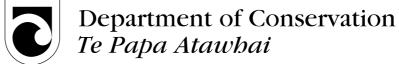
THE ARCHAEOLOGY OF NEW ZEALAND SHORE WHALING

Nigel Prickett





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Cover photograph: Trypots behind the beach at the historic Te Awaiti whaling station, Tory Channel.

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The archaeology of New Zealand shore whaling

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ABSTRACT

In this report are listed 87 New Zealand shore whaling stations and sites for which there is good archaeological and/or historical evidence. There is also information on 25 unconfirmed stations. Forty-nine stations are recorded in the New Zealand Archaeological Association site recording scheme. Thirteen stations are classed as 'outstanding' in terms of the scale and range of surviving archaeological evidence. Fifteen sites contain 'good' records of the shore whaling industry, 14 are classed as 'poor' with some evidence surviving, and 19 are destroyed. There is no archaeological record of 26 stations, some of which will also have been destroyed. Recommendations are made regarding the management of New Zealand's archaeological resource of shore whaling stations.

Keywords: archaeology, archaeological resource management, whaling, southern right whale, shore stations, New Zealand

1. Introduction

1.1 NEW ZEALAND SHORE WHALING

New Zealand shore whaling was a small part of the great world-wide whaling industry of the 19th century. In the 'Southern Fishery' of the South-West Pacific, shore whaling began in the first decade of the century in Tasmania, where skills and commercial arrangements were developed that were later taken up by the New Zealand industry. In 1991 Angela McGowan of the Tasmanian Parks and Wildlife Service took me to Maria Island and Adventure Bay, Bruny Island, where I saw for myself the marked similarity of archaeological remains to those of New Zealand whaling sites (Prickett 1993).

Several developments helped in the establishment of the New Zealand shore whaling industry. Importantly, in 1823 British duty on colonial right whale oil was reduced from £8-8-0 to £1 a tun (a 'tun' of oil being reckoned at 252 gallons, approximately one ton in weight). Two years later duty was further reduced to a nominal shilling a tun (Rickard 1965: 50-51). By 1830 the sealing trade had destroyed its own livelihood in the South-West Pacific, thus freeing up capital and labour experienced in local conditions. At the same time, the Greenland right whale fishery collapsed, making the distant Southern Fishery both necessary and economically competitive.

The first whaler to set up in New Zealand was the former sealer John ('Jacky') Guard, who may have been at Te Awaiti, Cook Strait, as early as 1827 (Grady 1978: 40-41). At first Guard was not equipped for taking oil, and whalebone was all he was able to produce. By 1830 or 1831 he was taking both oil and whalebone (Morton 1982: 230). In the south, Peter Williams was shore whaling in Preservation Inlet in 1829, in which year he produced 120 tuns of oil (Shortland 1851: 300). The same year Guard transferred his operation to Kakapo Bay, Port Underwood, having found whales close inshore, thus establishing the great Cloudy Bay industry (Grady 1978: 40-41).

The New Zealand shore whaling industry was based on the right (or 'black') whale, which yielded so-called black oil, and whalebone (baleen). Sperm whales and humpbacks were also sometimes taken. Heaphy (1842: 39) puts 1841 production at 1800 tuns of oil and 70 tons of whalebone, worth not less than £54,800 on the London market. In the 1846 season, 28 stations in the South Island, Cook Strait and on the east coast of the North Island, produced 774 tuns of black oil, 13 tuns of sperm oil, and 31 tuns of humpback oil, the latter being understated as some stations mixed right whale and humpback oil (*The New Zealand Spectator and Cook's Straits Guardian* 3 Feb 1847).

Major whaling regions were Foveaux Strait and Otago, Banks Peninsula, Kaikoura, Port Underwood, Tory Channel, Kapiti and Hawke's Bay (Fig. 1). On the North Island East Coast and in the Bay of Plenty, part-time whaling continued in a small way into the 20th century. In the north, there were factory operations at Whangamumu and Whangaparapara. Other stations were scattered about the coasts of both islands, and the Chatham Islands and Campbell Island.

