# Murihiku Pa:

# An Investigation of Pa Sites in the Southern Areas of New Zealand



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# Abstract

This Master's Thesis examines why there are fewer recorded pa (fortification) sites in Murihiku, the southern-most region of New Zealand. Previous research on pa sites has primarily focused on areas with high distributions of recorded pa, such as the Northland, Auckland and Waikato regions. This thesis examines the idea of the enclosure, using pa sites as a means through which to view variation in the form and function of enclosed sites.

A testable methodology was formulated to establish a data set of archaeologically visible pa sites within Murihiku. Data was compiled from a range of sources, drawing upon archaeological, traditional, environmental and historical sources to produce a list of locations that has been identified, in some form, as pa sites. The resulting 31 sites were critically examined through field visits and the identifying attributes used to categorize these sites as pa. Subsequently, four archaeologically visible pa were confirmed; two prehistoric sites, Mapoutahi and Pa a Te Wera, and two historic sites, Te Waiateruati and Te Kiri o Tunoho.

The nature of pa and their role in the late prehistoric period in Murihiku was investigated in order to evaluate the theories on why there are so few pa recorded. Pa sites are part of a dynamic and fluid continuum of site types that range from open to fully enclosed sites. The positions of these sites reflect the locations of socio-economic events, particularly the focus in the late prehistoric period on the east Otago coast. The historic pa appear to have developed in response to more external events, occurring to the north and south of Murihiku. Pa were important occupation sites within the settlement pattern, however, a lower population, varying motivations for warfare and their location south of the horticultural line should be considered as reasons for the fewer number of recorded pa sites in the region.

This research project offers a new perspective on settlement in the late prehistoric period in Murihiku. Furthermore, it illustrates the value of understanding enclosed settlements in the occupational history of Murihiku, even though features such as pa are not as common or widely distributed as their northern counterparts. This study supports recent interpretations of Maori pa as multifunctional, multifaceted and complex sites that changed through time.

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# **Chapter One: Introduction**

Went to Day to the heppah or Town...the Town was situated upon a small Island or Rock, divided from the main by a breach in the Rock...the sides everywhere so steep as to render fortifications even in their way almost totally useless, accordingly there was nothing but a small Palisade & one small fighting stage at one end where the Rock was most accessible

(Sir Joseph Banks, January 24th 1770, in Morrell 1958:103)

# **1.1 Introduction**

This thesis examines why there are so few recorded pa sites, which have been described as "rare and rudimentary", in Murihiku, the most southern portion of New Zealand (Anderson 1983a:34). In order to answer this question, the research will use contextual information from the current sample of pa sites in Murihiku and explore the nature and role of pa in the late prehistoric and early historic periods in the region. These sites are, in turn, examined within relevant existing models for pa, as well as Murihiku settlement and mobility theory, in order to answer the research problem.

At the most fundamental level, archaeologists identify pa as defensive fortifications, particularly identifiable in sites with ditches and banks (Best 1927; Hamel 2001; Walton 1999). Pa sites are perhaps, one of the most visible remnants of Maori settlement in New Zealand. In the North Island of New Zealand, over 6500 pa sites have been recorded (New Zealand Archaeological Association (NZAA) Site Recording Scheme) (see Figure 1.1). In Murihiku, there are far fewer pa recorded, conceivably less than ten sites (see Figure 1.1 - Brailsford 1981; Hamel 2001).



Figure 1.1: Pa sites recorded by the New Zealand Archaeological Site Recording Scheme (CINZAS May 2008).

While fortifications are identified throughout Polynesia, for example in Fiji and Samoa, the site type 'pa' is confined to New Zealand (Field 2008; Field and Lape 2010). Pa sites appear in the archaeological record from approximately A.D. 1500 to 1850 (Schmidt 1993, 1995, 1996), and are characterised by their defensive fortifications (Walton 1999). Pa sites are most easily recognised in the field by the often large earthworks, particularly by ditches and banks (Walton 1999). The high labour input into these sites, and the sheer number of these features present within the archaeological record, make them important places for investigation; particularly those related to settlement patterns, mobility and socio-economics.

The majority of previous studies on pa (e.g. Allen 1994; Buist 1964; Irwin 1985; Phillips 2000; Sutton *et al.* 2003) have primarily focused on study areas with higher densities of recorded pa sites. However, there are areas of both high and low concentrations in the spatial distribution of recorded pa sites in New Zealand. A distribution map of recorded pa sites (see Figure 1.1) in New Zealand illustrates that over 97 percent of these sites are located above the latitude 40 °05' S (see Figure 1.1 - Walton 2001:47). Fewer recorded pa sites are found south of this latitude (see Figure 1.1), which is particularly evident below Banks Peninsula and in Murihiku (see Figure 1.2).

Murihiku is the Maori term for the southern area of New Zealand, but has been used with differing northern boundaries (see Anderson 1998; Brailsford 1981; Brown 2010). In this research, a line extending west from Tumuka forms the northern boundary, while the southern coast of Stewart Island forms the southern boundary (see Figure 1.2). This area is in line with Brailsford's (1981) Murihiku region. It is also beyond the accepted limits of widespread prehistoric horticulture (Anderson 1998:72; Furey 2006; Leach 1976; Trotter and McCulloch 1999; Shortland 1851; Simmons 1969:6) and the last large cluster of pa sites on Banks Peninsula (see Figure 1.1).

In contrast with the studies cited above, this research focuses on Murihiku; a region with very few recorded pa. The only major study of pa sites in Murihiku was Brailsford's (1981) research over thirty years ago, in which the descriptions of many of the pa sites are brief. Previous studies of Murihiku have typically focused on the early prehistoric period, before pa appear in the area. Despite the limited scope of research, a number of theories have proposed reasons as to why few pa have been recorded in Murihiku, but none have been systematically reviewed. This research explores these gaps in the archaeological record using current theory on pa and the Murihiku region.



Figure 1.2: Murihiku including modern regions and cities.

## **1.2 Theoretical Perspective**

Pa sites catch the eye of the casual observer due to their built fortifications, and prominent locations in the landscape. For archaeologists, the cultural significance of pa and the additional labour required for the establishment and upkeep of these sites, represents an insight into the late prehistoric period of the New Zealand archaeological record.

While the function of pa sites has long been disputed by Europeans and archaeologists, most agree that these sites are both significant and complex; fulfilling settlement, symbolic, ceremonial, defensive and sometimes monumental purposes. The defensive and offensive role of pa in warfare was recognised by Europeans as early as 1769. Captain James Cook wrote that pa were retreats or strongholds, in disagreement with his interpreter, Tupaia, who

identified them as places of worship (in Beaglehole 1968:191). More recently, however, other non-defensive functions for pa, such as symbols of group identity and as places of display, have been discussed (e.g. Barber 1996; Sutton *et al.* 2003). As a site type, pa are variable in form and function. A cautious approach is therefore desirable because, as Groube (1964:210-211) first expressed, and Sutton *et al.* (2003:237) have summarised; the "form, function and meaning [of pa] will not always correlate in obvious ways and will not always change in unison".

Fortification implies defence against an external threat, real or imagined (Walton 2001). However, it cannot be assumed that the sole function of these fortifications was use in warfare. While defensive features would have created a physical barrier to attackers, this does not mean that pa were established or used solely for that purpose (Kennedy 1969). Furthermore, as Best (1927) proposed, there was more than one type of pa, and the specific meaning and use of a pa site must be considered in its own context. Kennedy (1969:116) used the term, 'pa' without the defensive connotation to refer to any site with earthworks, such as scarps, banks and ditches. Hamel (2001:62-65) distinguished between defendable sites and pa, which alludes to the first of many difficulties associated with identifying pa. This research uses the terms 'fortification' and 'defensive feature', but does not presume these to be associated only with warfare. Rather, these terms are associated with natural and structural features that enclose an area and reduce access.

The idea of pa as an enclosed site was recognised by Best (1927:18): "The word pa, as a verb, means 'to obstruct, to block up'; as a noun 'fortified place, stockade, barricade, screen.' Also it carried the sense of enclosure". Internationally, the term enclosure is used as a "generic term for any feature surrounding a site" (Parkinson and Duffy 2007:102). This is the theoretical starting point from which to identify and analyse pa in this research. Pa may be described as enclosed spaces, in that "when one speaks of enclosures in the prehistoric past, one is usually referring to a space, a piece of ground, surrounded by some feature that forms a barrier to movement" (Harding et al. 2006:ix). International literature stresses that archaeologists who study enclosures believe it is unlikely that any single site was established for only one function (Harding et al. 2006; Neustupny 2006:1; Parkinson 2007). Three things must be reviewed in relation to enclosures: the practical function (what is it used for?), the social meaning (what does it mean to people's social relations?) and the symbolic significance (what ideas are communicated?) (Neustupny 2006:1). Thus, an aim of this research is not to characterise pa sites in the Murihiku region as single function sites, but to recognise that they were multifunctional and need to be considered within their own context, as well as the wider cultural landscape.

### **1.3 Research Focus and Aims**

This thesis investigates the reasons why there are few recorded pa sites in Murihiku. This research is timely and important for two reasons. Firstly, new theoretical models for settlement in the southern areas of New Zealand have been developed since the last investigations of pa in the area were undertaken. Secondly, there has been little comprehensive investigation into pa sites and the late prehistoric period in the region.

The primary research question, in addition to three sub-questions, is:

1. Why are there so few recorded pa sites in Murihiku?

While there are currently fewer pa recorded in Murihiku than in other areas in New Zealand, the exact number of sites is unknown. Research on pa in Murihiku by Brailsford (1981) identified nine sites, while the NZAA Site Recording Scheme currently identifies fourteen for the same area. This variation may be the result of the 30 year time lapse, however, it highlights the need for the sample of pa sites in Murihiku to be assessed. In order to address the primary research question, this thesis establishes the current sample of pa sites in Murihiku.

The first sub-question asked for this research is:

1.1. Using a testable methodology, what is the current sample of pa sites in the Murihiku region?

The investigation uses a testable methodology by which pa can be identified. More specifically, the objectives of this investigation are to use archaeological/traditional/historical sources to identify what archaeological features/traditional knowledge have been used to identify a site as a 'pa'. Furthermore, it will determine if these attributes are consistently applicable to the identified sites. The investigation is not limited to late prehistoric sites. It also includes early historic sites as these pa were part of, and reflect, a changing cultural landscape. This allows discussion and comparisons between the periods, particularly of the major social and economic changes that occurred. The methodology is based on the archaeological and theoretical framework that a pa is an enclosure with defensive fortifications, most notably ditches and banks. This is important because there is currently no single system of pa identification in use. From an archaeological premise of pa having identifiable fortifications, sites are assessed against the current defining features of pa. This allows discussions on how pa are being identified, and what features distinguish a site as a pa.

Previous studies on pa have tended to focus on a regional level (e.g. Allen 1994;Buist 1964; Irwin 1985; Phillips 2000), as this research will do for Murihiku. While Brailsford's (1981) publication included the region of Murihiku, the descriptions of the pa sites were brief and hence, a more comprehensive study of pa in Murihiku could be achieved, particularly at a regional level. Furthermore, there have been a number of investigations that have produced new data that updates Brailsford's (1981) research. This thesis investigates pa sites in the Murihiku region in-depth and with recent additions to the literature.

Upon the establishment of the sample of pa sites in Murihiku, the nature of these sites must be examined, both individually and as a class of sites. Using the identified examples, this thesis examines what morphological attributes exist, or have been recorded at the identified sites, primarily through the literature and subsequently through field visits. The investigation of pa sites identified from archaeological, traditional and historical sources also precipitates discussion about the nature of the evidence. It also allows the impact of existing classification methods on current models of site identification and survey based archaeological research to be discussed, particularly in regards to the region of Murihiku.

The second sub-question asked is:

1.2. What is the nature of pa sites in Murihiku?

Research on Murihiku tends to focus on the early prehistoric period, more specifically, before 1500 and before pa were first established in New Zealand. This has resulted in an identifiable gap in the research for the late prehistoric period in Murihiku that studying pa will help address. Pa represent sites that appeared after approximately 1500 (Schmidt 1996) and hence, can be used as proxy markers to signify this time period, even if no absolute dates are known. This research will, therefore, contribute to this understudied period of Murihiku prehistory, as well as the early historic period.

Since the 1980s there have also been several significant theoretical developments in settlement pattern and mobility theory for the late prehistoric period in Murihiku that should be applied to the investigation of these sites. Most recently, Jacomb *et al.* (2010) introduced new models for the Foveaux Strait area to explain change over time, and settlement of that area. While Jacomb *et al.* (2010) proposed settlement models for the Foveaux Strait, they stated that more research was required to fully understand the late prehistoric and early historic sequence.

Using the above mentioned sample and contextual site information, an examination of the literature associated with proposed theories on the lower number of pa sites in Murihiku will be undertaken. Initially, the reasons why pa appear when and where they do will be examined.

This approach provides the opportunity for a critical review of proposed reasons for the decline in the number of recorded pa in the southern areas of New Zealand, many of which focus on the reason for pa further north, and are single-lined reasoning rather than contextually focused on the southern pa, themselves. However, these theories do allow for the placement of Murihiku pa sites as a group within the wider class of pa sites that appear throughout the entirety of New Zealand.

The third sub-question of this thesis is:

1.3. How do theoretical interpretations of pa compare with the archaeological evidence for pa in the Murihiku region and how does this evidence compare and contrast to the theories on why there are fewer recorded pa sites in Murihiku?

This research addresses the three sub-questions presented in this section: methodologically establishing the sample of pa sites in Murihiku, exploring the nature of pa in Murihiku, and investigating current theories on why there are fewer pa sites in Murihiku. In this way, the primary research question of why there are few recorded pa sites in Murihiku can be systematically addressed and answered.

# **1.4 Summary of Chapters**

As discussed above, this thesis will examine why there are few recorded pa sites in Murihiku by investigating three aspects; firstly, the sample of pa in Murihiku; secondly, the nature of these pa sites; and thirdly, an assessment of current theory on why there are fewer pa in the area.

Chapter Two reviews the region of Murihiku with a focus on the late prehistoric period, followed by a review of previous pa studies in the region. This chapter aims to outline the theoretical literature on Murihiku pa sites, as well as the proposed theories on why there are few recorded pa in Murihiku. Following this, a summary of the relevant settlement and mobility theory on Murihiku is presented.

Chapter Three discusses the known literature on the site type pa, specifically, with an aim of investigating how these sites are identified. It also outlines the attributes archaeologists use to recognise pa sites, presenting the framework by which sites identified as pa within Murihiku can be critically examined.

Chapter Four explains the methods used in this research to identify and critically assess sites identified as pa in Murihiku. While mostly limited to literature based searches, some sites were also visited by the author to assist in establishing the sample of pa sites in Murihiku.

Chapter Five critically examines and establishes the current sample of recorded pa sites in Murihiku. This is achieved through the critical evaluation of the individual sites identified as pa in the literature in Murihiku. Following this, there is a general discussion on the archaeological material present at Murihiku enclosures and pa, including known chronological information.

Chapter Six examines why there are so few archeologically visible pa compared to identified pa in the literature. To do this, the effectiveness of the methodological framework is evaluated. In this way, whether the few recorded pa sites in Murihiku is a sampling issue can be considered.

Chapter Seven is largely a theoretical discussion on why pa were established where and when they were in order to consider explanations for the fewer recorded pa in the southern portion of New Zealand.

Chapter Eight brings together the sub-questions and summarises the above chapters to outline and discuss the reasons for the fewer number of pa sites in Murihiku.

# **Chapter Two: Murihiku**

There are few fortified sites, i.e. pa, in the southern part of New Zealand. Kumara could not be grown south of Banks Peninsula, and there were consequently no kumara gardens or stores of kumaras to defend. The hunting and gathering life style of the southern Maori, involving regular movements, gave little incentive to build permanent houses or earthwork defenses [sic]. The known Otago pa... have only minor earthworks by comparison with the North Island pa.

(Hamel 1986:6).

#### 2.1 Introduction

This chapter examines the literature, and investigates what is currently known about why there are few recorded pa sites in Murihiku. Initially, a brief overview of the Murihiku archaeological record is outlined. This is an introduction to the region, which will aid in contextualising the place of pa sites in the late prehistoric and early historic period sequence. After this brief background section, previous research on pa in Murihiku and the associated theory on these sites is outlined and addressed. This information addresses the first and third sub-questions of this thesis. The first sub-question of this thesis addressing why there are fewer recorded pa in Murihiku, involves investigating the varying numbers of identified pa currently mentioned in the literature. The third sub-question of this thesis involves reviewing previous research with regard to the suggested reasons why fewer pa sites are recorded in Murihiku. While focusing on theories related to reasons for fewer pa provides a focal point for examination, a review of the wider settlement patterns and recent theory, particularly with a Murihiku focus, also warrants an investigation. This final point allows for discussion in following chapters on the specific and wider reasons for the fewer recorded pa sites in Murihiku compared to more northern areas of New Zealand.

### 2.2 Murihiku: A Brief Overview

# 2.2.1 The Prehistoric Period

The current general model for settlement in the south of New Zealand during the prehistoric period is resource focused. Murihiku is considered to have been outside the region of widespread prehistoric horticulture (Anderson 1998:72; Furey 2006; Leach 1976; Shortland 1851; Simmons 1969:6; Trotter and McCulloch 1999). Instead, Maori would have relied on a hunter/ gatherer subsistence strategy that shifted its focus from big game hunting, to fishing and fowling (Anderson 1988; Anderson and Smith 1996; Anderson *et al.*1996; Davidson 1984). Before 1500, villages, such as Shag River mouth (J43/2), were occupied for a number of decades and the surrounding area was targeted with a broad-spectrum subsistence strategy (Anderson and Smith 1996; Nagaoka 2002). This strategy focused on big game including moa (family *Dinornithidae*) and marine mammals, primarily seals (*Arctocephalus forsteri* - Anderson *et al.*1996; Davidson 1984; Holdaway and Jacomb 2000).

