. Christchurch City.
M35/293	M35876?	South New Brighton, midden, pine trees, fossicked. Christchurch City.
M36/5	M36085?	Allandale, midden, cultivated. Banks Peninsula D.C.
M36/8	M36146?	Motukaraka, cave, midden. DOC.
M36/27	M36082?	Govenors Bay, earthworks, built on. DOC.
M36/30,41	M36086?	Quail Island, burial, midden, find spot. DOC.
M36/31,47, 50–55,57	M36386	Barnett Park, Rifle Range Valley, caves, midden, 47 and 50 destroyed. Christchurch City.
M36/37	M36230?	Oaklands, midden, cultivated. DOC.
M36/43,58	M36478	Mt Pleasant, find spot, early stockyards. DOC.
M36/88–89	M36366–367?	St Andrews Hill, middens. Christchurch City.
M37/6,7	M37023?	Kaitorete Spit, middens, ovens. DOC.
M37/22	M37017?	Birdlings Flat, pa, pits, built on. DOC.
M37/23	M37018?	Birdlings Flat, pits, burial, fossicked. DOC.
M37/24,25	M37022	Oruaka Pa and cave, midden, pits. Brailsford 1981: 161–162. DOC.
M37/31,75–101, 122–123	M37011	Kaitorete Spit, ovens, work areas, 122–123 destroyed. McFadgen 1987. DOC.
M37/37–38, 48, 51–68, 124–127	M37014	Kaitorete Spit, ovens, artefacts, work areas. DOC.
N33/16–18	N33044?	Napenape, pits, find spots, hearsay. DOC.
N34/1–6	N34026	Waipara River mouth, earthwork, pits, midden, oven, rock shelters. Trotter 1975b: 226. Brailsford 1981: 187. DOC.
N34/7,8,14	N34008?	Motunau River mouth, midden, ovens. Hurunui D.C.
N34/12,13	N34020	Motunau Island, midden ovens. Trotter 1982: 90. DoC.
N36/1	N36001?	Breeze Bay, burials, oven, destroyed? DoC.
N36/2	N36152–153	Godley Head, earthwork. Trotter 1976. Covenant?
N36/3	N36003	Ripapa Island. Trotter 1987. Brailsford 1981: 159. Navy League (NZ) Inc.
N36/45	N36147?	Taylors Mistake, midden, ovens, built on. Christchurch City.

Site No.	Land Unit No.	Description
N36/53	N36004?	Camp Bay, midden, ovens, eroded. DoC.
N36/86	N36102	Onawe, defended pa. Trotter 1986. Brailsford 1981: 185–186. DOC.
N36/91	N36110?	Wainui, midden, roading, erosion. Banks Peninsula D.C.
N36/94	N36097?	Duvauchelle, midden, oven, erosion. Banks Peninsula D.C.
N36/95	N36093?	Duvauchelle, midden, oven, erosion. DOC.
N36/111	N36041	Pa Island, defended pa, midden. Brailsford 1981: 172. DOC.
N37/8	N37015?	Stony Bay, midden, ovens, burial, cave, erosion, fossicking. DOC.
O32/35	O32002?	Waingaro, pits, ovens, midden. DoC.
O33/4	O33006 or 069	Waiau River mouth, cave, ovens, pits, erosion. Parry 1960: 13. DOC.
O33/7	O33045?	Gore Bay, ovens, destroyed. Hurunui D.C.
O33/8	O33048?	Gore Bay, burial, midden, oven. Hurunui D.C.
O33/11,13	O33059?	Hurunui River mouth, ovens, artefacts. Duff 1956: 275. Hurunui D.C.

Note: The sign ? in this list indicates that the location of the site either on or off the land unit is uncertain, or that the existence of the site is uncertain. For land unit data, see Department of Conservation (1991).