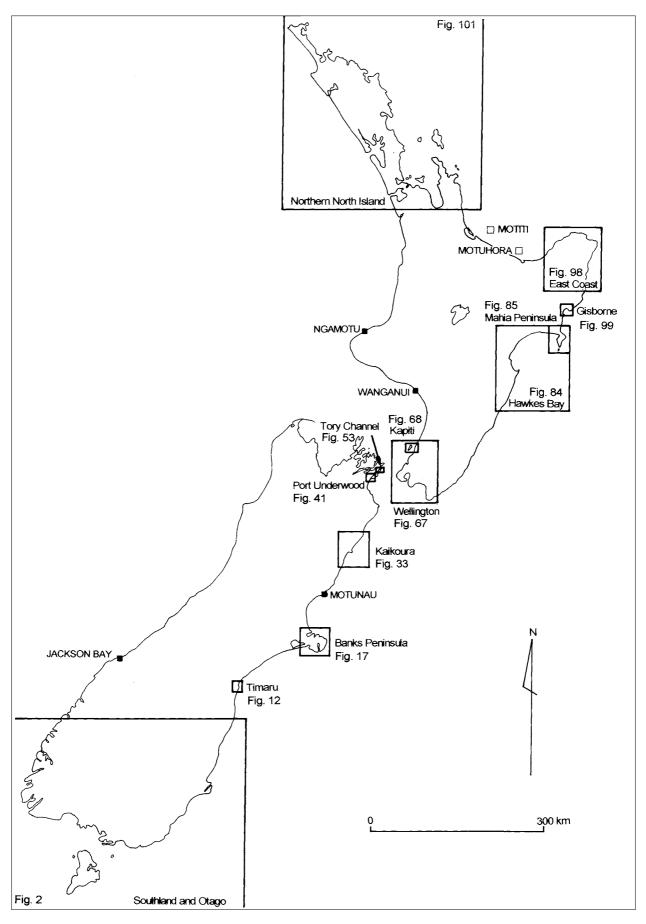


Figure 1. New Zealand, showing the location of detailed maps of the various whaling districts, and stations not covered by the district maps.

The New Zealand whaling season was from late autumn to October. Each year right whales arrived on the coast, as early as April in the south, or May in Cook Strait and further north (Dieffenbach 1843 v.I: 45), having summered in the Southern Ocean (Gaskin 1972: 86-87). Travelling up the east coast of the South Island, a large part of the migration would turn into Cook Strait, where Port Underwood provided an ideal calving area of warm, shallow water. The migration then passed through the strait and between Kapiti Island and the mainland to another calving area in the South Taranaki Bight, known to whalers as 'Motherly Bay' (Wakefield 1845 v.I: 340). Other whales travelled up the east coast of the North Island to Hawke Bay and beyond, a few even reaching the east coast of the Northland peninsula.

Whaling in inshore waters could be undertaken from anchored vessels or from shore stations. In New Zealand, a distinction is made between 'bay whaling'—that is, whaling from ships anchored in bays—and land-based 'shore whaling' (Morton 1982: 230). In 1836 there were 18 vessels bay whaling in Port Underwood, most of them American (Grady 1978: pl. 24). When a whale was spotted, as many as 70 boats from ships and shore stations might set off after it (Morton 1982: 231). In the 1834 season at Otago, the Weller brothers' station took 310 tuns of black oil, in competition with the American whaler *Columbus*, which took 200 tuns (Shortland 1851: 301).