The most current literature on the early settlement patterns of the southern region propose a transient village model as the primary residential site type. A transient village refers to a short-lived sedentary settlement (Anderson and Smith 1996; Anderson *et al.*1996; Smith 1999; Walter *et al.* 2006). These villages were located in areas rich in meat resources and display all of the indicators of a sedentary population. Once the surrounding environment was depleted, perhaps within a few decades, the settlement would be relocated (Anderson and Smith 1996; Anderson *et al.*1996; Walter *et al.* 2006).

A rapid depletion of resources occurred soon after Murihiku's settlement, and by the midprehistoric period, moa species were extinct and sea mammal populations had declined (Anderson and Smith 1996; Davidson 1984; Holdaway and Jacomb 2000). Settlements between 1400 and 1600 represented smaller, more temporary arrangements, such as Kahukura (G47/128 - Brown 2010; Jacomb *et al.* 2010; Simmons 1969), and subsistence strategies shifted to focusing on the remaining resources (Anderson 1981a; 1983b; Walter *et al.* 2006). While there are few firmly dated sites between 1600 and 1800, subsistence patterns from late prehistoric occupation sites, such as Mapoutahi (I44/17) and Pukekura (J44/4), indicate a reliance on fishing, particularly barracouta, as well as fowling (Anderson 1981b:155, 1983a; 1988, 1997; Leach and Hamel 1978).

Following the decline of seal and moa populations, the southern Coast and south Otago were largely abandoned (Anderson *et al.* 1996; Hamel 1977a; Jacomb *et al.* 2010; Lockerbie 1959;

Simmons 1973). The current gap in identified sites in Southland and south Otago between approximately 1600 and 1800 has been used to support the model of a general decline and dispersal of people in the Murihiku area (Lockerbie 1959; Simmons 1973; Jacomb *et al.* 2010).

The material culture of the late prehistoric in Murihiku is consistent with the Classic Period (as opposed to the Archaic Period), lasting in the south from approximately 1650 to 1850 (Anderson 1982:112). Recent archaeological research suggests that material culture in Murihiku does not show a significant shift in style over the prehistoric period for either fishhooks or adzes (Brown 2010). However, the introduction of new ideas and materials late in the prehistoric period is thought to have included fortifications, weapons such as patu and mere, and certain nephrite ornaments, for example hei tiki, which are generally associated with the arrival of North Island immigrant groups, specifically, various hapu of Ngai Tahu (Anderson 1982a:123, 1983a:35; Duff 1956:11). During this period nephrite became an important exchange item throughout New Zealand, and was sourced from the West Coast of the South Island (Cable 2006).

There is some evidence that very late in the prehistoric period or early in the historic period, villages once again returned to the south supported by large social and exchange networks (Anderson and Smith 1996; Hamel *et al.* 2003:138). Early European records detailing the protohistoric period describe villages, which may have been part of settlement patterns similar to those of the late prehistoric period (Anderson 1980). It is suggested that exchange occurred throughout the southern region, encompassing most of the South Island, and that individuals would have moved throughout the whole of Murihiku (Anderson 1980).

Settlement patterns for the late prehistoric period in New Zealand have tended to revolve around base settlements, used particularly during winter, with mobility for seasonal resource procurement or social reasons (Anderson 1998; Davidson 1984: 166; Groube 1964; Phillips 2000: 167-8; Walter *et al.* 2006:281). Walter *et al.* (2006:281) propose Oruarangi (Furey 1996), Kohika (Irwin 2004) and Panau (Jacomb 2000) as examples of late period sedentary villages, with very similar characteristics to the earlier transient villages. Furthermore, these sites are 'remarkably consistent' with historic records of villages noted during the early contact period (Groube 1964; Walter *et al.* 2006:281). After reviewing the archaeological record, Walter *et al.* (2006) proposed that the transient village concept, with mobility by the occupants occurring for food procurement, existed in both the South and North Islands as the basic unit of settlement throughout the full prehistoric sequence. In regards to Murihiku, Water *et al.* (2006:281) noted "in southern New Zealand transient villages may have disappeared briefly with the depletion of big game... they had re-emerged by the contact period (Anderson and Smith 1996a)".

Ethnohistoric records indicate that social networks dictated subsistence availability, with individual people having access to different resources based on descent lines (Anderson 1980; Hamel *et al.* 2003:138). Coastal areas, excluding perhaps the west coast of Murihiku, were the focus of settlements, with the interior being used as a transit zone for hunting eels, catching birds and travelling to acquire lithic material, particularly nephrite (Anderson 1982b:125; Bathgate 1969; Leach 1969). Northern Murihiku was important for cabbage tree (ti / *Cordyline australis*), the east Otago coast was important for barracouta (*Thyrsites atun*), and southern Murihiku and offshore islands were used for hunting mutton birds (titi / *Puffinus griseus* - Anderson 1988, 1998; Anderson and Smith 1996; Hamel *et al.* 2003:138).

Ethnohistoric sources outline oral traditions explaining that Murihiku was settled throughout the prehistoric period by four waves of people: Te Rapuwai (date unknown), Waitaha (c. A.D. 1477), Ngati Mamoe (c. A.D. 1577) and finally Ngai Tahu (c. A.D. 1650 - Anderson 1998; Beattie 1954; Lockerbie 1959:87; Stack 1898:14). The arrival of these new people from the north is thought to have been a combination of battles, alliances and marriages at a hapu, rather than an iwi level (Anderson 1982a:123, 1998; Beattie 1954; Carrington *et al.* 2008; Leach, B. 1978; Leach, H. 1978b). However, the documentation of these traditions, for example those by Stack (1877), often only refer to iwi, as the complexity of the many hapu was deemed too intricate for the European audience (Anderson 1983a:4). There is also some questioning of the simplification of the iwi hierarchy, which has Ngai Tahu as the primary iwi in Murihiku when Europeans first arrived. Ballara explained:

Edward Shortland... reported to J.J. Symonds in 1844 that Ngāti Māmoe were the 'admitted proprietors' of the southern half of the South Island. Their territory stretched south from Taumutu, a place at the outlet of Waihora (Lake Ellesmere), not far south of modern Christchurch. In southern Canterbury and Southland Ngāti Māmoe were the 'first class claimants'. He recorded that other Maori then living on those lands had been invited to settle there by the chiefs of Ngāti Māmoe at the time when Te Rauparaha's attack on Kaiapoi led to a general move south (1998:71).

Ballara (1998:70-76) considered the sale of the Otago block in 1844 to Ngai Tahu rather than Ngati Mamoe as the result of placating Ngai Tahu for sales of their land further north. Through ignorance, simply not caring, or a lack of systematic inquiry, a progressively simpler hierarchy of tribes was created throughout the 19th century within which Ngati Mamoe were almost ignored altogether. The simplification of the situation is highlighted by the 1991 Waitangi Tribunal consideration of the southern Maori as a synthesis known as Ngai Tahu-Ngati Mamoe.

#### 2.2.2 The Early Historic Period

When Captain Cook first came to New Zealand, there had been no contact between Europeans and people or pa in eastern and southern Murihiku. When Cook passed south of the Otago Peninsula in February/ March 1770 he recorded no signs of people nor were there people sighted further south at the Catlins, other than possible evidence in the form of a large fire (Beaglehole 1968:258-260). Sealing occurred on the shores of Murihiku from 1793 and intensified in the first decades of the 1800s (McNab 1907:131-144). However, the first detailed written accounts of Murihiku were not recorded until the 1830s and 1840s, approximately 40 years after Europeans first arrived in the area, and after the first muskets were acquired by Maori in the region in 1825 (Anderson 1998; Church 2008; Crosby 1999:158-9).

During the early historic period there were continued attacks against northern Ngai Tahu hapu and others by Te Rauparaha. While these battles only made it as far south as Banks Peninsula, there was genuine concern that Te Rauparaha would continue into Murihiku proper (Anderson 1998; Brailsford 1981:232; Crosby 1999; Taylor 1952:163). The only direct attack came from a taua/ war party from Ngati Tama (led by Te Pūoho) in an attempt to invade Southland in 1836-7. As this was almost a surprise attack (Crosby 1999:315-321), there would be no expectations that fortifications would have been established for this specific event.

The introduction of potatoes by Europeans during the first decade of the 1800s allowed widespread and sustainable horticulture in Murihiku. Captain Cook planted a garden at Dusky Sound in 1777 but potatoes are not believed to have been grown (Anderson 1998:73-4). Although he did plant potatoes in Queen Charlotte Sound in the same year, the garden became overgrown and it is assumed to have been unused. Therefore, it is likely that potatoes were not introduced into Murihiku from the north as Simmons (1967a:55-56) believed, but were directly introduced by sealers in Foveaux Strait in the early 1800s. Sealers grew potatoes on Solander Island in 1808 and on Stewart Island by 1809, so this is the likely source and time period of the first horticulture in Murihiku (Anderson 1998:73-4). Records from the *Snapper*'s visit to Foveaux Strait in 1822-1823 reported Maori in the Bluff area growing over 100 acres of potatoes (McNab 1907:146).

#### 2.2.3 Models of Change in Foveaux Strait

Recently, new research has examined the southernmost portion of Murihiku, Foveaux Strait. The Southland Coastal Heritage Inventory Project (SCHIP) included an archaeological survey of the coastal strip between Waiparau Head and Rowallan Burn (Jacomb *et al.* 2010). Drawing on NZAA Site Records and survey, the SCHIP created an inventory of 431 archaeological sites, including 154 sites that were not re-located in the field and 109 previously unrecorded sites. Jacomb *et al.* (2010) focused on the 350 recorded prehistoric sites in order to evaluate the known record for the Foveaux Strait region. After consideration of the outcomes of the SCHIP and the current literature Jacomb *et al.* (2010) proposed three alternative models of occupation for the Foveaux Strait area: the Economic Change Model, the Meat and Potatoes Model and the Resource Network Model.

Model 1 - Economic Change Model

This model states that the sequence of Foveaux Strait "can be understood in terms of internal processes of ecological change and socio-economic response" (Jacomb *et al.* 2010:49). Early settlement was permanent in larger settlements, supported by "big meat packages" particularly seals (Jacomb *et al.* 2010:49-50). By the 15th century, a diminished population adopted a seasonal settlement pattern with higher mobility in response to a decrease in easily won resources. Subsistence relied upon year-round resources, including fish and shellfish, complimented by seasonal resources, such as marine birds. This continued until the arrival of Europeans in the late 18th century, when trade and the introduction of agriculture encouraged people to permanently occupy settlements again (Jacomb *et al.* 2010:50).

Model 2 - Meat and Potatoes Model

Like Model 1, the motivation for settlement in Model 2 was economically driven. However, in Model 2 Jacomb *et al.* (2010) theorises that Foveaux Strait was only permanently occupied during the very beginning and the very end (or very early and very late periods) of the sequence. In the interim period the area was sparsely occupied. The difficult conditions of the

area were only endured when economic returns made permanent occupation viable, such as big game in the early period and European trade and agriculture late in the period.

Model 3 - Resource Network Model

Model 3 differs from Model 1 and 2 in that the settlement of Foveaux Strait was "driven by processes and events occurring outside the region" as the area was "economically and demographically linked to wider resource networks" (Jacomb *et al.* 2010:51). Early in the sequence, when moa were supporting base settlements such as the Shag River mouth site (J43/2), the low density of moa and difficult conditions prevented viable settlement south of the Catlins Coast. Settlement on the southern coast during this period by people from Otago was intermittent and for short periods of time. Jacomb *et al.* (2010) suggest the argillite source as the main attraction and pull factor to the region, in addition to other subsistence resources. The decline of moa in the early 15th century is regarded as the trigger for the abandonment of the large permanent or semi-permanent sites on both the Catlins Coast and in Otago (Anderson and Smith 1996; Hamel 1977a). With the breakup of these populations, visits to the Foveaux Strait area occurred infrequently or not at all. People only returned to the region, and for the first time established permanent settlement, in the early historic period. In Model 3 this was prompted by the arrival of Europeans, and more northern tribal politics.

All three models suggest a bipolar settlement pattern in the southern areas of Murihiku with higher levels of occupation before the 16th century and also in the early historic period. Between the 16th century and the early historic period, Model 1 outlines a low, highly mobile population, while Models 2 and 3 propose either very sparse occupation or complete abandonment of the Foveaux Strait area. The trigger for the decrease of population in Models 1 and 2 was a local resource crisis, while in Model 3 a wider resource network crisis occurred further north in Otago. Jacomb *et al.* (2010) use the archaeological evidence from SCHIP to lend support to the third model, although they call for further research. Archaeological evidence from the late prehistoric period in the Murihiku region is currently sparse.

The above short review of the history of Murihiku indicates the centrality of subsistence in current theories about settlement patterns, from big game in the early prehistoric period, through the subsequent loss of these resources, and the eventual introduction of European cultigens. The interim period is one that has undergone less research, and it is during this period that pa were established. The proposed reasons for the fewer recorded pa sites will be explored in the following section.

## 2.3 Theoretical Perspectives on Pa in Murihiku

The majority of archaeological research on pa has been undertaken in the northern areas of New Zealand, while southern research has tended towards the early prehistoric period. The focus of archaeological research in southern areas of New Zealand has been on large early prehistoric sites, particularly sites with abundant moa remains. There are also issues with the radiocarbon dating of later prehistoric sites and this results in few late sites being classified as such. The flattening calibration curve during the late prehistoric period means that there are issues in obtaining shorter date ranges for archaeological sites (Anderson 1998:7). For this reason, as well as the difficulties of tying-together oral traditions and archaeological information, Anderson (1998:7) wrote about the traditions of the South Island without correlating archaeological evidence. Due to problems with radiocarbon dating late prehistoric sites in Murihiku, most of the dates for pa come from estimations based on oral traditions, and the people associated with those sites (Anderson 1998; Brailsford 1981).

Theoretical reviews of pa in Murihiku can be found in Brailsford (1981), Anderson (1998) and Hamel (2001). Using archaeological evidence and oral traditions Brailsford (1981) described sites he identified as pa in the South Island of New Zealand in the course of the Southern Earthworks Project. Anderson (1998) synthesised the oral traditions of the South Island, and Hamel (2001) identified pa in a review of the prehistoric and historic archaeology of Otago. All three publications define pa in a similar way, as "fortified", be they strongholds (Brailsford 1981:4,9), settlements (Anderson 1998:8), or sites (Hamel 2001:62). The second of these would advocate some level of occupancy. The only one of these three publications that discusses the definition of the site type pa in any detail is Hamel's (2001) *The Archaeology of Otago*.

Hamel (2001:62-5) distinguishes between sites that are pa ('fortified sites') and sites that could be naturally defended from her study region, Otago. The difference between a fortified site and a defendable site is that the former had built fortifications (ditches and banks) and the latter is located in a naturally defendable area. Whether this makes the site functionally different is not discussed, nor is the fact that often fortified sites are also defendable sites, although as a summary text of archaeology in Otago, this publication was not the appropriate arena for these discussions.

## 2.4 The Role of Pa in Murihiku

Much of the wider literature on pa that considers Murihiku investigates why the decline in the number of pa sites occurs the further south one travels (Anderson 1982a, 1983a; Duff 1942, 1947, 1956; Vayda 1960; Walton 2001). While it may be that the full sample of pa sites has not yet been established, it is unlikely there are hundreds of undiscovered sites, therefore, other factors also need to be considered. The lower number of recorded pa sites in Murihiku may reflect a lower population, or that there were fewer systemic reasons for establishing and occupying these sites, for example greater mobility or a different type of warfare. The reasons for the establishment of a pa must have been such that the additional labour input was considered to be warranted, indicating that place may have held some importance. Hence, the reasons for the establishment of these sites requires investigation.

Pa are thought to have had only minor, or simple, earthworks compared to pa in the North Island (Anderson 1983a:34; Hamel 1986:6; Vayda 1960:10-2; Walton 2001:47). The main built defensive feature of southern pa is considered to have been palisading (Anderson 1983a:34; Vayda 1960:10-2). The following sections will explore the current literature on Murihiku pa sites. New Zealand-wide literature typically focuses on why pa were not required in Murihiku, and the perceived lower prehistoric productivity of southern New Zealand. Contextual studies tend to explore other, non-military reasons for the establishment and use of Murihiku pa sites.

## 2.4.1 The Chronology of Pa in Murihiku

The standard view by archaeologists is that the pa were developed in the north and the concept moved south with the arrival of the classical assemblage (Anderson 1982a, 1983a). Duff (1942, 1947, 1956:11) viewed pa as material culture and argued that they were brought south with the classic assemblages from northern New Zealand by Ngai Tahu, late in the prehistoric sequence. Simmons (1969:13) argued that this movement of classic culture and European influence triggered the establishment of pa in Murihiku. This idea of European influence suggests pa were only recently introduced into Murihiku. Bellwood (1978:1) took this one step

further by arguing "there appear to be no fully prehistoric fortifications" in Murihiku. A shorter chronology for the establishment of pa could have resulted in fewer pa being established in comparison to the rest of New Zealand. The timing for the arrival of pa, prehistoric or protohistoric, in Murihiku is therefore an important consideration.

Pa in Murihiku are thought to have been mainly defended using natural features and palisades. Anderson (1983b:34) has briefly raised and discussed the appearance of the palisade in Murihiku. He noted that it is problematic to identify when palisades first arrived in the south, as they are features identified during excavations. Excavations usually do not focus on the borders of sites, and prior to the 1950s, features in general were often overlooked (as illustrated by the overlooking of postholes interpreted as houses). Anderson (1983b:34) concluded that palisades probably emerged around 1550, however, two sites, Shag River Mouth and Pounawea, present small clues which Anderson suggests may indicate posts on the border of a site.

### 2.4.2 Population and Murihiku Pa Sites: A Numbers Game

The reason there are fewer pa in Murihiku compared to other areas of New Zealand may be due to a lower population density. Groube (1970) calculated that two percent of the population would have been required to have been building pa at all times in order to establish the number of recorded pa in New Zealand. Walton (2001:53) has stated, since Groube's publication, that there were more pa established in New Zealand with a lower population than originally thought. If there were fewer people in an area, a smaller number of workers would have been available at all times to construct pa. It is thought that there were fewer people in Murihiku in the prehistoric period than in other parts of New Zealand (Sutton and Marshall 1980), which may account for the lower number of pa sites.

A reliable population estimate for the south during the prehistoric period has not been made due to disease and warfare in the early historic period, and the mobility of people when Europeans took early censuses (Anderson 1998:190-3). While there was a general decrease in the number of Maori in Murihiku during the historic period, due to the loss of southern Maori in warfare further north and decimation of the population by European diseases (Anderson 1998:190-3; Williams 2010:158), there was also an increase in people moving into the area as refugees from the warfare on Banks Peninsula and further north (Wanhalla 2004:83).

In general, during the prehistoric period, it is thought that there was a lower population of Maori in the southern areas of New Zealand than more northern areas (Sutton and Marshall 1980). In 1800 it is thought that the population did not exceed 3000 to 4000 people for the whole of the South Island (Waitangi Tribunal 1991:182-84). It is generally thought that the lower population in the southern portion of New Zealand was due to the harsh environment (Golson 1957:45; McGlone *et al.* 1994:156), the inability for sustainable horticulture and perhaps increased mortality from the colder climate (McGlone *et al.* 1994:156).

Large areas of Murihiku are thought to have been sparsely inhabited or uninhabited during the late prehistoric period:

*The Catlins*: believed to have few sites post 1500, and thought to have been completely abandoned between 1700 and 1750 (Hamel 1982).

Southern coast of the South Island: Jacomb et al.'s (2010) second and third models suggest that during the late prehistoric period, the southern coast of the South Island was inhabited only sparsely or not at all, and people were re-attracted to the area when trading Europeans arrived.

*The West Coast*: thought to have been only infrequently visited for foraging throughout the prehistoric period. There does not appear to have been permanent prehistoric settlement however, more work is required in this area (Coutts 1982).

*Inland areas of Murihiku*: While ethnohistoric traditions suggest that villages existed in the interior, these are not represented in the known archaeological record. While it has been thought that control of nephrite sources may have been important (MacKay 1873:41,44; Shortland 1851:99), it is now argued that the interior was a transit area visited for food expeditions (eeling and birding) and acquiring nephrite (Anderson 1982b; Bathgate 1969; Leach 1969). However, Anderson (1982b:59) argued that if sites were found in this area and they were fortified, then it may have been only in a rudimentary way.

It could be proposed that the reason there are fewer pa sites in Murihiku is simply that there are fewer sites in Murihiku in general. Currently, roughly ten percent of recorded archaeological sites in New Zealand are identified as pa (estimated from CINZAS, May 2008). This same data set suggests there are just fewer than 6000 NZAA Site Records for the Murihiku area. This would require that there be roughly 60 pa in the area to meet the national average.

The increased mobility of the prehistoric people of Murihiku, enforced by a hunter/ gather lifestyle, may have resulted in fewer incentives to build more than rudimentary pa (Hamel 1986:6). As no horticulture existed in Murihiku, there were neither gardens to tend nor stores of kumara to defend (Anderson 1983b:34). This view has been held by both northern investigators of pa (Mihaljevic 1973:178-9; Walton 2001), as well as more southern focused investigators (Hamel 1986:6). The protection of horticultural assets is seen to be the purpose of many northern pa and hence, the establishment of pa sites in Murihiku must have resulted from other systemic reasons. However, while the people are seen to have been highly mobile, it is believed that villages may have existed in late prehistoric Murihiku and the existence of pa at all warrants further investigation (Anderson 1998; Anderson and Smith 1996; Walton 2006).

#### Resource Motivated Warfare

The distribution of pa sites in New Zealand has been linked with an association between pa and areas of rich, and desired resources (Allen 1994, 2006; Anderson and McGlone 1992; Bellwood 1978:1; Davidson 1984, 1987, 2001; Duff 1967; Kirch 2000; Leatherwick 2000; McGlone 1983; McGlone *et al.* 1994; Vayda 1960; Walton 2001). Some archaeologists point to pressure on resources as the population increased as the trigger for conflict in the late prehistoric period (Sullivan 1985). Land suitable for horticulture has been highlighted by archaeologists as a primary cause of resource tensions (Allen 1994; Buist 1964; Duff 1967). While kumara is the primary resource noted (Sutton *et al.* 2003:9), it is not the only resource that needs to be taken into consideration (Leatherwick 2000; McGlone *et al.* 1994:152-154; Walton 2001:55).

Conventionally, the southern areas of New Zealand are considered to have been ecologically and economically marginal in the late prehistoric period compared to that of the horticultural north (Golson 1957:45-6; Leatherwick 2000; Lewthwaite 1949:93; Walton 2001). This school of thought permeates the theoretical discussion of southern pa function, as illustrated by Walton's comment:

The different pattern of warfare in the South Island, with its significantly fewer pa, may be a reflection of the relative weakness of economic base of southern communities compared with the northern. The question is could so much effort be devoted to warfare and preparations for war without a productive economic base? (2001:55)

It may have been that there were more tensions over resources despite a lower population, as the resource threshold was lower in a non-horticultural area. An area that is generally marginal may in fact increase the stakes to have control over important resources. Barracouta (*Thyrsites atun*) are suggested to have been the resource over which tensions arose (Anderson 1981b:156, 1983b:42, 1998:137).

The southern waters of New Zealand had primary production of up to five times greater than those further north. The most important economically valuable fish were barracouta, which, although available all year round, school near the coast from November until April (Anderson 1981b, 1988). Barracouta accounts for over half the sample of fish recovered from middens in the Murihiku area: Anderson (1997) suggested about 62 percent, while Leach and Boocock (1994) suggested 55 percent. Other prominent fish species include red cod (*Pseudophycis bachus*) and hapuku (*Polyprion oxygeneios*), which have similar seasonal patterns to barracouta. However, the prevailing south westerly winds on the southern coast of the South Island, and scarcity of canoe launching places in Southland and Canterbury made accessing these resources more difficult. The Otago coast is therefore considered to have been the most suitable place to access these resources, due to its leeward shore and numerous harbours (Anderson 1981b, 1983a, 1988). This is reflected in the fish bone assemblages from the region (see Table 2.1).

Pa sites in Murihiku, specifically those on the east coast of Otago and around Otago Harbour, are argued to have been look out points for schools of barracouta (Anderson 1998:137; Hamel 2005:8). Prehistorically, and into the historic period, large schools of barracouta were taken off the coast of Otago (Anderson 1983b:42). The pa located in this area tend to be situated on peninsulas and therefore make good lookout points, as well as serving as sheltered harbours in times of bad weather (Anderson 1981b:156, 1983b:42, 1998:137).

While it has been suggested that an increase in barracouta fishing was the reason for the shift of sites onto headlands in the late prehistoric period (Anderson 1981b; Leach and Hamel 1978), the figures do not really support an increase in barracouta targeted fishing. While there is a small increase in the percentage of barracouta in middens, on average it is by only two percent. Traditional methods of drying included removing the head, so even trade would not affect these MNI counts (Anderson 1981b). This would suggest other reasons for the locating of sites on headlands in the late prehistoric period on the east Otago coast also need to be considered.

There are also other factors that must be considered for a model of barracouta fishing being the reason for the establishment of pa on headlands. For example, why are places enclosed at all if they are acting solely as lookout points?

While fish were an important resource, they were balanced with other protein resources such as marine animals and birds in the southern areas of New Zealand (sites included are located at or south of the Shag River site) compared to central and northern areas. This would have also decreased the reliance on fish compared to more northern populations (Smith 2004).

Area	Time Period (where applicable)	Mean Per Cent of
		barracouta
		remains found in
		New Zealand
		middens
Northern North Island		4.80
Southern North Island		4.30
North coast, South Island		38.50
East coast, South Island	Archaic	66.30
East coast, South Island	Classic	67.80
	Taiaroa Head (Pukekura)	40.00
	Huriawa Peninsula (Pa a Te Wera)	80.00
South coast, South Island		34.00
West coast, South Island		6.00
New Zealand Total (from 65		32.50
assemblages)		

Table 2.1: Mean Percentage of New Zealand Middens Identified as Barracouta (data from Anderson 1981b:155, 1997:19; Leach and Hamel 1978)

Although barracouta appear to be a pull to the area in the late prehistoric period, midden studies illustrate that this fish was also an important resource in early times. Therefore, the shift in site locations from bays in the early period to headlands in the late period may not only be linked to the increased importance of barracouta. If this shift from primarily river and bay sites to the use of headlands was not the result of increased focus on barracouta, it may have been a social response. It is possible that population pressure occurred, or that headland pa were a socio-political enterprise.

#### Non Resource Motivated Warfare

While resources are argued to have been a primary motivation for warfare in the prehistoric period, there is some critique of this. For example, ethnohistoric traditions outline that raids were a component of prehistoric warfare in which the attackers did not necessarily want to occupy the land they raided (Vayda 1960). With limited transport to carry raided goods, warfare for material gain may not have been the sole motivation for warfare (Lilburn 1985). Therefore, other motivations for warfare also need to be considered.

Warfare in prehistoric Murihiku is thought to represent battles between small, kin based parties (Anderson 1980, 1988, 1998; Anderson and Smith 1996). Taua were, at the most, on the hapu level and were usually motivated by family quarrels and revenge (Anderson 1982a:123, 1998; Leach 1978; Orchiston 1979). It has been suggested that the way Maori in southern New Zealand fought was different to the north, with more one-on-one fighting, raids and retreats to the hills or bush (Anderson 1983b:34; Orchiston 1979; Walton 2001). This is interpreted as having resulted in fewer pa being established and pa being simpler in morphology, for example with just a palisade (Mihaljevic 1973:178-9; Vayda 1960:10-12).

The inland areas of Murihiku have been proposed as places of retreat, therefore pa were not required (Anderson 1982b:74-74, 1983b:34). The ethnohistoric records have been used to support this theory, as groups fled, usually south (Anderson 1998). However, while there do appear to have been retreats and mobile raiding, they do not explain the pa sites that do exist.

There is contention amongst archaeologists as to the effect of social pressures on the establishment of pa. One faction argues that the establishment of pa was purely based on resource driven conflict (Duff 1967; Green 1975), while the other suggests a shift in the social structure, due to various triggers, as well as resource pressure increasing warfare in the late prehistoric. Some archaeologists suggest this shift was an increase in social complexity with the emergence of individual leaders and the resulting control of their groups (Allen 1994, 2006; Earle 1997). Others point to increased consolidation of the community, specifically the hapu, rather than the work of individuals (Irwin 1985; Marshall 1987, 2004; Phillips and Campbell 2004; Walter *et al.* 2006). Aside from the debate regarding which social sector pa may represent, the motivation for warfare was likely influenced by social triggers such as mana, territory disputes, and revenge (Allen 2006; Buck 1949; Vayda 1960; Walton 2001:48).
#### 2.4.4 The Role of Pa Beyond Warfare

There is no agreement as to whether Murihiku pa were places of occupation or simply refuges in times of danger. Vayda (1960:10-12) suggested that while pa in northern New Zealand may have been used as villages, those further south may have acted more as refuges. Orchiston (1979) created a method to determine whether a pa was a citadel or occupied settlement (see Figure 2.1). He concluded that pa located on the northern half of the east coast of the South Island, established by Ngati Mamoe and Ngai Tahu, were specialist activity sites and their living areas were usually adjacent to these pa sites. This region is ethnohistorically tied to Murihiku by related people and therefore, could suggest contact and sharing of ideas including pa, which are believed to have been introduced into Murihiku via this northern coast, creating a potential similarity in use of these sites.

Mihaljevic (1973:178-179) suggested that South Island pa may have been non-defensive in nature and may have been viewed as temples. The reasoning behind, or reason for this is that warfare may not have existed in the south because of the low population. Furthermore, the small scale nature of the pa in Murihiku was the result of a smaller population having fewer resources, time and effort to construct them. The main problem with this theory is that there is some tangible evidence of warfare in Murihiku as well as many ethnohistoric traditions (Anderson 1998). However, it is thought that war was not a constant state in Murihiku. Anderson (1983b:42) suggested that if the traditions recount all of the incidences of warfare then there would have been years or decades between major events.

The physical barriers and protection afforded, as well as the symbolic nature of deterrence leverage, should be considered when investigating pa in Murihiku. "Fortifications are most symbolically useful when they are militarily functional... [but] Because fortifications usually surround sites with many other functions and because they are so useful as symbols, their features often incorporate elements that either exceed or, to some degree, undercut military necessity" (Keeley *et al.* 2007:81-82). Furthermore, "Widespread paa building may also be correlated with the socio-political development of the ancestral landscape and, eventually, the formation of new founding traditions and descent associations" (Barber 1996:877; also see Sissons 1988). The movement of new people into the region and the symbolic impact this had on the inhabitants already in the area, as well as the tying of the new people to place, should not be underestimated in the establishment of new pa sites in Murihiku.

New Zealand *pa* were habitation sites within which the "everyday activities of living" occurred, then they should contain:

- (i) abundant faunal (and perhaps floral) remains, representing a variety of microenvironmental exploitation strategies;
- (ii) a full spectrum of artifact forms, including stone flake implements, adzes/chisels/gouges, fishing gear (if a coastal site), abraders, pounding implements, spearpoints (if forest resources were available), and ornaments;
- (iii) evidence of workshop activities (involving the manufacture, or, at very least, the maintenance of artifacts used in the quest for and preparation of food); and
- (iv) evidence of continuous occupation (even if the population was fluctuating seasonally).

In contrast, *pa* that served simply as specialist-activity sites could be expected to show

- (i) a drastically-reduced even impoverished floral/faunal range (representing stockpiled foods mainly — particularly fish and fernroot), given the same environmental conditions;
- (ii) an impoverished artifactual assemblage with major emphasis on food-preparation implements and broken non-perishable weapons of war;
- (iii) comparatively few signs of workshop activity, and where these do occur the diagnostic artifacts are those that would have been employed in the fashioning or maintenance of implements of war; and
- (iv) evidence of a comparatively short-lived interval (or intervals) of occupation, and, if re-occupation, signs that some renovations were carried out on structures (as is clearly documented at Motuara Pa, Queen Charlotte Sound, during the 1770's — Anderson, 1776-7:800).

These are the sorts of propositions that can be tested by excavation.

Figure 2.1: Orchiston's method for determining occupation of pa sites (Orchiston 1979)

If pa sites in Murihiku were established for social motivations they need to be viewed as enclosures in the full sense: that they were also established with social meaning and symbolic significance (Neustupny 2006:1). Unlike the general model of upward channelling of tribute represented by monumental buildings, pa are seen by many archaeologists as representing community and shared purpose (Phillips and Campbell 2004; Walter *et al.* 2006). However, others, such as Allen (2006) suggest pa represent leaders or chiefs. Either way, pa are open to the paradigm of international literature on enclosures but should be viewed from this sense of community. Likewise, Murihiku pa are also open to these theories and should be studied as such.

# **2.5 Conclusions**

In this chapter a review of the literature on the prehistoric and early historic periods in Murihiku outlined evidence for the population mobility and some permanent settlements. The late prehistoric period in Murihiku was characterised by subsistence focusing on fishing and fowling. It is thought that the population was very mobile but that, late in the prehistoric period, transient villages may have once again been established. This late prehistoric period was the focus of the rest of the chapter.

This chapter also summarised and examined the literature about pa as a site type in Murihiku. This portion of the chapter explored the proposed reasons from previous research as to the reasons there are fewer identified pa the further south one goes in New Zealand. A review of how pa are identified and the site type defined illustrates the need for a firm definition and identification methodology for recognising pa, particularly in the field. This will be addressed in the following chapter with a New Zealand-wide focus.

On the whole, pa in Murihiku are generally viewed as fewer and simpler than more northern pa. Proposed reasons for this tend to fall into three categories. The first argues that a sparse or absent population resulted in fewer pa. The second more popular argument is that pa and warfare are linked, and that with a reduction of, or a different type of warfare pa were less necessary. Like the rest of New Zealand, the reason for prehistoric warfare in Murihiku is a contentious topic, but economic reasons are the primary candidates, particularly barracouta on the east Otago coast. The third suggestion is that pa in Murihiku may not have been established as fortifications, but represent temples. While some of these theories can be critiqued at this point, they are discussed in the later chapters of this thesis within the context of the individual pa sites of Murihiku.

# **Chapter Three: The Site Type Pa**

"One of the greatest problems of New Zealand archaeology is to find an acceptable difinition [sic] of the paa."