1.2 ECONOMICS

In the 1830s New Zealand shore whaling operations were financed by Sydney merchants. When the Wellington settlement was founded in 1840, it rapidly took over the servicing of local stations (Dieffenbach 1843 v.I: 52). Edward Jerningham Wakefield describes the fitting out:

'The parties enrolled in Sydney received an advance and spent it there; a brig or schooner then carried the whole "mob," as the party was sometimes called, to their station in New Zealand, with new boats, tackle, provisions, spirits, goods with which to barter for firewood and fresh food from the natives, clothing, tobacco, and various other necessaries, which were placed under the care of the chief headsman, and charged to him at an immense profit by the owner of the party in Sydney, as an advance on the produce of the season.' (Wakefield 1845 v.I: 319)

Typical shares were as follows: chief headsman 1/18th, other headsmen 1/24th, boatsteerers 1/60th, coopers and carpenters 1/70th or wages, boatmen 1/100th (Shortland 1851: 109-110). The remainder went to the capitalist who financed the station, who also took the oil and whalebone at his own valuation and the profit in selling on the London market. Shortland (1851: 110) gives prices paid for black oil early the early 1840s. In New Zealand it fetched £8 to £12 a tun, paid in rum, goods and cash, and in London it was worth £30 cash. For whalebone, New Zealand and London prices were respectively £50 to £56 (again in rum, goods and cash), and £160 or more, paid in cash. The cost of shipping to London was about £9, and there might be as much as 10% leakage of oil during the voyage.

In the Alexander Turnbull Library the account book for Alexander Fraser's Long Point station, Kapiti Island, 1840-42, gives rare detail on the costs and returns of running a whaling station (Fraser ms). For the 1840 season there are individual slop bills, advances in Sydney and final payments for 25 men, five headsmen, 11 Maori, a cooper, carpenter, clerk, and 'tonguer'. The latter acted as an interpreter, and 'cut-in' the whale, receiving the tongue oil in payment. Fifteen European men received £16 to £21 for the season, nine getting a cash advance in Sydney. Ten received lesser shares of £4 to £8. Maori were paid between £7 and £12 each. Three headsmen took cash advances in Sydney, and were paid out at £48 to £67. Tonguer John Hogan took £58-6-6. The cooper, clerk and carpenter received wages of £60, £48 and £36. There were passages from Sydney for 20 men at £5 each and five headsmen at £10.

Five new boats were purchased at £27 each, and shipped from Sydney for £5 apiece. Provisions are listed as pork (£394-0-11), flour (£436-3-4), sugar (£39-10-0), tea (£76-18-0) and spirits (£152-10-0). Payment to Maori for buildings confirms 1840 as the first season. They received 25 pairs of blankets at 30 shillings, two kegs of tobacco totalling 200 lb. at three shillings a pound, and a 52 gallon hogshead of spirits at 8/- a gallon, to a total value of £88-6-0.

Total costs of £3248-8-4 for the 1840 season were made up of: shares and wages £913-0-4; passages £150; boats £160; provisions £1099-2-3; buildings £88-6-0; and costs incurred with Sydney whaling suppliers and merchants £709-7-0. The remainder is freight, handling and wharfage at Sydney. Oil returns were 44 tuns and 133 gallons, at £15 per tun, giving a return of £668-5-5¼. Fifty-seven hundredweight and 11 lb. of whalebone at £95 per ton fetched £242-14-3½. These prices were paid in New Zealand, the owner's profit, if any, being made on the London market.

1.3 THE DECLINE

The inshore whaling industry soon destroyed its means of livelihood. Mostly cows and calves were taken, as the females came inshore to calve. Males generally remained out at sea, to be joined there during the summer by cows and calves on the return to the Southern Ocean. As early as 1832 the Under Secretary of the Colonial Office, Mr R.W. Hay, predicted the end of the New Zealand shore whaling industry (Rickard 1965: 109). In 1842 Charles Heaphy (1842: 38-39), who worked for the New Zealand Company and was anxious to promote settlement, claimed that the whaling industry was by no means in decline. He was, however, soon proved wrong. The peak years were the late thirties.