(Mihaljevic 1973:139)

# **3.1 Introduction**

Archaeologists define pa as a defensive fortification, the archetypical pa being a site with a defensive ditch and bank. These sites are enclosures, and it is these enclosing features that set them apart from other sites. In order to establish the current sample of pa sites in Murihiku, a methodology by which to identify and critique sites is required. This chapter outlines and examines how archaeologists currently identify the site type 'pa'. The chapter also addresses the gap in the literature regarding the definition of pa. The focus of this chapter therefore is on how archaeologists define and identify the archaeological site known as a pa, with the aims of identifying tools that systematically recognise pa in the field, and establishing the sample of pa in Murihiku. The methodology outlined is in essence a summary of the literature on pa throughout New Zealand, and aims to systemise how identification is currently carried out. This is required because, as established in the previous chapter, pa in Murihiku are thought to be 'rudimentary' or marginal examples of the site type, with fewer easily distinguishable features such as large ditches and banks.

Defining the site type pa requires a working definition of an archaeological site, an exploration of the word itself, an examination of the current definition of the site type 'pa' and finally, a critical analysis of the attributes used by archaeologists to identify pa in the field. The final section of this chapter, provides a brief overview of the various suggestions of the function of pa and is presented in order to establish a background for interpreting Murihiku pa sites.

# 3.2 Pa as an Archaeological Site

To define the site type 'pa', the definition of an archaeological site must be addressed. This section will review the international and New Zealand literature on the concept of an archaeological site in the context of the site type 'pa'. This will provide a better understanding of how pa are defined and identified (see Doherty 1996 for an in depth analysis of the site debate in New Zealand). The notion of "site" is often assumed to be intrinsic in archaeology, yet archaeologists find it a difficult term to define. Orton (2000:67) commented that, when asked to define the concept of the site, archaeologists often reply: "I can't define it precisely, but I know one when I see one". The archaeological site is seen as a discrete and continuous spread of artefacts, although how many, and where to place a border generates difficulty in defining the concept of site (Orton 2000).

# 3.2.1 The Concept of Site Internationally

Internationally, archaeologists have questioned the notion of site and asked: is the concept of site real or is it a notional entity that is more of a reflection of the discipline of archaeology than it is of the past? Beginning in the 1960s, processual archaeology introduced systemic paradigms, in which archaeologists wanted to investigate methods designed to know the past and the systems that influenced it. This included the use of site as a unit for understanding organisation in the past and how a place was significant to the people that used it (Binford 1992; Rossignol and Wandsnider 1992). However, the difficulties of empirically defining site have led to debate among scholars as to whether site is an appropriate unit (Dunnell and Dancey 1983; Lewarch and O'Brien 1981). To this end, Dunnell (1992) rejected the concept of site as an archaeological construction (also Dunnell and Darcey 1983; Gallant 1986). Furthermore, while areas identified as sites may be of great interest to archaeologists, their meaning to the people who created and used them may differ (Galaty 2005). Thus, the landscape approach was developed in an attempt to move away from the use of the concept of "site".

The landscape approach to archaeology questions the use of the site concept and introduces the idea of a 'siteless' approach (Galaty 2005). The landscape approach was supported by both Binford (1992) and Dunnell (1992), despite their disagreement over the concept of site, due to the flexibility it allows for spatial scales (Rossignol and Wandsnider 1992). In its purest form of the landscape approach, the site concept is made obsolete. The entire landscape is simply

seen as varying densities of artefacts, and no judgements are made to presume one place is more important than another (Bintliff and Snodgrass 1988; Dunnell 1992; Dunnell and Dacey 1983; Kowalewski 2008; Wandsnider and Camilli 1992). However, strict application of density based boundaries to landscapes may result in missing significant features (Gallant 1986).

Other archaeologists still use the site concept as an applied, rather than presumed, concept and incorporate it into the landscape along with areas identified as 'off site areas' (Galaty 2005). While sometimes it may seem easy to distinguish a site, for example a walled building, this may not take into account the time and spatial realities of the past (Dewar and McBride 1992; Dunnell 1992; Dunnell and Dancey 1983; Kantner 2008). From the perspective of the researcher, the site concept makes the study of settlements much more straightforward; as it allows sets of data to be grouped (Galaty 2005).

The pa site is relatively restricted, due to its enclosing features, and, therefore, is a good candidate for using the site approach. Although critiques of the concept of site need to be considered, such as temporal and spatial factors, for the purpose of this research, the pa is viewed as a site within the context of a landscape.

#### 3.2.2 The Concept of Site in New Zealand

The concept of site has been defined in New Zealand as "any specific locality at which there is physical evidence for human occupation in the past that is, or may be able to be, investigated by archaeological techniques" (Walton 1999:3). However, Doherty critiqued New Zealand archaeologists in relation to their definition of site:

One gets the impression that most researchers think it is superfluous to even state it...Rather the process is in most cases regarded as so unequivocal that the criteria used for determining sites do not even need to be specified. It is also generally accepted that an appropriate degree of separation is to be judged in the field, and can be mediated by expediency or psychic powers (1996:15).

Doherty (1996) also noted that archaeologists tend to focus on the physical elements of sites that are testable with archaeological methods.

In New Zealand, focusing on physical remains to identify an archaeological site has been criticised, as the focus is on recoverable material and information rather than sites that may be

significant to iwi (Allen 1998). Allen (1998) criticised the defining of sites based on physical evidence; he claims that it ignores important areas, such as wahi tapu, which can be identified using only oral traditions and written accounts. The definition of an archaeological site in the legislation (Historic Places Act 1993) is a continuation from the site approach popular in the 1970s; it has not changed with the development of the siteless approach, nor does it recognise important areas without physical evidence (Allen 1998). Other countries have begun to recognise areas of significance without known physical evidence, for example the Australian Acts on heritage; the *Environment, Protection and Biodiversity Conservation Act 1999* and the *Aboriginal Heritage Act 1972*. It may, therefore, be worth considering places identified as pa that contain no known or visible archaeological evidence. These places may hold significance to local iwi and should be considered within the wider archaeological landscape.

Pa are recognised by site recorders as archaeological sites, and they are recorded using the basic units of 'features' and the 'site' (Walton 1999:3). To fully understand archaeological sites, site recorders need to look at features (cultural structures - elements of human activities) and 'environmental space' (a unit of non-human attributes - Walton 1999:11-13). Walton (1999:11-13) defines 'environmental space' to be the interaction between, for example, features and resource zones. Features are identified by the site recorder, and then grouped together to form an archaeological site using a site boundary. One could argue, in a wider interpretation of this and in relation to pa, environmental space could also include the use of the environment for cultural purposes. An example of this would be the incorporation of a cliff into a strategically defensive site.

The positioning of site boundaries can create problems when researchers are trying to analyse pa at the national scale. Walton (2006:177) analysed the size of pa in New Zealand and asked, "if there is no clear perimeter in places, what areas are included as integral to the site and what are not?" When defining the site boundaries, Walton (1999:40-1) suggested first 'lumping' features together and then splitting features into sites when the features are more than 40 meters apart; this being the measure most people use to distinguish sites (Doherty 1996). However, alternative dimensions are also used, for instance Phillips (1987) divided sites by 100 meters, while England (1993) divided sites by 50 meters. This thesis will, in the first instance, use the site boundaries as proposed by site recorders

## 3.3 The Definition of the Site Type 'Pa'

The way pa are identified and recorded may have influenced the number of pa sites recognised in Murihiku. The definition of pa must be examined in order to ascertain if pa sites are being identified in the same way in Murihiku as they are in the rest of New Zealand.

#### 3.3.1 The Term Pa

The Maori language and early European writers advise that the word pa has numerous meanings. Best (1927:17-18) listed the 'types' of pa that he understood to have existed prehistorically (see Figure 3.1). Accordingly, pa reflects more of a collection of fortification types. These are also acknowledged by archaeologists, for example, Ruahihi pa (U14/38), located near cultivation grounds may represent a weak first line of defence rather than a standalone fortification (McFadgen and Sheppard 1984:36).

Davidson (1984:185) outlined that when Europeans, such as Captain Cook (1955), first arrived in New Zealand, the term 'pa' described fortifications and other descriptions, such as village, referred to non-fortified settlements. Europeans soon after began to use pa to describe settlements on the flat with surrounding palisades or fences. Eventually, in the late nineteenth century this resulted in all Maori settlements being called pa. Consequently, when archaeologists are identifying pa based on European accounts from the eighteenth century, it is sometimes difficult to ascertain the specifics of a site in relation to fortifications.

Contemporary communities in some areas refer to the marae complex as a pa to distinguish it from the ceremonial courtyard (Salmond 1975:31). Sutton (1990) proposed that the pa of the prehistoric period was the prototype for the modern day marae. However, "archaeologists always use the term 'pā' to refer to earthwork fortifications; the term as used by archaeologists does not refer to the modern Māori settlement" (Jones 1994:41). This thesis uses the archaeological interpretation of the term pa.

"Pa taua.-Denotes a fortified place. A generic term.

*Pa whawhai.- pa-* to obstruct. Any barricade or screen may be described as a *pa*, but *pa taua* implies something to obstruct enemies, while *pa whawhai* may be rendered a 'fighting *pa*'.

Pa maori.- Literally 'native fort.' Any fortified hamlet is included in this term.

*Pa maioro.*- Earthworks, both rampart and fosse, are termed *maioro*. Hence a pa maioro is a fortified place the defences of which are earthworks (stockades being an additional defence).

*Pa tuwatawata. Pa tiwatawata.*- A fortified place having no earthworks; stockades being the form of defence employed.

*Pa kokori. Pa korikori.*-These terms were applied to any defence of an inferior nature, such as a few huts surrounded by an ordinary type of palisaded barrier. Such places were often constructed at cultivation grounds away from the fortified village, and at fishing camps on the coast.

*Pa Tahora.*- Applied to *pa tuwatawata* or any inferior type of defended position situated away from the main *pa* of the clan.

*Pa whakairo. Pa whakanoho.*- These terms imply a first class type of fortified village, defended by earthworks and stockades. Such *pa* had some of the stockade posts embellished with carvings, hence the term whakairo. They were also protected by a mauri...

Pa punanga.- A term applied by some clans of Wai-rarapa, etc., to retreats or places of refuge provided from non-combatants in war time... These places were often situated in the depths of the forest...It would appear that many of these places of refuge were not fortified in any way...

Pa ukiuki.- This expression denotes a permanently occupied fort."

Figure 3.1: Terms identified by Best (1927:17-18) used by Maori to denote the various forms of fortified places.

#### 3.3.2 The Definition of Pa in New Zealand

What pa sites are and how to identify them in the field are not well defined in any single text. The NZAA Site Recording Scheme was established in 1958 with the aim "to create simple but systematic files of information about archaeological sites" (Walton 1999:1). Part of the scheme includes a number of publications (Daniels *et al.* 1970; Daniels *et al.* 1979; Golson and Green 1958; Walton 1999) used as handbooks for recording New Zealand archaeological sites.

In the most recent of the NZAA Site Recording Scheme handbooks, the passage that could be described as a definition for pa reads:

In ethnographic texts, such as Elsdon Best's (1927) classic "The Pa Maori", the term pa is used to describe a fortified place constructed by Maori. Pa were often built on hills and ridges but with the advent of firearms the so-called 'gunfighter pa' came to be constructed. The common identifying features of pa were earthwork defences (ditches and banks and, for some gunfighter pa, bastions and underground bomb shelters) and frequently palisading... Palisades do not usually survive in an archaeological context so the main field identifier is now earthworks. (Walton 1999:47-53)

Walton defined pa sites as fortified places, identified by earthwork defences. Three main defensive earthwork features are used to identify pa: ditches, banks and scarps. In relation to what earthwork defences are and how to identify them, Walton (1999:50) defines only the defensive scarp: "an artificially steepened slope". For ditches, Walton (1999:50) considered it useful to distinguish between lateral and traverse ditches (a ditch running parallel and at a right angle to the topographic feature respectively). The three types of artificial earthwork defences were illustrated by a cross-section drawing of some possible combinations found in the field (see Figure 3.2). Otherwise, site recorders are left to define what artificial defensive earthworks are.

While identifying pa that are "massive and attract attention" (Walton 1999:48) may be straight forward, the identification of pa in Murihiku based solely on the definition given in the NZAA Site Recording Scheme can be more problematic. Sites in Murihiku identified as pa do not all have the easily definable features that many of the more northern pa sites have. A more detailed definition of the features used to identify pa then requires a review of the wider literature.

Figure 3.2: Possible combinations of cross-sections for defensive ditches, banks and scarps found at pa (Daniels *et al.* 1979:25).

Archaeologists define and explain their method of pa identification to differing degrees. Some do not define pa at all and, therefore, an assumed level of knowledge is expected. There is an assumption of what a pa is; most authors of pa literature do not specifically outline their criteria for identifying and defining pa. Many archaeologists come to the same conclusion as Schmidt (1996:1) when he asked "what is a pa?"; that the interpretations are that of the primary investigator or the author. The simplest definition is that pa is a generic name used by archaeologists to describe a group of sites which have features identified as defences (Daniels *et al.* 1979:26).

In the past, pa were often referred to as 'fortified villages'. Early researchers of pa, such as Best (1927), Firth (1927:66) and Buck (1949:137-8), defined pa as fortified villages. This tradition has been continued by some archaeologists (Bellwood 1978:3) but has been critiqued on two grounds. Firstly, it would suggest pa were always places where people lived, and secondly, it would suggest some lengthy occupation. While this may be true for some sites, not all fortified sites have evidence of occupation (Sutton *et al.* 2003). For example, some pa have been identified as food storage areas (Law and Green 1972). Thirdly, while many pa sites do have evidence of occupation, they may not have been permanently occupied. Some may have been used only as citadels and refuges in times of danger (Orchiston 1979). Consequently, while some pa may have been fortified villages, the definition of a pa as a fortified village is not all encompassing.

Three levels of definitions are recognisable in regards to defining pa:

*Benign Neglect*: assumes that people know what a pa site is and that archaeologists will recognise it as such based on their professional experience. The problem with this is that not all sites are identified by archaeologists, nor do archaeologists identify them in the same way.

A Vague Definition: such as 'a fortified site'. The problem with this definition: what are fortifications? For example, do they include natural features interpreted as having had a defensive function or only modified defences? (See below for a more in depth discussion on this point)

*The Formalised Definition:* broken down into seemingly rigid criteria (see examples below). While this may be the most detailed type of definition, they vary in the criteria employed. Many still do not define what a fortified feature is, for example, what exactly constitutes a ditch?

Focusing on the third type of definition, the formalised definition, there are varying degrees of restriction on fortified features within definitions of pa. Two main types are recognisable: a more restricted definition and a broader definition. The main difference between these two types of definitions for pa sites is the inclusion of natural features that are interpreted as having had a defensive function in the broader definition.

The more restricted definitions of pa are based on the identification of artificial fortifications. An example of this type of definition would be: "A <u>pa</u> is defined as an area of land enclosed by a ditch, or a ditch and bank, or a scarp" (Buist 1964:20; 1965:77, Wilkes 1995:239). A simpler definition of a pa as "a site containing built fortifications" (Daniels *et al.* 1979:24) was used in the 1979 version of the NZAA Site Recording Scheme handbook and has often been used by archaeologists (Burridge 1995:52; Pritchard 1983). While the more restricted definitions do not recognise natural features that could have been defendable as a defining identifier of pa, there seems to be recognition of these features, due to their inclusion in site descriptions.

The broader definition of pa includes natural features as attributes that may have been used for defensive purposes. An example of this definition would be that by Gorbey (1970:27):

"<u>pa</u> were defined as a defensive area marked by earthworks. That is, a site was plotted as a <u>pa</u> if: An area of land was enclosed by (a) a bank and ditch system or (b) a scarp system; Terrace arrangements were noted rising to a seemingly easily defended area, or The site was an artificial swamp mound." It is the second and third criterion that recognises natural features. A site that contained only terraces without natural features, which could have been used for activities such as habitation, would be called an 'open settlement' or an area of occupation. Additionally, the protection given to a swamp mound is the difficulty of access through the natural swamp. Gorbey (1970:27-8) preferred this method as that is how he believed other people identified pa, so this in turn, would make his research easier.

There have been critiques in the wider literature on how pa sites are recorded (Irwin 1985:79; Phillips 1983). Whether the reason archaeologists do not include a detailed definition is because they assume general knowledge, or the debate of the definition is too big a problem to address in that particular piece of literature is unknown. Problems that have been recognised in relation to the recording of pa sites include: inadequate recording, site damage, not recording beyond site boundaries, and site contemporaneity issues (Phillips 1983). Of particular concern is Irwin's (1985:79) comment in relation to his study of pa at Pouto: "There is considerable typological ambiguity for the site recorder on the ground... our terminology consists of an inconsistent shorthand which is misleading". In response to these problems, Phillips (1983) highlighted a need for a higher standard of consistency in recording pa sites, to the degree that if a site was destroyed, the paper record would be sufficient to meet standards required for research. The inclusive nature of the NZAA Site Recording Scheme handbook may encourage this, however, many site records are still not detailed enough and do not meet the required standard of research as outlined by Phillips (1983).

One way that has been used to approach pa, is to view them as artefacts and create classifications (Sutton *et al.* 2003:5). Due to the difficulty of creating an objective descriptive definition for pa, classifications have been suggested (Mihaljevic 1973:143). The NZAA Site Recording Scheme handbooks (Daniels *et al.* 1979; Walton 1999) advise that classifications may be useful for the identifying and recording of pa. It is from the classificatory systems of archaeological sites that some assumptions of the chronology and function of these sites can be inferred (Walton 1999:41). However, a lack of clear criteria has "resulted in a mix of rather fuzzy definitions" for pa (Walton 1999:41). The result has been a number of different classifications (Spring-Rice 1996; summarised in Figure 3.3), none of which are universally used or are particularly helpful in trying to decipher whether a site in Murihiku should be considered a pa or not.



Figure 3.3: Classification of Pa (Spring-Rice 1996:156)

A number of archaeologists have contrasted the pa/ fortified settlement with the unfortified settlement in order to understand them. An unfortified settlement is commonly referred to as a kainga or open settlement (Sutton *et al.* 2003). Features of the unfortified site and fortified site are often compared based on the presence or absence of fortifications (O'Keefe 1991; Sutton *et al.* 2003; Vayda 1960:10). Hamel (2001:62) recognised that defendable sites need to be carefully considered as they may not have been established 'forts' *per se.* The inference is that earthworks, such as ditches, are the important part of identifying pa. As Hamel noted, there "is also evidence of a palisaded settlement at Whareakeake (Lockerbie 1959: 92; Skinner 1959), which was in a bay and not on a headland" (Hamel 2001:62), without implying that the site is a pa. Hamel listed sites in Otago that she thought were located in naturally defendable areas, primarily, surrounded by cliffs or located on headlands, but with the caveat that they cannot be assumed to be established forts, even if there are traditional accounts indicating this. The current use of kainga (open settlement) verses pa (defended settlement) over-simplifies the reality of the situation, and it is in fact much more likely that the degree of enclosure can and should be viewed more as a continuum (also suggested by Mihaljevic 1973:143).

# 3.4 Variation between Pa

This section addresses the variations that occur between pa sites in regards to the attributes used to identify them. Firstly, variations between pa over time is considered, including the origins of pa and change in their form into the historic period. Secondly, variation in space is analysed. This is the variation that occurs between individual pa sites and between pa in different regions.

Pa sites are identifiable in the New Zealand archaeological record from approximately 1500 (Schmidt 1993). Recent studies (McFadgen *et al.* 1994, Schmidt 1996) have indicated pa construction occurred for c.350 years, from approximately 1500 until 1850. They are, therefore, considered to be late prehistoric or 'classical' sites. However, some pa fortifications appear to have been established on sites that had already been occupied, in areas that were naturally defendable, including Rahopara Pa (Auckland, R10/21), Station Bay Pa (Motutapu, R10/26), Sarah's Gully Pa (Coromandel, T10/168), Waioneke and Otakanini (South Kaipara Q10/32 and Q10/44), Te Awanga (W21/1), and in the Hawke's Bay (Birks 1960; Davidson 1978, 1984:188; Fox 1978). How this influences the dating of pa is yet to be addressed in general (Jones 1994:59). However, it does suggest that pa are identified based on the presence of built fortifications rather than natural features.

Fox's (1976:28-9) model of pa evolution has since been critiqued (Davidson 1984:182). Fox outlined a four step evolution, from pa with only palisades to pa with stages, ramparts and ditches. She believed the evolution of pa involved the spread of ideas rather than people. While Fox's evolutionary sequence fits the Otakanini pa (Q10/44) site development, one site is not enough evidence to indicate her evolutionary model was a general trend. Davidson (1984:182) provided Ruarangi (Q07/30) and Maioro (R13/1) as examples of sites that were always defended by scarp and palisade, and the Kauri Point pa (U13/4) as an example of a site that was always defended by a ditch. The evolution of prehistoric pa has therefore been dismissed, with the development of the gunfighter pa in the historic period being the only time that the general morphology of pa changes (Buist 1964).

## 3.4.1 Gunfighter Pa

The introduction of muskets by Europeans triggered the development of a new type of fortification (Jones 1994:84, see Figure 3.4). As many as 400 gunfighter pa were established in the nineteenth century, mainly during the period 1865-1880, but they were first known from the 1830s in Northland (Golson 1957:104; Jones 1994:84).

Gunfighter pa from the early contact period (1810s-1840s) are sometimes difficult to distinguish from prehistoric pa (Jones 1994:88). As a general rule, historic fortifications were built on the flat for better defence against long range muskets and cannons. However, some fortifications were still established on hills and ridges (Best 1927:367). There was also reuse of prehistoric fortifications during the historic period. Furthermore, some prehistoric pa were built on flat ground (Jones 1994:88-89). The appearances of gun pits are therefore the earliest tangible identifiable adaptations of Maori fortifications to muskets (Jones 1994:88-89).



Figure 3.4: Aerial view of the gunfighter pa Ruapekapeka (Q6/139) established 1845, Northland (Jones 2005).

Maori used a number of new and adapted fortifications that distinguish historic and prehistoric pa from the mid 1800s. Complex fortifications appeared with "gun pits, multiple defensive perimeters, rifle trenches, breastworks, flanking angles, underground shelters, and a form of stockade" (Jones 1994:89 - see Figure 3.4 - see also Allen 2006). Ditches, from which to fire muskets, appear behind banks and tend to be shallower than prehistoric ditches and banks (with exceptions, for example, the East Coast, North Island). The position of palisades may have also have changed, while fighting stages were abandoned (Belich 1986; Best 1927:367-413; Davidson 1984:193; Jones 1994). Trotter (2009) analysed the position of palisades at four early contact period Canterbury pa, all from the early 1800s, and found that the palisades were built on the inner side or behind the defensive walls. On the whole, gunfighter pa were more informal than European fortifications, reflecting defensive, rather than offensive warfare (Belich 1986; Jones 1994:91).

## 3.4.2 Regional Variation

Regional variation in pa morphology is now generally accepted to be a response to local contexts. While variation occurred due to agency (Allen 1994), pa design was also a response to the context of the local situation, such as the frequency and form of attack (Fox 1976:18, 21).

Variation between individual pa, as opposed to trends across geographic regions, occur primarily due to the unique location of each pa site. The location of a pa site may have been influenced by the need for natural protection, resources, and labour input/ population size (Firth 1927:67; Prichard 1983; Walton 2001:51). The focus on the location of pa in naturally defendable areas is viewed as such an important part of pa research that a number of classifications have been created around this theme (Best 1927:21; Golson 1957). Topographic location can influence the features present at a pa site, for example, at swamp pa, rows of palisades are found as these were more practical than ditches and banks. Since the morphology of a pa is the result of geographic context, stylistic differences are adaptations to the terrain (Jones 1994:48). However, the influence of the location of a pa on the types of defences did not always result in a particular type of fortification.

Pa are complex sites, often the locations of multiple occupations and varying in function. This was clearly illustrated during the Pouerua cone pa (P5/195) excavation in which the researchers detailed the sequence of events over time to show changes in use over time, including times when fortifications were functional, and times when they were not. The types of fortifications also changed and at different times included scarps, palisades, and ditches and banks. Use of the area shifted from houses and occupation to what the researchers believed was a more ceremonial use of the cone pa that excluded living areas (Sutton *et al.* 2003). This illustrates the various uses of the landscape over time, and reinforces that pa sites changed, both morphologically and functionally over time.

Some regions tend to have pa that use similar natural features and fortifications. While this was formerly thought to have been the result of the stylistic differences of agency, it is now believed to have been influenced by terrain. Some stylistic similarities between regions can be identified for pa. Jones (1994) summarised that south of Wanganui, the Hawkes Bay and North of Cape Runaway, earthworks tend to be shallow due to shallow soils. River terrace pa are common on the East Coast, Wanganui and parts of the Waikato that are a reflection of the large rivers of these areas. "The regions with the highest density of pā and also the most

elaborate and deeply dug defences are Wanganui, Taranaki, the Bay of Plenty, the Waikato, and Auckland and Northland" (Jones 1994:48). The Bay of Plenty, Waikato and Northland have ring-ditch pa that were once argued to have indicated links between these people. It is now thought that these similarities are the result of the typographic similarities of these regions including volcanic landscapes and the resulting landforms including lahar plains (Jones 1994:48).

# 3.5 Identifying Pa in the Field

What is required to identify pa in Murihiku is a systematic method of pa identification using tangible attributes. Walton (1999:39) proposes that one possible way of identifying pa, that would allow better comparisons between pa sites throughout the country, would be to treat the features of the site as discrete components. The reasons for the establishment and use of pa were contextual. The common feature of pa is that they are all enclosures and defensive. Ten attributes are outlined as those used by archaeologists to identify pa and are broken down in Figure 3.5. The most convincing features in identifying pa sites are ditches and banks.

The international theory of enclosures has been highlighted as an encompassing quality of all pa sites, and it is the enclosing features identified in the literature that are the primary focus in this definition of the site type pa. The presence of a defensive ditch and bank at a site usually substantiates the site as a pa. Six attributes are identified within this methodology as being core features that identify pa: ditches, banks, scarps, palisades to a lesser extent, natural features that prohibit access, and finally, artificial islands. Three additional morphological attributes are considered, as they support the identification of pa sites: fighting stages, gates and entrances, and platforms/ tihi. Finally, a single non-morphological attribute, ethnohistoric sources, must be considered as a rich source from which potential pa sites can be identified and then considered in conjunction with the other attributes.

The identification of a pa site based on a combination of attributes can be more persuasive than based on a single attribute. Some attributes can be convincing in their own right, for example, built enclosures such as ditches and banks. When these attributes exist, the identification of a pa site is relatively straightforward. Conversely, when there are attributes that are contentious, such as palisades or natural features, identification is more difficult. If a combination of attributes occur, the matter is less difficult. However, sometimes sites only have one attribute, which is contentious and a critical assessment of the site may be required based on the individual situation. Three types of pa sites within the theoretical framework of enclosures can be identified:

- 1. Natural enclosure: A site located in an area that is defendable using the natural features surrounding the site.
- 2. Cultural enclosure: A site enclosed by way of built fortifications.
- 3. A mixed natural and cultural enclosure: A combination of type two and three.

From these a continuum of sites can be created. Those that are not an enclosure, and therefore presumed to be open sites, are at one extreme. At the other extreme are sites that have had a lot of labour and time invested in them. The term enclosure is not exclusive to the site type pa and could include other types of sites such as historic stock yards. However, this reduces the prejudice of function that the use of the term 'pa' can imply. The assumption is that these sites could have been used for defensive purposes. Using the conventional definition, for a site to be considered an archaeologically identifiable pa, the site must contain built fortifications.



Figure 3.5: Ten attributes used by archaeologists to identify enclosures and pa sites.

#### 3.5.1 Ditches and Banks

Ditches and banks are the most commonly recognised defensive features of pa (Lilburn 1985:86). Ditch and bank structures are forms of earthworks typically constructed from natural material such as soil and sometimes stone. While ditches and banks occur naturally, they are often culturally constructed features identified at pa sites (see Figure 3.6 - Best 1927:212; Buist 1964:8; Golson 1957; Groube 1964:187). While many European explorers and archaeologists have identified ditches and banks, there has not been substantial theoretical discussion on them. Kennedy's (1969:93) suggestion that they are "self explanatory" is not explanation enough.

Ditches and banks are often found together because the spoil from the ditch was frequently used to create the bank. However, they can be found separately and can also be identified in conjunction with scarps or palisades (Lilburn 1985:86). The order of the ditch or bank is variable with fortified sites tending to show the order as a response to the terrain (Wilkes 1995:245). Maximum use of spoil was often used to minimise the time required to build the ditch and bank; "ease and speed of construction were more important than tactical perfection or stylistic flourish" (Wilkes 1995:245).

Internationally, ditches are thought to be defensive based on their size and shape. The ideal defensive ditch is one that is the hardest to bridge and the most difficult to climb out of. Therefore, they are wide at the surface and deep. The most cost efficient way to achieve this is by cutting a V shaped ditch (Keeley *et al.* 2007:88). For a ditch to be considered to have had a strict military function, it needed to have been at least 1.5 meters wide and at least 1 meter deep (Keeley *et al.* 2007:60).

Archaeologists are inclined to identify pa based on the interpretation of ditches and banks as defensive. "Pa sites are found in elevated, often highly inaccessible locations and are characterised by the presence of terracing, ditching, and/ or banks. These features usually cut across access routes onto the pa and are therefore *assumed* to be defensive" (*emphases added* Sutton *et al.* 2003:1). Ditches and banks are often used to cut off and create different areas within a single pa site (see Figure 3.6). Archaeologically, defensive ditches and banks are described as usually being between three and six meters high (Fox 1976:57). Ethnohistoric accounts record that the size of a bank and, consequently a ditch, was typically 6 - 12 feet (1.8 - 3.7 m) in length and 6 - 7 feet (1.8 - 2.1 m) in width to allow defenders to stand upon it (Best 1927:51).



Figure 3.6: Aerial view of a prehistoric pa in southern Hawkes Bay. Note the single and double ditches around the circumference of the hilltop (Jones 2005).

# 3.5.2 Defensive Scarps

Defensive scarps are less studied than defensive ditches and banks (Lilburn 1985:86). Scarps have been described as averaging 6.6 feet (2.01 m) and can be identified by themselves or in association with palisades, ditches and banks (see Figure 3.7 - Lilburn 1985:86; O'Rourke 1962). They tend to be dug into the earth but can also be stone faced (Best 1927:210-211). In 1817 Nicholas (1817:270) described a scarp first hand: "...they had cut away a great part of the hill, so that the ascent was quite perpendicular". Scarps appear from earliest pa sites; for example, they are present in the earliest layers of the Otatara-Hikurangi Pa (V21/41) complex (Jones and Walton 2006) and Pouerua cone pa (P5/195 - Sutton *et al.* 2003). Groube (1964) and Fox (1976) recognised the defensive scarp in their classification of pa as the Type 1 Terrace Pa (Lilburn 1985:86).



Figure 3.7:Some attributes of pa including ditches, banks and scarps (Lilburn 1985:87)

The differences between defensive scarps and structural scarps pose an issue for archaeological identification. The NZAA Site Recording Scheme handbooks (Daniels *et al.* 1979:25; Walton 1999:50) describe the defensive scarp as "an artificially steepened slope", which describes any type of scarp. A more detailed definition is Lilburn's (1985:86, see Figure 3.7): "...they are vertical or near vertical and they are usually modified". The near vertical nature of defensive scarps is presumed to distinguish them from structural scarps (Lilburn 1985:86). However, "steep slopes are sometimes scarped but it is difficult to separate the defensive function of the scarp from the habitation area associated with it and thus determine its contribution to the defensive pattern" (Smart 1962:173). Further problems with the identification of scarps include the difficulty of knowing if the scarp is natural or cultural without excavation, and where the scarp ends (Lilburn 1985:88).

Like ditches and banks, it seems the identification of defensive scarps comes down to the interpretation of function by the archaeologist. Lilburn (1985:88) suggested that determining the function of a scarp comes down to the observer using common sense. For example, if the scarp is in an area that is not naturally defendable, it may be interpreted as a defensive scarp.

#### 3.5.3 Palisades

Palisades are built structures, constructed of wood, and usually only identifiable in the archaeological record as features interpreted as postholes (exceptions include swampy areas - see Figure 3.8 and Figure 3.9 - Fox 1976). Palisades consisted of wooden posts in a line described as a "defensive fence around a  $p\bar{a}$ " (Phillips 2000:181). When multiple attributes including palisades are recognised at a pa site, it is easier to identify palisades at strategic locations. However, if the sole attribute is a palisade, the labelling of the site as a pa is problematic and requires further discussion on what constitutes a palisade rather than a fence.

The morphology of defensive palisades includes the location, size and structure of the timber posts. Ethnohistoric reports record the presence of usually one, sometimes two, main palisade lines. The best palisades were made from heartwood timber and "firmly embedded in the ground" (Best 1927:45). However, not all palisades were vertical; some may have leaned over or away from a ditch (Best 1927:83; Cook 1955:197-199). Best describes a typical main palisade as being constructed with a number of different sized posts; "the larger posts only of the main fence were so high, the secondary posts were shorter, and the intermediate palisades shorter still, say ten to twelve feet above ground" (Best 1927:45). However, there are accounts of some palisades being constructed totally from large posts. Secondary palisade lines may have been constructed using only secondary sized posts (Best 27:45, 58). Archaeological excavations have disproved the idea that all palisades had different sized posts placed in a particular order. For example, excavations at Ruahihi pa (U14/38) revealed a palisade that had postholes that decreased in size at one end (McFadgen and Sheppard 1984:17).

In relation to the distances between the posts, Best (1927:62-3) stated the largest posts were 5 - 8 feet (1.5 - 2.4 m) apart, but could be closer, while the rest of the posts were irregular. Two types of large posts are said to have existed; the first being 10 - 15 feet (3.0 - 4.6 m) in height, 10 - 18 inches (0.25 - 0.46 m) in diameter, with the top carved as a rounded knob to represent the enemy's head (Best 1927:62-3). The second large type of post was much bigger than the first, measuring between 15 and 24 inches (38 cm - 61 cm) in diameter, in areas with easily accessible wood resources, and was placed in important places such as gates and corners. These posts had heads carved into them and were named after male ancestors to try and 'terrify' the enemy (Best 1927:63, 73).



Figure 3.8: Mangakaware swamp pa (S15/18), Waikato. Note the entrance indicated on the middle right and the palisade post-holes (Fox 1976:25)



Figure 3.9: Surviving palisade posts at Mangakaware swamp pa (S15/18), Waikato (Fox 1976:27)

Further complicating matters about palisades and pa, Best (1927:3-4, 17) suggested both 'hamlets' and pa could have palisades but that palisaded hamlets (pa tuwatawata) should not be identified as fortified places. If some places had palisades but were not considered to be defendable, then at least some palisades "may have had the same significance as a modern picket fence" (Kennedy 1969:114-115). It is little wonder then that there is confusion as to whether sites with only palisades should be considered pa or not (Gorbey 1970:27-8). Sites with palisades seem to only be identified as pa if there is some other attribute that identifies the site as defendable, such as the presence of natural features that are considered defendable.