Black oil production figures from the Weller brothers' station at Otago illustrate the industry's brief success and rapid decline. In 1833 the station took 128 tuns of oil. In the following years production was 310, 260, 210, 272, and 213 tuns, followed by 65 tuns in 1839, 14 tuns in 1840, and 10 tuns in 1841, after which the station closed (Shortland 1851: 301). In the 1845 season the two-boat Otago station, now owned by James Davis, took just 100 gallons of humpback oil (*The New Zealand Spectator and Cook's Straits Guardian* 6 December 1845).

In 1839 in the Kapiti and Mana region, 23 boats at six stations produced 500 tuns of black oil and 30 tons of whalebone (Dieffenbach 1843 v.I: 109). By 1847 there was only one station on Kapiti Island and another at Korohiwa on the mainland near Mana Island, between them employing three boats and taking 29 tuns of black oil (Wakefield 1848: 193). Oil production figures for Wellington-based stations—including much of the South Island, Cook Strait, and the lower North Island—show a marked downward trend in the period 1843 to 1847 (Table 1).

TABLE 1. PRODUCTION FIGURES (INCLUDING SPERM AND HUMPBACK OIL) FROM STATIONS BASED AT WELLINGTON (WAKEFIELD 1848: 193).

YEAR	BOATS	MEN	OIL (tuns)	WHALEBONE (tons)
1843	91	768	1289	65
1844	85	673	1130	48
1845	91	774	970	37
1846	69	618	819	28
1847	51	408	468	15

In the middle of the 19th century New Zealand whaling stations were largely abandoned for lack of right whales. At only a few places whaling continued as a part-time occupation of men mostly engaged in farming and other pursuits. Among these were Maori whalers of the East Coast and Bay of Plenty, the best known of whom were at Te Kaha, where traditional boats and technologies were employed well into the 20th century, taking mostly humpback whales. There was no shore station as such, men lived on scattered farms and villages; whales were brought in and tried out on the beach wherever convenient. Photographs of the operation were published in the *Auckland Weekly News* in 1919.

Tory Channel and Whangamumu whalers worked on the last frontier of hunting for right whales in New Zealand waters, at subantarctic Campbell Island. Tory Channel men were at Northwest Bay from 1909 to 1913, taking only whalebone, as they did not have the gear to take oil (Kerr 1976: 83). On the other side of the island, the Cook family operation at Northeast Harbour had two good years in 1911 and 1912, but closed down after 1914 (Kerr 1976: 84).

In 1927, Tory Channel whalers took the last two right whales captured by New Zealand shore whalers (Gaskin 1968: 15). In the years 1927 to 1963 there are no records even of sightings on the mainland New Zealand coast. The southern right whale was protected by international convention in 1936. The first recorded recent sighting in mainland waters was at Tory Channel, on 15 July 1963 (Gaskin 1964). Since then, whales have turned up rarely in winter on the New Zealand coast, following ancient migration routes. Only at Campbell and Auckland Islands have they continued to come inshore, with a population of between 45 and 60 at Campbell Island in late winter and spring in the early 1960s (Gaskin 1968: 15–18).

1.4 THE WHALERS

Edward Jerningham Wakefield, whose contemporary account of New Zealand shore whaling is the best available, was a 20-year old agent of the New Zealand Company when he visited Kapiti in June and July 1840 during the whaling season. He was a sympathetic observer of whaling men, and greatly admired their active life.

'I was much interested in observing the life of these rough men, and in finding that many generous and noble qualities redeemed their general inclination to vice and lawlessness.' (Wakefield 1845 v.I: 310)

Wakefield identified New Zealand shore whalers as ex-seamen, runaway convicts from New South Wales and Van Diemen's Land, or their descendants who he knew as 'currency lads':

'The frankness and manly courage of the sailor mingle with the cunning and reckless daring of the convict, or "lag," in no common manner. Though prone to drunkenness and its attendant evils, the whaler is hospitable in the extreme, and his rough-built house is a model of cleanliness and order.' (Wakefield 1845 v.I: 311-312)

He adds, 'I of course speak of the general character of this class of men; to which there are some terrible exceptions.'