A site that is located in an area that has no natural defences, but is surrounded by a palisade fulfils the role of an enclosed site. Conceivably, as Walton (2001) suggested, people may have put more effort into the construction of a fortification in order to have more choice about its locality. Constructing a completely artificial enclosure would allow a defendable site to be located anywhere.

While there are few currently known archaeological examples of settlements located on the flat surrounded by palisades, they may be currently underrepresented. Excavations at the late

occupation phase at Murdering Beach (J44/20), on the east Otago coast, revealed postholes interpreted as a palisade surrounding the village (see Chapter Five and Appendix Two - Bell 1956). Palisades are features usually only identified in excavation, and as excavation often focuses on the central portion of a site, there is the potential to overlook outlying palisades. Furthermore, prior to the 1950s features in general were often overlooked, as is also illustrated by the overlooking of postholes later interpreted as houses (Anderson 1983b:34).

#### A Row of Postholes: A Palisade or a Fence?

When other modified attributes, such as ditches and banks, are present, the interpretation of a row of postholes as a palisade or a fence is less of an issue. However, where sites exist based on this attribute alone, this debate must be addressed. The difference between a fence and a palisade is important, as each is suggested to have had a different function. Palisades are thought to suggest defence, while a fence does not automatically imply this defensive function.

Fences were recorded during the nineteenth century and appear to have been used throughout the prehistoric period (Davidson 1984:162). Postholes have been interpreted as fences from a number of sites including Foxton (S24/3), Hamlin's Hill (R11/142) and Washpool (S28/48 - Leach 1979; Mcfadgen 1972:37; Peace 1977:82-5). Captain Cook's (1955:99) descriptions of internal divisions supports this, as he indicated that if the main fortifications were broken, the enemy had to overcome further obstacles before taking the whole pa (also Davidson 1984:162). From this perspective, fences may be seen as secondary fortifications. The partial and complete enclosing and division of settlements with fences is not considered to be purely defensive but also corresponds to domestic units (Davidson 1984:162). "They could be used to mark out individual territories within settlement. But they might also have served as windbrakes, and to keep dogs in or out. In historic times, they became an important protection against pigs" (Davidson 1984:162).

While Best (1927) explained that a palisade could be identified as being a defensive palisade by the 'grotesque figures' that were carved into the main posts, this is not helpful for subsurface archaeology (Best 1927:22). The difference between defensive and non-defensive palisades seems to be how archaeologists interpret their function based on the size and location of the postholes.

A palisade or fence can create an enclosure, both can slow people entering the area, and both can be multifunctional depending on the context. An alternative view is that there is a continuum: at one end, a small fence, at the other, a large palisade. We can estimate either end of the continuum but the grey area in the middle still presents problems, both morphologically and functionally.

# 3.5.4 Natural Features Interpreted as Being Defendable

Natural features interpreted as having a defensive function have been recognised by early European explorers and archaeologists as being used by prehistoric Maori in their positioning of pa (Sir Joseph Banks in Morrell 1958:102). The current NZAA Site Recording Scheme handbook (Walton 1999:50, 52) recognises that natural features interpreted as having a defensive function are used by site recorders in identifying pa. In saying that, it does not define how to identify or define these features, and so is not comprehensive enough for archaeologists trying to define natural features that they believe could have had a defensive function. Most archaeologists recognise natural features as being part of the choice for the location of pa (Best 1927; England 1993:2; Firth 1927:66-7; Golson 1957; Irwin 1985:17; Vayda 1960:10). However, while natural features that could have been used for defence are identified as being characteristic of pa, they are not always used on their own to define a site as a pa.

Best (1927:140) stated that the locations of pa were carefully chosen, firstly for defence, then for food, and finally, for water. Pa were situated to gain the advantage of defence by being located in high areas or places with difficult approaches (Golson 1957). A naturally defendable area may have been chosen for the location of a pa site because this required less labour time to build ditches and banks (Jones 1994:44). Hence, people establishing a pa site must have had to compromise between labour times for initial establishment or labour time required for the extra travel to collect food and water (Walton 2001).

Fox (1976:22) asked 'when is a *pa* not a *pa*?' in relation to sites with no visible fortifications but differing from 'open settlements' in that the location of the site was in a position of defence (Fox 1976:22). Some archaeologists outline that a site requires archaeologically visible fortifications (e.g. ditch, bank or a palisade) to be identified as a pa (Buist 1964:20; 1965:77; Wilkes 1995:239). "Unfortunately, because of the prominent nature of pa, the term has been used too freely to describe any archaeological feature in a commanding topographic location" (Burridge 1995:52). Burridge (1995:92) believed that some sites, rather than being located in elevated areas for defence were located there for visibility. While this may be the case, many archaeologists lean towards their inclusion so as not to overlook potential pa sites, especially in areas with excellent natural defences that do not require additional fortifications, such as

Hawke's Bay and Tolaga Bay (Davidson 1987:14; Fox 1982:72-3; Irwin 1985:104). As Jones noted in relation to his work at Tolaga Bay:

...judgement as to whether a group of pits and terraces with steep natural defences and little or no apparent artificial defences should truly be regarded as a  $p\bar{a}$  is not easy. To restrict the determination of  $p\bar{a}$  only to sites with clear artificial defences would mislead readers about the nature of settlements and their distribution. One site which we know from field survey to have had limited artificial defences, Te Kararoa at Cooks Cove, had very full palisaded defences in the 18<sup>th</sup> Century (Jones 1983a). The problem is particularly acute for smaller sites (1989:234).

It is reasonably straightforward to recognise a pa site based on natural features that could very easily have been defendable, such as an island surrounded by high cliffs. However, it is the problematic in-between features at the other end of the scale that create issues.

A further problem with natural features being interpreted as defendable is the subjective rather than objective nature of identifying a feature as defendable. Identifying when a slope becomes defensive, and at what point archaeologists agree that natural features could have been used for defensive purposes is problematic and under-researched. Pearce (1977) carried out experiments to try and help address this issue. He found that a fit person running up different slope angles could not make it to the top of a 120 m slope that was 27 degrees without walking and resting at some points. Interestingly, terraces and scarps actually made it easier to run up a slope. Pearce (1977:23) concluded that slopes themselves offered barriers to an attacking party; the longer and steeper the slope, the harder the ascent. Research on Pacific forts further support this notion; Fijian and Samoan forts do not have defences on slopes over 30 degrees (Best 1993). While these two studies have begun to address the problem of subjectivity in identifying defendable natural features, more work is required.

#### Areas of Habitation

As archaeological sites, pa must be testable by archaeological methods. Major research projects that focus on pa identify some signs of cultural remains, being the fortifications, signs of habitation or other features such as pits (Buist 1965; Irwin 1985; Phillips 2000; Sutton *et al.* 2003). Even sites that could have been defended using natural features need to be recorded based on the presence of cultural features to be considered a strictly archaeological site (Walton 1999). Other signs of habitation that occur within the pa proper as well as outside include: pits, hearths, ovens, and shell middens (Walton 1999:53-4).

## 3.5.5 Artificial Islands

Artificial islands are cultural tells in swamps and lakes that are often termed artificial swamp mounds or swamp pa. While some pa in swamps and lakes are natural islands (which fit under the category of natural features that could have been defendable), others are artificial islands. It is not the mounds themselves, but their intended establishment in naturally defendable areas that make them an attribute used to identify pa. Artificial mounds are built using a variety of methods, usually by building up layers with wood, sand, stone, flax mats, midden and other material (Barr 1998; Bellwood 1978; Green and Green 1963). Taylor (1872:101-2) recorded that pa in the Horowhenua region were created by driving stakes into the lake then throwing rubbish in. Many examples of artificial islands are known from the Hauraki Plains, Hawkes Bay, Waikato, Bay of Plenty, and Manawatu/ Horowhenua regions (Adkin 1948; Bellwood 1978; Green and Green 1963; Phillips 1994:60-71; Phillips 2000; Shawcross 1968; Shawcross and Terrell 1966:46).

Artificial islands often have other fortifications located on, or around them; specifically palisades. Although recognised as pa sites in their own right (Firth 1927:67; Gorbey 1970:27) artificial islands tend to also be fortified using palisades, commonly with one row of palisading on the swamp side and three plus rows on the land side (Bellwood 1978: 20; Peters 1971:127-7; Pick 1968:32; Rolston 1947:265; Teviotdale and Skinner 1947:346). Barr (1998:53) noted that all pa sites on the Waikato Lakes include built defences, either visible palisade posts or a hazardous maze of stakes and posts just below the water surface. Wetland and swamp environments often result in the preservation of palisades and other cultural materials (see Figure 3.9 - Bellwood 1978).

# 3.5.6 Fighting Stages

While no pa have been identified by the presence of solely a fighting stage, a fighting stage is a feature that is only identified at pa. Fighting stages have been best defined as "elevated platforms above the palisades" (Davidson 1984:190 - see Figure 3.10). Fighting stages were initially described by Cook and subsequently in more detail by the French at Paeroa (Q05/39) and other pa in the Bay of Islands (Cook 1955:98; Beaglehole 1968:199). Cook (1955:98) described two fighting stages at Mercury Bay, Wharetaewa. The coastal pa was fortified with ditches, banks, 'picketing' (palisades?) and two fighting stages. "Close within the inner picketing was erre[c]ted by strong posts, a stage 30 feet high 40 in length and 6 feet broad, the use of this stage was to stand upon to throw darts at the Assailants, and a number of darts lay upon it for this purpose" (Cook 1955:98). Best (1927:103-104, 115) stated that these stages were for the use of between three and twenty people and were positioned at weak points such as entrances and on high ground for use as watch points.



Figure 3.10 Plan and section of a fighting stage at Tiromoana pa (W21/1), Te Awanga (Fox 1978:12).

Archaeological excavations have revealed a number of features at different sites that have been interpreted as fighting stages. While little is said about the method of how fighting stages are recognised, they seem to be identified by the presence of an arrangement of 'large' postholes behind posthole features that have been interpreted as palisades (see Figure 3.10). Large postholes interpreted as representing fighting stages have been identified at a number of archaeological sites including: Otakanini (Q10/44, periods II and III), Manakaware II (S15/18), Station Bay (R10/86), Te Awanga (W21/2, see Figure 3.10), and Pari Whakatau (O32/20) (Bellwood 1971; Davidson 1972:4, 1984:190; Fox 1978:11-12; Kennedy 1969:208-9, 213; Trotter 1975).

## 3.5.7 Gates and Entrances

A site that has a 'gate' or an 'entrance' may represent the funnelled movement through an opening in an enclosure. Although gates and entrances are not explicitly defensive, they are used in conjunction with fortifications and therefore are useful in identifying pa. The NZAA Site Recording Scheme handbooks (Daniels *et al.* 1979:26; Walton 1999:52) give examples of gates and entrances including undug 'causeways' in ditches, gaps in banks, ramps forming sunken pathways through scarps, sloping terraces and ditches giving access to lateral terraces.

Best (1927:117-9) and Firth (1927:66-7) suggested the entrances to pa were established in such a way as to not decrease the ability to defend the pa. For example, entrances may have been tunnelled, directed between two rows of palisades, or have had fighting stages associated with them, as described by Cook (1955:99 - for an example see Figure 3.10). Gateways were often named and these were passed down in oral traditions (Best 1927). Archaeologically, it is often the lack of evidence that indicates an entrance (see Figure 3.8 and Figure 3.10). Gumbley (2000:8) used this reasoning to interpret an entrance at Awa-te-take pa (Q19/231). He suggested that where three ditches that did not reach the cliff, but instead left a gap, an entrance could have been present. This was further supported by the presence of a number of living features immediately inside this gap. Other indicators of entrances include path-like spurs leading through gaps of postholes or earthwork features (Hunt 1962).

#### 3.5.8 Platforms/ Tihi

Prehistoric pa are usually located on hill tops or ridges that contain high spots and it is here that archaeologists sometimes identify a platform (see Figure 3.11). A platform has been defined as "an area, usually flat, standing above and surrounded in whole or in part by scarp, ditches or banks" (Daniels *et al.* 1979:31). A platform sometimes "appears to have [been] artificially levelled" (Daniels *et al.* 1979:31). However, platforms are not restricted to pa sites. Other, non-fortified sites also have terraces/ platforms at their highest point, but at pa they are generally called tihi (see Figure 3.11 and Figure 3.12 - Sutton 1990).

The expression 'tihi' tends to imply an area of importance associated with status and religious and military uses (Sutton 1990; Sutton *et al.* 2003). The tihi has been associated with status and a symbolic statement about the spatial and socio-political organisation of the pa (Best 1927; Firth 1927; Phillips 2000:148; Sutton 1990). Lilburn (1985) suggested that some tihi were associated with the status of a pa site. The consistency of the size and orientation of tihi at Pouerua pa has been used to support this. Alternatively, the symbolic statements of tihi may be tied into a religious function of the tihi as a prehistoric marae-like area (Sutton *et al.* 2003). Fijian and Samoan forts traditionally had high platforms associated with ceremonies and chiefs (Best 1993). The tihi may have also acted as the citadel of a pa, where the last stand took place (Golson 1957).



Figure 3.11: 1st tihi (centre of photo) at Pouerua cone pa (P5/195 - Jones 1994).



Figure 3.12: Cone pa at Pouerua (P5/195) indicating the position of the four tihi (Sutton *et al.* 2003:209).

#### 3.5.9 Ethnohistoric Sources

Ethnohistoric sources include the records of Maori oral traditions and accounts from early Europeans. Information, such as the names of pa and gateways, are known only from ethnohistoric sources (Best 1927; Irwin 1985; Phillips 2000). Archaeologists tend to use ethnohistoric records about pa to support archaeological evidence (Irwin 1985; Sutton *et al.* 2003). Ethnohistoric traditions are useful to identify records of potential pa that can then be investigated using the attributes identified above. Phillips's (1994: 2000) interdisciplinary study along the Waihou River is an excellent example of how ethnohistoric sources have been used to support the identification of pa. Using oral traditions, early European accounts, archaeological and environmental information, Phillips developed a chronological sequence of the different functions of pa over time that resulted in an excellent in-depth analysis of area. Early European accounts, from people such as Captain Cook and Banks, are used to relocate pa and compare them to the archaeological remains (Jones 1983).

# 3.6 The Functions of Pa

The existence of a pa site indicates that, at some time in the past, people were present at its location. For how long, however, varies between pa sites. There is a continuum of pa between sites interpreted as having been permanently occupied and those that have no evidence of occupation. At one end of the scale, 'permanent' occupation would suggest pa could incorporate the functions of the kainga (Best 1924:304; Buck 1949:137; Fox 1976, 1983). Alternatively, pa that were temporarily occupied have been suggested represent fortified sites used as refuges during times of war (Davidson 1985; Groube 1965; Orchiston 1979). At the other end of the scale are fortified sites that show no evidence of occupation, for example some pa sites may have been used solely for food storage (e.g. Law and Green 1972). This would suggest there is no single tendency for the occupation of pa sites, and that context needs to be considered. Furthermore, this would suggest pa were multifunctional through time and space.

There has been debate about the defensive role of pa from their first sightings by Europeans. Captain Cook wrote:

We have before now observed on several parts of the Coast small Villages inclosed with Pallisades, and Works of this kind built on eminences and ridges of hills, *but Tupia hath all along told us that they were Mories or places of Worship, but rather think they are places of retreat or Stronghold* where they defend themselves against the Attack of an Enimy as some of the seem'd not ill design'd for that purpose [sic *- emphasis added*] (Thursday 2<sup>nd</sup> November, 1769, in Beaglehole 1968:169).

While Cook (in Beaglehole 1968:169) noted that "Tupia spoke to them in his own language and it was an [a]greeable surprise to us to find that they perfectly understood him", Cook argued that pa were for warfare. This debate has continued among archaeologists up until the present.

The assumption that warfare was widespread and endemic in the late prehistoric period has been critiqued (Davidson 1984:191). The fear of warfare, rather than endemic warfare, may have been the reason for the building of pa (Vayda 1960). The particular state of war or peace in which people lived would have changed in time and space. For example, there was great variation in Captain Cook's recording of peace and war as he travelled around New Zealand in 1769-70 (Beaglehole 1968). There are only a small number of pa which indicate direct evidence of warfare (e.g. Mangakaware II, Peketa Pa and Waioneke - Davidson 1984:191-192). Furthermore, Davidson (1984:184) pointed out that there is a need to, "distinguish between pressures producing warfare and pressures producing fortifications". The pressures
that occurred in prehistoric New Zealand (e.g. population and resource pressures) occurred in other areas of Polynesia and yet these places did not all contain fortifications. It may have been that the energy and resources being put into building marae and platforms in other parts of Polynesia was being put into building pa in New Zealand, but not necessarily for defensive functions (Davidson 1984:184).

While Walton (2001) suggested that pa are the most visible element of prehistoric warfare, the presence of fortified features need not be representative of defence (Davidson 1984; Kennedy 1964:94). Lilburn (1985) found pa in her study area, which were not as defensively strong as they could have been, a case in point being unfinished defensive ditches. McFadgen and Sheppard (1984:36) reached the same conclusion about Ruahihi Pa. They suggested the shallow ditch and small bank with a single line of palisades and large entrance way would not have made the pa strongly defendable. Best (1927) suggested pa near cultivation grounds were not very formidable or meant for staged conflicts, therefore Ruahihi may have been one such pa (McFadgen and Sheppard 1984:36). This indicates that more complex, contextualised explanations should be considered when considering the function pa.