The same source describes the roles of headsmen, boatsteerers, tonguers, tub oarsmen and pulling hands. Wakefield relishes whalers' slang, and the names by which men are known, 'like the heroes of the Iliad': Long Bob, Geordie Bolts, Flash Bill, Butcher Knott, Gipsey Smith, Fat Jackson, French Jim, Black Peter. Maori chiefs with whom the whalers had to deal were known as: Satan, The Old Sarpent, Bloody Jack, The Bully, The Sneak, The Badger, The Greybeard, and The Wild Fellow (Wakefield 1845 v.I: 318-319). There is a description of the role of Maori 'wives' of the whalers, and of the reciprocal responsibilities of the men. It was a very practical arrangement, from which many New Zealand families—and at least one Prime Minister—are descended.

Bringing together men from the waterfront taverns of Sydney and the bays and Maori settlements of the New Zealand coast was not easy. Wakefield (1845 v.I: 333) tells of a whaleboat making the passage from Wellington to Kaikoura in a gale 'because Black Murray, the chief headsman, thought his men had enjoyed drinking enough on their advances, and because he thought it easier to get them away to the station while they were intoxicated.'

'The preliminary orgies are nearly over; the clerk stops the advances until something has been earned; the headsmen administer a severe personal castigation to some few notorious characters who grumble at this curtailment of their ease; the boats are practised every day in pulling and sailing; when at length, one morning early in May, a whale is signalled from a hill near the bay, where a look-out is constantly kept.' (Wakefield 1845 v.I: 325)

Wakefield also gives a good account of the whaleboat and its organisation for the task ahead, shore works and accommodation, the chase, laws relating to the ownership of whales, relations with Maori, and the role of whalers as early settlers in New Zealand. In many districts the first European settlers were whalers, and shore stations were the first European settlements.

1.5 WHALERS AND MAORI

Maori always played a major role in shore whaling. In the early years at Otago there was an equal number of Maori and European whalers (Shortland 1851: 301). Wakefield (1845 v.I: 334-335) states that at some stations all the 'common men' were Maori. Hawke's Bay stations were heavily dependent on Maori labour. Many Maori went on to become boatsteerers and headsman, and some set up their own stations, especially on the East Coast and in the Bay of Plenty.

Throughout New Zealand, whalers lived close to Maori communities, from whom they obtained food, protection from other Maori, and, not least, a willing labour force to crew the boats and man the shore works. Maori gained new skills and access to goods from beyond New Zealand. Whalers and Maori women entered into relationships, some of which were later formalised by marriage. Many Maori men took the opportunity to ship out on whaling vessels for money and adventure.

The relationship between Maori and whaler was marked by equality and reciprocity, since both had much to gain. This contrasts with the situation after 1840 when European settlers flooded into New Zealand, soon pushing Maori to the margins of economic and political life. Nonetheless, the opportunities that Maori so eagerly grasped were based on northern-hemisphere technology, commerce and, ultimately, political power. Thus, while shore whaling offered opportunities to Maori, it was also to play its part in changing the old world for ever.

1.6 TWENTIETH-CENTURY FACTORY WHALING

With the loss of the right whale, modern whaling stations, with motorised whale chasers, harpoon and bomb guns, power winches and steam digesters, turned to humpback and sperm whales. Foremost was the operation at Tory Channel, where the Perano family whaled from 1911 to 1964 (Grady 1982). The average annual catch for ten years prior to 1956 was 115 whales (Hauraki Whaling Ltd 1956: 5). Gaskin (1968: 39) records no less than 248 sperm whales taken from April 1963 to December 1964. But sperm whale numbers also were in rapid decline, due in part to the activities of a Russian whaling fleet off the east coast of the South Island.

In the north, the Cook family, at Whangamumu near the Bay of Islands, used steel nets to hold humpbacks for killing with harpoons and lances (Grady 1986: 218-219). The station operated from 1890 to 1931, averaging 70 whales a season (Hauraki Whaling Ltd 1956: 5). A 1901 photograph of Whangamumu whalers shows an old technology, no different to that used in the heyday of New Zealand whaling 60 years previously (see Fig. 103). On the South Island east coast, at Kaikoura, old methods were employed on a part time basis for many years, before harpoon and bomb guns were acquired in 1908 and modern chasers soon after. The last season was 1922 (Sherrard 1966: 74-75).

In 1956 Hauraki Whaling Ltd issued a share prospectus for a shore station based at Whangaparapara, Great Barrier Island. The proposal is full of information on the technology and operation of modern stations, the market for whale oil, and

on estimated income and expenditure (Hauraki Whaling Ltd 1956). Humpbacks were to be the chief quarry, with blue, fin, sei, and sperm whales also hoped for. The chief engineer, W.A. Balsillie, came from setting up a station at Byron Bay, New South Wales. Whangaparapara was soon in financial trouble and had three owners before closing down after the 1962 season. New Zealand humpback catches declined rapidly from 361 in 1960, 80 in 1961, and 32 in 1962, to 9 in 1963 (Gaskin 1972: 83). The last whale captured by a New Zealand shore station was a bull sperm whale, taken by a Perano chaser off Kaikoura on 21 December 1964 (Grady 1982: 199).

1.7 ARCHAEOLOGICAL INVESTIGATIONS

While some whaling sites have been recorded as part of a general survey of a district, or as casual records of particular sites, the best records in the New Zealand Archaeological Association file are the result of a particular focus on the industry and its remains.

In April 1982 I recorded whaling sites on Kapiti and adjacent islets during an Offshore Islands Research Group trip (Prickett 1983). Another regional survey was carried out in October 1990, by University of Otago graduate student, Matthew Campbell, who recorded sites along the Foveaux Strait and Otago coasts (Campbell 1992, 1993). In the summer of 1989/90 I carried out a survey on the Hawke's Bay coast, which was focussed partly on whaling stations, and resulted in a number of new records (Prickett 1990). Banks Peninsula whaling sites have been visited by Chris Jacomb (Canterbury Museum) over a number of years, resulting in excellent records of the sites in the files, and a good descriptive account (Jacomb 1998).

In the course of the current project I have visited whaling sites in Southland, Otago, Timaru, Banks Peninsula, Kaikoura, Port Underwood and Tory Channel, the Wellington coast, and Chatham Island. Districts where surveys, or an upgrade of available information, are needed are Mahia Peninsula, the East Coast and the Bay of Plenty.

There have been few excavations of whaling sites. The first was undertaken by the Wellington Archaeological Society at Korohiwa near Titahi Bay in 1968. Little of interest appears to have turned up (Wellington Archaeological Society ms). The most extensive work was carried out in the early 1970s by Peter Coutts at Taieri Island, south of Dunedin, where he focussed on the living area and published the only plan of a whalers' hut thus far available (Coutts 1976). In the summer of 1989/90 Chris Jacomb carried out a 3-4 day rescue excavation at Oashore, Banks Peninsula, after bulldozer damage to the site. A 1991 excavation at the Weller brothers' tryworks on the edge of Otago Harbour (Campbell 1991) resulted in a chemical analysis of ash residues for cetacean fats (Campbell & Smith 1993).

1.8 SCOPE OF THE REPORT

This report is concerned with shore whaling stations. These are locations where whalers set up on shore for the purpose of capturing whales by means of shore-based boats, and where whales were processed on shore for oil and/or whalebone (baleen). They include living quarters for whalers (and often their families as well), and industrial components, of which the most important is a tryworks but which may also include a slipway, cooperage, boatsheds, lookout, etc. Twentieth-century operations at Kaikoura, Tory Channel, Great Barrier Island, and Whangamumu have important industrial remains.