A number of different authors have argued that, rather than a response to warfare, these fortified features may represent more symbolic boundaries. Mihaljevic (1973) suggested that the word 'pa' should be defined as a, "screen, blockade, anything used to close or block an open space" (Williams 1971:243). These 'blockades' were indicators to individuals and communities as to where they stood in relation to the landscape, effectively acting as boundaries (Lilburn 1985; Mihaljevic 1973). These boundaries are therefore suggested to have symbolically represented social power and identity (Allen 1994, 2006; Phillips 2000; Potts 2008; Walter *et al.* 2006). Leach (2003) thought pa may have been associated with the wealth display and visibility of a community (also Burridge 1995:92). Another suggestion is that the tihi (the highest platform) and associated defensive features may be the prehistoric prototype of the modern marae (Sutton 1990:204-208). As yet, there are no pa of which the primary function has proven to be religious or ceremonial, although the cone pa at Pouerua is thought to have come the closest (Sutton *et al.* 2003). Marshall (1987:227) noted the "emphasis at Pouerua was on the ceremonial display of wealth and power, and on peaceful communal activities, notably feasting. Defence, though included, was not paramount".

The role pa as a symbolic monumental construction has been considered by a few scholars (Barber 1996; Marshall 1987; Mihaljevic 1973; Sutton *et al.* 2003). They have viewed pa as not only having a military role, but also being possible symbols of groups or territorial markers perhaps linked to Maori cosmology. However, their views, while acknowledged as having merit, have not been accepted by all researcher, who argue for the defensive nature of the sites

and their link to warfare (Allen 2006, McGlone *et al.* 1994:157; Walton 2001). Viewing pa sites as exclusively one or the other is unnecessary, as both could have coexisted simultaneously, as has been concluded internationally for enclosures (Keeley *et al.* 2007; Neustupny 2006:1).

If pa sites in Murihiku were established for social motivations, they need to be viewed as enclosures in the full sense: that they were also established with social meaning and symbolic significance (Neustupny 2006:1). Unlike the general model of upward channelling of tribute represented by monumental buildings, pa are seen by many archaeologists as representing community and shared purpose (Phillips and Campbell 2004; Walter *et al.* 2006). However, others, such as Allen (2006), suggest pa represent chiefs. Either way, pa are open to the paradigm of international literature on enclosures but should be viewed from this sense of community. Likewise, Murihiku pa are also open to these theories and should be studied as such.

# **3.7 Conclusions**

While addressing the problem of the sample of Murihiku pa sites, the previous chapter identified a gap in the literature regarding the definition of the site type pa and how archaeologists identify these sites in Murihiku. This chapter addresses this gap. Within an archaeological framework, pa are archaeological sites. As enclosures, these sites have been bounded by their earthworks and/ or other features, although their position within the archaeological landscape needs to be considered to understand these sites.

Pa sites differ across both time and space. While the morphological attributes of pa sites are recognised to vary across time, it is now thought they are the result of environmentally influenced contexts rather than stylistic variation. The only recognisable shift in the site type pa through time is the shift to 'musket pa', which show adaptations to the fortifications in response to the introduction of musket at the arrival of Europeans.

Ten attributes were discussed in relation to how archaeologists are identifying pa sites:

- Ditch;
- Bank;
- Defensive Scarp;
- Palisade;
- Natural Features that inhibit access;
- Artificial Island;
- Fighting Stage
- Gates and Entrance;
- Platform/ Tihi; and
- Ethnohistoric Traditions.

The first two of these, ditches and banks, are the most distinguishing and recognisable features of pa sites. Core archaeological features identified at pa include ditches, banks, defensive scarps, palisades, natural features and artificial islands although some of these features are more convincing than others and all need to be considered within the context of the site. Fighting stages, gates and entrances as well as platforms/ tihi are considered features that support the identification of a site as a pa. The final feature considered, ethnohistoric traditions, is an excellent source of information from which to identify potential pa and enrich the knowledge of known pa sites. The methodology presented in this chapter will be used to critically assess the sites identified as pa in Murihiku in order to establish the current sample of pa sites in the area.

A review of the literature outlines the varying roles of pa. Archaeologists have argued a wider, more integrated view of the functions of pa is required, in which a pa site could have played a role in any or all of the following: warfare, ritual activities, social statements and places of occupation.

# **Chapter Four: A Method for Critically Identifying Pa**

Fortifications, like other forms of settlement, varied greatly in size, situation and purpose. Some relied heavily on naturally steep terrain; others depended far more on artificial defences. Some were on precipitous headlands with limited amounts of palisading. Others, on more open ground, were surrounded by strong palisades.

(Davidson 1984:184-5)

# 4.1 Introduction

This chapter outlines the methodology used in this research to identify known pa sites in Murihiku. All sites that have been identified as pa, enclosed and/ or defendable in the literature are discussed in an inclusive review of pa sites in Murihiku. Information was collected for each site in regards to how it was identified as a pa. This was done primarily through a critical examination of the available literature, both published and available unpublished, as well as in-field assessments when required. Using this method, a critical examination of the sites identified as pa in Murihiku will be undertaken in the following chapter, and the sample of pa sites in Murihiku established.

# 4.2 Identifying Pa in Murihiku

The method for this thesis was, in the first instance, to find any site that had been referred to as potentially enclosed or defendable in Murihiku. Secondly, this thesis utilises the method to ascertain attributes that the identification of sites in Murihiku was based on. The period that these sites represent was restricted to pre-1840 as this reflects the prehistoric/ protohistoric, including the two attempts to invade the south with muskets by Te Rauparaha in the early 1830s, and a Ngati Tama taua in 1836 (Crosby 1999). This focus on pre-1840 sites was required as the meaning of the word pa changed and no longer necessarily referred to a fortified place after this date (see Chapter Two). Although archaeologists tend to agree that pa were a

post-1500 phenomena (Schmidt 1996); sites that were suggested to have been defensive, but were considered to have been occupied pre-1500 were also investigated.

Information was sourced from a number of places, including the NZAA Site Records and general literature in order to thoroughly identify and investigate a list of proposed pa sites. Furthermore, records of oral traditions, early European accounts and archaeological research were investigated. A set of criteria was established in order to collect and critically assess the information known about each site. New information was also obtained from field visits when required and practicable. A more detailed study of some sites was conducted based on criteria that were required due to the inclusive nature of the study. Nonetheless, a number of limitations have been identified and subsequently addressed.

## **Identifying Defendable Sites**

Sites were identified for the study area of Murihiku. As many documents were electronic and available online, keyword searches were used to identify these pa sites.

Key search words were used to search for pa including:

- Pa, paa;
- Enclosure, enclosed, enclose;
- Fort, fortification, fortified; and
- Defensive, defence, defended, defendable.

## 4.2.1 Avenues Searched for Pa Sites

### NZAA Site Records

The NZAA Site Recording Scheme has resulted in the collection of recorded archaeological sites, each with an NZAA Site Record Form containing a section labelled 'Site Type'. Here the site recorder fills in the type of archaeological site they consider to be present. There are no set categories although the NZAA field books are often used as guidelines (Daniels *et al.* 1979; Walton 1999). NZAA Site Records were searched using CINZAS for site types that included the key search words (see above).

NZAA Site Records were obtained for sites for the following reasons:

• The site had a site type that included the word pa/ paa/ pā. A search of the CINZAS database was carried out to obtain these sites;

• The site was designated as pa or an enclosure based on oral traditions, European accounts, or archaeological research, and a record existed for that particular site even though it was not recorded as a pa within the NZAA Site Record; and/ or

• The site was identified as a pa but the NZAA Site Record did not designate its site type as pa. This can occur because the said pa site has not been physically located, and is therefore often included in a NZAA site record within close geographical proximity. Alternatively, the suspected pa site is included in the site record under the site type that specified the archaeological material identified at the site, e.g. midden.

## **Literature**

Both unpublished and published literature provided information regarding details from any sites considered to have been enclosed in Murihiku. Unpublished literature included NZAA Site Records; unpublished reports, including excavation and commercial reports; as well as academic theses and reports. Unpublished literature was obtained from the New Zealand Historic Places Trust (NZHTP) using the key search words (listed above) and via a manual search of all hard copies of the NZHPT unpublished literature held at the University of Otago Anthropology Library. Furthermore, unpublished literature is included in the NZAA Site Records. For any site referred to as a pa (or any of the search words), a review of that source was conducted to identify any other pa sites mentioned.

Searches were also conducted to obtain any published literature, or literature that was held at the search location that identified or discussed pa sites in Murihiku. The University of Otago and Hocken Libraries (both located in Dunedin) contained the majority of the literature consulted, so searches of the catalogues were made and subsequent searches of the written source or maps was carried out to identify whether the author had documented other pa sites. In addition, the Hocken Library holds early survey maps that were consulted for pa sites. The Maori Land Court Records (Hocken Library) were consulted but no relevant information was obtained.

Three online databases were searched using the key search words (listed above). These were: The New Zealand Electronic Text Centre (www.nzetc.org) that holds early European publications, Papers Past (www.paperspast.natlib.govt.nz) that holds historic newspapers, and the Waitangi Tribunal Records (www.waitangi-tribunal.govt.nz) relevant to the Murihiku area.

# 4.2.2 Source Types Consulted

When searching the NZAA Site Records and the literature, three types of information sources were used to identify sites considered to be defended in Murihiku: records of oral traditions, early European accounts, and archaeological research. A single site may have been identified using one or more of these and this was noted for each site.

## Records of Oral Traditions

Oral traditions subsequently written can contain a number of variables and biases. Some give details, while others give the most minor facts. The writing down of these traditions can be influenced by the European writer (Anderson 1998). For example, a European's use of the word pa may not reflect the original meaning in the oral tradition (Hamel 2001 and Chapter Two). Furthermore, oral traditions tend to only focus on dramatic events, and may miss the everyday ordinary activities that occur (Anderson 1998). In relation to pa sites, oral traditions tend to focus on battles or prominent figures and do not specifically focus on the morphological features or details of pa sites.

## Early European Accounts

European explorers and writers wrote accounts and details about the locations of what they considered to be pa. In Murihiku, Europeans first arrived in the area with Captain Cook's visit in 1769 (he did not identify any pa), followed by frequent visits by sealers from the 1790s and the permanent settlement by Europeans in the 1820s and 1830s (Church 2008).

#### Archaeological Research

Some archaeological sites have been identified by researchers as pa. The archaeologist has therefore considered the location or a feature at the site as possibly having a defensive element and hence, the whole site may have been defendable.

# 4.3 Investigating Murihiku Pa Sites

Investigating possible sample bias in the identification of pa sites in Murihiku involved two steps. The first was to research the literature to obtain written information regarding the sites. The second was to test the information on the ground through field visits and surveys.

## 4.3.1 Literature Investigation

For each site, specific points of information were obtained where possible. Each piece of information was critically assessed in regards to its limitations (see limitations section below). Any questionable information that lacked multiple sources of evidence was noted.

In addition to relevant background information, these points were:

# Site Name/s

This included the Maori name, when known, for the pa. However, the Maori name may not refer to the entire archaeological site as the site may have included several occupation phases. Furthermore, there may have been variations for a single site name and these were noted.

## General location

The area, as it is known now, where the reported pa was located.

### NZAA Site Record Number

This is the official number given to an archaeological site through the NZAA Site Recording Scheme.

# Site Type

Taken directly from the NZAA site record form, if one was available, in order to identify how site recorders are identifying sites that were potentially defendable. It was also noted whether or not the site type included the word pa.

# Location Information

The types of natural features in an area that may help enclose a site tend to be related to the location of the site. Furthermore, the location was recorded in order to see if Murihiku pa followed the trends of other pa sites in New Zealand and whether archaeologists were

identifying them in the same ways. Nine general location types were identified for Murihiku pa, and were defined as follows:

- Bay: Flat land behind the beach.
- Bay/ swamp?: Sand dune within a bay. 'Swamp?' refers to the concept that the area is now a sand dune, but may have been a swamp when the site was occupied.
- Headland: A high point jutting out to the sea that does not have an isthmus.
- Hillside: The slope of the hill.
- Hill top: The geographically highest point of a hill.
- Island: A piece of land surrounded by water, in this case, the sea at the high tide mark.
- Peninsula: A piece of land jutting out from the mainland into the sea with an isthmus.
- Riverside: Inland near a river, situated near or on an old river terrace.
- Swamp island: A piece of land surrounded by swamp.

These were identified by field visits, inspection of topographic maps and aerial images via Google Earth (n.d.), Bing Maps (n.d.) and regional councils.

# Archaeological Material at the Site

For a site to be considered an archaeological site it must contain physical remains (Walton 1999:3). It was therefore of interest whether archaeological materials were present at the site or if a site had been recorded despite no material evidence. Variables such as excavation, erosion or even fossicking can influence the identification of archaeological material so this was also noted.

# Attributes Indicating a Pa

This section stated the specific attributes lending weight to the site being considered an enclosure and pa. The choice of attributes used to identify a pa came from the three sources above. At some sites, the reasons were specifically stated. However, others were part of the site description yet others were described as a pa with no justification.

# Occupation Period

The occupation period of a site refers to when it was established and occupied as a pa. Sites identified as enclosures solely by natural features complicate this. As this is a modern interpretation, it was unknown if these features were considered as enclosing at any stage of the Maori occupation of the site. Any indications whether or not this was so were noted.

Sites were loosely grouped, firstly as 'prehistoric', 'historic' or 'unknown' based on archaeological material, oral traditions or accounts from European visitors. 'Historic' indicated that the site had either European material present, was visited by a European, or is suggested by tradition to have been used after the arrival of Europeans and muskets. If a more specific chronological time period was available, this was included.

There are a number of issues associated with the dating of sites in Murihiku, including radiocarbon dating and the delay between the arrival of Europeans in the area and associated written records of the area. Radiocarbon dating is difficult for the late prehistoric period in both Murihiku and other sites from the late pre-historic period throughout New Zealand (Anderson 1998:7). Date ranges tend to be large, making any chronological ordering difficult. Therefore, other sources have been used to try and determine the occupation period of a site. Oral traditions have been used to estimate time periods based on generations, and continue to be used to approximately date events (Anderson 1998). The dating of pa in Murihiku draws heavily on oral traditions rather than radiocarbon dates alone and the limitations of this method must be kept in mind.

### Early European Site Visitation

The reasoning for this part of the research was to establish whether the site was in use during the historic period, when muskets were available, as there was a design shift in the layout of fortified sites (see Chapter Two). This section also investigated what early Europeans wrote about the places they visited. Drawings and records left by Europeans are primary sources of information that investigate not only the sites, but also how Europeans were recording and interpreting their surroundings.

#### Suggestions of Site Function

Any information relating to the use or function of the site was collaborated in order to interpret the site itself and its context in the wider archaeological landscape.

# 4.3.2 Sources Used to Obtain Information on Murihiku Pa Sites

A wide range of sources were consulted in order to obtain the information required for each site. These included NZAA Site Records, literature, maps and aerial photos, field survey, and personal communications. Unlike the search for sites using key search words as described in

the previous section, each source was searched by the specific site, using the name/s and location of the site.

# NZAA Site Records

From late 2009 the NZAA Site Records became available online through the web database 'NZAA Archsite'. As this research occurred before and after the files were placed online, both paper files (the Otago pa sites) and online records were obtained. Some variations occur between the paper records and the online records, for example, some photos have not been uploaded.

# Archaeological/ Ethnohistoric/ Historic Literature

Literature, sourced from the resources outlined in the above section, was searched using the specific name/s and locations of sites.

# Maps and Aerial Photos

Sites that were listed as defendable were searched for relevant survey maps and aerial photos. The 'Quickmap' programme was used to search for survey maps to check for the identification of places as pa, or to link the names of pa to particular places. Any location identified as the locality of a pa was manually searched for any maps covering the geographic vicinity. Aerial photographs were obtained for all sites with known locations, from either regional council online databases, Google Earth (n.d.) or Bing Maps (n.d.). Some sites could not be narrowed down to a particular location and so were not included in the detailed study and were instead listed in Appendix One.

## Personal Communications

As the project went on, there were a number of people, particularly archaeologists, who proposed sites that may have been pa, and therefore warranted further investigation. Archaeologists, iwi and landowners also passed on information that was unpublished about sites that were thought to be pa.

# 4.3.3 Field visits

Whenever practical, field visits were undertaken to check information from the literature. Field visits were required if the information for the site was ambiguous or there were contradictions between information sources. Other sites were visited to record examples of attributes that

occur at Murihiku pa sites. Some sites were not visited because their exact location was unknown; they had good literature resources; they had been destroyed; or are currently overgrown and/ or have no surface features. Further information regarding these sites is in Appendix Two and their locations are identified on the map in Figure 5.1.