Not included in this report are locations where temporary works were set up on the beach to try out a whale or whales, or whaling operations which were a minor part of the seasonal round of a farming community. Some of these operations may have used a permanent tryworks, but none had the associated living quarters which distinguish the whaling stations of interest here. For this reason part-time whaling by Maori communities on the East Coast, in the Bay of Plenty and in Northland is not covered.

Nor have I included bay-whaling operations, although bay whalers did sometimes set up tryworks on shore. Otago Harbour, the bays of Banks Peninsula, Port Underwood, Kapiti Island, and northern harbours were important for bay whaling, or re-victualling, or both, but these are mentioned only where they throw light on the origins or operation of shore stations. Ports such as the Bay of Islands, Mangonui, and Wellington, which serviced pelagic whaling vessels and sometimes shore stations, are not part of the survey.

Also not included, since they were not shore whaling stations, are whaling bases such as the Hardwicke settlement on Auckland Island (1849–52), and the early 20th century Norwegian bases at Whangaroa in the north, and at Paterson Inlet, on Stewart Island. Shipwrecks associated with whaling operations are not covered except as part of the history of a shore station.

1.9 THE ARCHAEOLOGICAL EVIDENCE

Surviving archaeological remains of a whaling station may include domestic or industrial elements or both. The most important evidence consists of the above ground or sub-surface remains of built structures. Portable items such as bottle glass, ceramics, hoop iron, or whale bone may relate specifically to whaling operations, or generally to the period of operation. Archaeological evidence described here relates to sites of the main period of shore whaling in the 1830s and 1840s.

Domestic aspects of a whaling station site are made up of the remains of whalers' houses. These were mostly small rectangular buildings of one room. Archaeological evidence is almost invariably in the form of a stone-built fireplace, sometimes still standing to a metre or more, but more often marked by a low mound of stones and soil which may be covered in grass or other vegetation. Fireplaces may sit at the end of a terrace or slight depression to indicate the related structure.

Some huts are marked only by terraces or depressions, without obvious fireplace remains. Very occasionally there is other evidence of whalers' huts, such as a stone step marking the house doorway. Small rectangular hearths of placed stones signal Maori dwellings, which are sometimes part of a shore whaling operation.

Other evidence of living arrangements may include the remains of stone houses, stone revetting, ditches, and garden walls or stone rows. Whalers' graves may be marked by a gravestone or an arrangement of stones.

The most important industrial evidence relates to the tryworks. This may take the form of the stone remains of the trypot base, including the firebox and flue, and sometimes also a hard black deposit made up of partly burnt fuel and whale oil. Where all that remains is a low mound, it can be distinguished from a domestic chimney by its larger size, its location immediately behind the beach and sometimes by a black tryworks deposit. A cooper's workshop may be signalled by rusted remains of hoop iron. Slipways for hauling up whaleboats may sometimes be made out at the back of a beach, and should also be looked for where there is a rocky shore in front of the site.

Every whaling station had a lookout on a nearby high point, commanding a good view of the ocean. This is sometimes marked by a terrace or small pit, which provided shelter from the elements during the winter whaling season when a watch was constantly maintained.

1.10 THE INVENTORY

The following inventory deals with each whaling station and site according to location, description and history. The information given varies greatly, depending on what is available.

'Location information' describes the geographic location of the whaling station, from archaeological evidence where possible, or from historical references. Site record numbers are given where these are available, as is the source of the site record.

'Map references' have been checked by the writer against the relevant NZMS 260 sheet, and some have been corrected from the original record. References qualified by 'c.' cover a range of sites, from those that I am confident have been accurately located, but which require confirmation, to those for which there is only a general location from historical accounts. Where no map reference is given the location is too general for a reference to be of any value.

'Site descriptions' range from general to detailed accounts of features, depending on available records. Sometimes a lack of experience with archaeological characteristics of whaling sites will have led to difficult evidence being overlooked by field workers. Station histories depend on available information.