The following sites were visited:

• Cape Wanbrow (May 2010): It has been suggested this site was naturally defendable (Hamel 2001), and aerial photographs showed ditch like features in the paddock behind the eroding beach that required field inspection;

• Te Raka ea Hine atea Pa, Katiki Point (October 2010): This site may have had a ditch (Brailsford 1981) so was visited and photographed to clarify this;

• Cornish Head (June 2010): This site appeared to have been defendable based on aerial photography (NZAA Site Record J43/42) and by Phil Latham (pers. comm. 2010). The site has not been inspected in recent NZAA Site Recording Scheme upgrades as the coordinates were incorrect and was therefore visited;

• Pa a Te Wera (June 2010): This site is complex but is regarded as the, "most impressive earthworks site in Murihiku" (Brailsford 1981:220). The site was therefore visited to inspect the earthworks;

• Omimi (May 2010): There is uncertainty whether the 'ditch' at this site is natural or cultural (Hamel 1977b), and it was therefore visited for clarification;

• Mapoutahi (June 2010): Mapoutahi was field checked, as the site has examples of ditch and bank features (Anderson 1983c; Anderson and Sutton 1973; NZAA Site Record I44/17), the only other besides Pa a Te Wera;

• Camp Hill (May 2010): There is a dispute as to whether the ditch and bank at this site is cultural or natural. Simmons (1967b) recorded them as established from a natural river cut. However, Hamel (pers. comm. 2009) believed the area was a mining camp. The land owner (Jill Neame) reported scheelite mining occurred in the area in the 1960s;

• Putatara (December 2009): There had been a report of a pa in this area by Department of Conservation employee Phred Dobbins (Rachael Egerton pers. comm. 2009) that had not been field checked. Both the East and West Ruggedy sites were checked as they have been claimed as the site of the pa (NZAA Site Record D48/1; NZAA Site Record D48/2);

• Teraepuha and Otaheiti (June 2010): Both of these sites were visited as they were recorded as historic pa sites (Hamel 2001:64; Steven 1976; Taylor 1952:139), but did not have a lot of information connected with them;

• Pa o Ngatikuri/ Papanui Inlet (October 2010): This site was visited as the location was only known as being a "<sup>1</sup>/<sub>4</sub> mile" from a recorded site (NZAA Site Record I44/106). The site

was thought to be the headland above the site (Phil Latham pers. comm. 2010). A 1901 map of the area drawn by O'Neil had a label 'pa o Ngati kuri' located on a headland further west that was the right distance from the known site. Neither area had known archaeological sites, both were visited for clarification;

• Pa a Tu Pari Taniwha (numerous visits April-June 2011): This site was visited as it was tested as a site that had no visible archaeological evidence, but strong oral traditions indicate that it was the location of a pa (Joseph 1899; Taylor 1952:181);

• Omoua Pa (December 2010): Was reported to have had a ditch that was destroyed, as such the site was visited to confirm this (NZAA Site Record I45/25). It is also tied by oral tradition to Pa a Tu Pari Taniwha and Whakapaupuka (Joseph 1899; Taylor 1952);

• Whakapaupuka (May 2011): This site is linked by oral traditions to Pa a Tu Pari Taniwha and Omoua Pa. It is the only one of the three that has confirmed archaeological material (NZAA Site Record H45/5). However, the most recent information in the NZAA Site Records came from the 1970s;

• Otauira Pa (February 2011): While Beattie (1920a:194) indicates that this was the location of a pa site, and there is a recorded archaeological site in the area, no archaeologists have suggested any link between the two, therefore confirmation was required;

• Te Kiri o Tunoho (February 2011): Little is known of this site and it has not been visited by archaeologists in recent times so the reports from the first half of the 1900s of fortifications required infield confirmation; and

• Whareakeake (November 2009): Varies from the usual naturally defendable location of pa in Murihiku, but has been identified as a possible pa (Hamel 2001).

## The following sites were not visited:

• Te Waiateruati: A well documented site (Brailsford 1981) and easily visible from aerial photographs;

• Te Kapa, Huru Huru's pa, Anchor Island and Pa a Te Whara: Are well documented as currently having no visible archaeological evidence (NZAA Site Record A44/3, 4, 23, 27-29; NZAA Site Record B45/40, 41; NZAA Site Record J41/60; NZAA Site Record J41/62). The latter two are also difficult to access;

• Pukekura, Tarewai Point and Aurakitaurira: Have been investigated by archaeologists (Hamel 2005; Leach and Hamel 1978:239; NZAA Site Record J44/3; Skinner 1960), all three have been excavated; they are now largely destroyed;

• Otipua and Brinns Point: Show little evidence of being pa (Hall-Jones 1956:50; NZAA Site Record I43/38), and have no known archaeological evidence suggestive of pa site;

• The stream outlet at Long Beach, Te Anau and Freshwater River: Do not have known specific locations (Hamel 2001:66; Hall-Jones 1968; NZAA Site Record D48/8); and

• Parangiaio: The location of a small excavation but no other archaeological material is known from the site, nor are there any identifiable defensive features (Coutts and Jurisich 1972). The site is also difficult to access.

### Method for Field visits:

For each site that was visited, the information gathered during the literature search was assessed in the field. Sites were identified on the ground through visible surface features, GPS coordinates obtained from NZAA Site Records and aerial maps. Once the location of a reported site was ascertained any archaeological features and enclosed areas including those using natural features were photographed and a site plan produced.

### 4.4 Organisation of Results

Specific locations and other information was not available for all suggested pa sites. A name or vague location is all the information available for some pa. Sites were included in the detailed study if:

• The site had an NZAA Site Record that was dedicated to the occupation of the site when it was presumed to be used for defensive purposes;

• The site had an NZAA Site Record that identified an archaeological site at the location of the suggested pa site;

• The site had been documented as a pa site and required a field visit (see above for reasons for field visits); or

• The site had been documented to have been a pa site and had a specific, known location. The site was not necessarily identified as a pa within the NZAA Site Recording Scheme.

Sites that did not meet the above criteria had only the name, location and references that mentioned the site recorded (Appendix One). Those sites with less information recorded about them may, or may not exist, however, a ground search for these sites was outside the scope of this thesis.

# 4.5 Limitations of the Methodology

This thesis endeavours to ensure that the limitations of the method used in identifying pa sites were minimised as much as possible but note that some could not be avoided.

## Limitations of Sources of Information

There were a number of limitations that resulted from using literature sources to identify and examine pa sites. The use of oral traditions written down by Europeans, ethnohistoric sources and archaeological research all have their own limitations that require the information to be critically examined.

As identified above, the use of written records of oral traditions requires careful, critical examination. In Murihiku, there is a focus on traditions associated firstly with Ngai Tahu, then Ngati Mamoe and finally, for which there is limited information, the Waitaha and Te Rapuwai (Anderson 1998; Carrington *et al.* 2008). This corresponds with the arrival of these iwi in the south, Ngai Tahu being the most recent. While Anderson (1998:60) warned that traditional histories are, "shaped and reshaped to reflect the views of those who constructed and transmitted them", they provide useful information about pa in Murihiku.

Early European records also contain bias, both in general and in the context of Murihiku. Ethnohistoric accounts have been used for this thesis but the shortcomings of their use must be recognised. European accounts include notes made by early European explorers through to ethnographic data from authors such as Best (1927) and Firth (1957). Many early European explorers left accounts of their journeys that may have been influenced by their own views and Eurocentric outlooks. Another issue with the use of ethnohistoric records is the speed at which Maori society changed after the arrival of Europeans and the delay between initial European contact and the writing of many of these ethnographic texts, such as Best (1927) work (Salmond 1997; Sutton 1986). The first detailed written accounts of Murihiku were not recorded until the 1830s and 1840s, about 40 years after Europeans first arrived in the area, and after the first musket was used in 1825 (Anderson 1998; Crosby 1999:158-9). Information from ethnohistoric records must therefore be used critically in order to recognise and address the problems of using these accounts.

There are a number of limitations associated with using site records and research sources for identifying and examining pa in Murihiku, including the following:

• Archaeologists and others do not always justify or explain their identification of a site as defendable;

• A feature may be incorrectly identified as an enclosing feature;

• It is sometimes difficult to ascertain whether a feature is natural or cultural without invasive investigation; and

• The interpretation of natural features considered as possibly having had an enclosing function is open to bias. If the author simply writes that a site is located in a defensive position, then an interpretation of what makes the location defensive can be open to speculation (see Chapter Three).

## Critically Assessing Information

Identifying and comparing the attributes used to identify different sites as pa can be prejudiced and may not reflect the contextual setting of each site. A problem with assessing features that identify a pa site is that they may no longer exist or be visible. For example, palisades are usually only visible during archaeological excavation, so if a site has been excavated there is a greater chance of these fortifications being identified at the site. Alternatively, a site may be reported to have a fortified feature that is no longer visible due to fire, erosion, the passing of time and so on. However, these are all problems encountered in archaeology and must be recognised and addressed. More systematic excavations could help to remedy the situation.

There can be problems identifying features due to coastal slumping and erosion. There has been erosion on the east Otago coast. Along this coast "The soil is subject to slumping and subsequent formation of slump terraces which have been modified for use as habitational terraces elsewhere" (Trotter 1967a:235). This can make the identification of features as natural or cultural difficult without excavation.

## 4.6 Summary

The previous chapter outlined ten attributes used by archaeologists to identify pa (see Figure 3.5). This chapter outlined a method to identify known pa in the literature. Sites suggested to have been pa were identified for Murihiku from oral traditions, early European accounts and archaeologist's research. For each site, information was collected focusing on how and why the site was identified as a defended site. When required and feasible, field visits were made to clarify information. The extensive information assembled for each site is detailed in Appendix Two, while the next chapter critically assesses the identified sites and establishes the sample of Murihiku pa site.

# Chapter Five: Establishing a Sample of Murihiku Pa Sites

"when is a pa not a pa?"

[emphasis original](Fox 1976:22)

# **5.1 Introduction**

The first requisite in investigating why fewer pa sites have been identified in Murihiku compared to more northern areas of New Zealand is to firmly establish the sample of pa sites in Murihiku. A review of the definition of the archaeological pa site in Chapter Three illustrated the need for a more comprehensive method of identifying pa that had greater emphasis on field site identification.

This chapter critically reviews the current sample of pa sites in Murihiku and establishes a new sample based on the methodology from previous chapters. A total of 31 sites have been identified as pa in Murihiku by various authors. The first section of this chapter examines each of these 31 sites to critically assess its status as a pa, and establish the current sample of pa sites in Murihiku.

The second section of this chapter reviews the archaeological data, including chronological and historical data, for the sites currently identified as enclosures in Murihiku. The sites identified as pa and enclosures are discussed as a group to create a greater data pool because many of the sites lack archaeological data. In this way, it is possible to gain a better understanding of the time period as a whole and the generally homogenous cultural material identified at these sites.

# 5.2 Critically Assessing Pa Sites in Murihiku

This section critically assesses the sites identified as pa in Murihiku in order to determine the sample of pa sites in Murihiku. A total of 31 sites were identified as pa for the Murihiku area using the methodology outlined in the previous chapter (see Figure 5.1 and Table 5.1). The material for this section is largely literature based with some in-field observations noted. Future research of unpublished documents, speaking to local iwi and associated people, extensive aerial and ground surveys, as well as happenstance finds may uncover additional pa sites.

This chapter discusses only pa sites that could be related to a specific geographic point. There are a number of other reported pa without specific location details that are listed in Appendix One. These reported pa require field survey that is outside the scope of this research, but could be a starting point for future searches for fortified sites in Murihiku. Knowledge of these sites typically comes from the traditional records, and presents future opportunities to investigate the conflicting interpretations between the archaeological record and traditional histories (Jacomb *et al.* 2010; Potts and McCoy 2011).

Each site identified as a pa in Murihiku will be reviewed in order to determine the level of confidence of the site as a pa. As outlined in Chapter Three, all pa should be enclosures, but not all enclosures are pa. In the strictest sense, archaeologically recognisable pa contain both cultural and natural enclosure features. While traditional pa and natural enclosures should be acknowledged, they are not archaeological pa.

Based on existing evidence, four ordinal levels for sites being considered pa within this research are outlined:

Level 1: Pa. Site has built earthwork enclosures (ditches and banks), natural enclosing features and secure cultural association;

Level 2: Enclosed site, but not an archaeologically visible pa. Site has enclosing attributes including palisades and natural enclosing features, but no earthworks are known;

Level 3: Equivocal, but warrants further investigation; and

Level 4: No, not considered an enclosed site at this time.

These levels provides a general level of confidence of the site as a pa. The sites are outlined and assessed below (for further information on each site, see Appendix Two).



Figure 5.1: Location of identified pa sites in Murihiku (see Table 5.1 for site details).

Site Number (see Figure 5.1)	Traditional Site Name	Site Location	NZAA Site Record Form Identification Number	Site Name for this Research
1	Te Waiateruati	Inland at Orakipaua Creek	K38/12	Te Waiateruati
2	Otipua	Inland at Salt Water Creek	No NZAA Site Record	Otipua
3	Unknown	Camp Hill	E40/13	Camp Hill
4	Te Kapa/ Rapa Pa	Inland at the Waitaki River	J41/62	Те Кара
5	Huru Huru's pa/ Te Punaomaru	Inland at the Waitaki River	J41/60	Huru Huru's pa
6	? Makotuku tuku Pa	Cape Wanbrow	J41/75	Cape Wanbrow
7	Te Raka a Hine atea pa	Katiki Point	J42/20 (also others)	Te Raka a Hine atea pa
8	Unknown	Cornish Head	J43/42, I43/16-7	Cornish Head
9	Pa a Te Wera	Huriawa Peninsula	I43/1	Pa a Te Wera
10	Unknown	Brinns Point	I43/38	Brinns Point
11	Unknown	South of the mouth of Omimi Creek	I44/11	Omimi
12	Mapoutahi	Also known as Goat Island	I44/17	Mapoutahi
13	Unknown	Stream outlet at Long Beach	No NZAA Site Record	Stream outlet at Long Beach
14	Whareakeake	Murdering Beach	J44/20	Whareakeake
15	Teraepuha	Pulling Point	I44/75	Teraepuha
16	Otaheiti	Acheron Head	I44/137-141	Otaheiti
17	Pukekura	Taiaroa Head	J44/4 and others	Pukekura
18	?Rangi pipi koa	Tarewai Point	J44/3	Tarewai Point
19	? Pa o Ngatikuri	Papanui Inlet	Mentioned in I44/106	Pa o Ngatikuri
20	Aurakitaurira	Papanui Beach	I44/1	Aurakitaurira
21	Pa a Tu Pare Taniwha	Outram	I44/11	Pa a Tu Pare Taniwha

Table 5.1: Sites identified as pa in Murihiku (for further information and references see Appendix Two)

Site Number (see Figure 5.1)	Traditional Site Name	Site Location	NZAA Site Record Form Identification Number	Site Name for this Research
22	Whakapaupuka	Ram Island	H45/5	Whakapaupuka
23	Omoua Pa	Henley Hill	I45/25	Omoua Pa
24	Unknown	Upukeroro River Mouth, Te Anau	D43/2 (also D43/1)	Te Anau
25	Unknown	Anchor Island	Mentioned in A44/10	Anchor Island
26	Pa a Te Whara	Specifics unknown - Matuaira/ Spit Island	Mentioned in B45/40-1	Pa a Te Whara
27	Te Kiri o Tunoho	Matariki Island	D46/64	Te Kiri o Tunoho
28	Otauira pa	Waipara Lighthouse peninsula	F47/15	Otauira pa
29	Parangiaio	Parangiaio Point, Ruapuke Island	E48/34	Parangiaio
30	Putatara	Specifics unknown - Ruggedy	Mentioned in D48/1-2	Putatara
31	Unknown	Specifics unknown - Freshwater River	D48/8	Freshwater River

Table 5.1 (cont.): Sites identified as pa in Murihiku (for further information and references see Appendix Two)

# 1. <u>Te Waiateruati</u>

The built fortifications of Te Waiateruati, a musket pa, are still visible today (see Figure 5.2 and Figure 5.3 - Beattie 1919a:48; Brailsford 1981; NZAA Site Record K38/12; Taylor 1952:163-4). Unlike any other pa in Murihiku, but common throughout New Zealand, this musket pa is located inland and on the flat (Jones 1994). While Te Waiateruati is reported to have been occupied from the mid 1700s, the recorded fortifications were the result of the 1831 establishment or renovation of the defences in anticipation of an attack from Te Rauparaha and his forces that would have likely killed or enslaved the occupants as had occurred further north (see Appendix Two - Beattie 1919a:48; Brailsford 1981:232; Crosby 1999; NZAA Site Record K38/12; Taylor 1952:163-4).

# Confidence Level: 1

# Known archaeological material? Yes

*Attributes of pa (see Section 3.5):* Ditch, bank, gun pit?, reported palisade, natural features, and ethnohistoric traditions including recorded gate names.

*Type of enclosure (see Section 3.5)*: Mixed natural and cultural enclosure.



Figure 5.2: Site plan of Te Waiateruati (Brailsford 1981:232).



Figure 5.3: Overlay of Trotter's (NZAA Site Record K38/12) and Brailsford's (1981:232) maps of Te Waiateruati onto Google Earth (2011a).

2. Otipua

The use of the word pa is thought to have been in reference to an eel weir, which can also be referred to as a pa (see Appendix Two - Hall-Jones 1956:50).

Confidence Level: 4

Known archaeological material? No Attributes of pa (see Section 3.5): None

# 3. Camp Hill

There is currently no evidence to support Camp Hill as an archaeological site or a pa. The reported ditch and bank (Simmons 1967b) are unlikely to be built defences (see Appendix Two - field visit 2010).

# Confidence Level: 4

*Known archaeological material?* Unknown if the charcoal in the road cut is cultural or natural *Attributes of pa (see Section 3.5):* None

# 4. Te Kapa

While being referred to as 'pa' by early European visitors (Mantell 1848; Willis in Brailsford 1981:234) and researchers (Brailsford 1981:234; Taylor 1952:95), there is no evidence that this site was an enclosure (see Appendix Two).

# Confidence Level: 4

*Known archaeological material?* Thought to be subsurface *Attributes of pa (see Section 3.5):* None

# 5. Huru Huru's pa

Alternatively identified as a pa (Brailsford 1981:235) and village (see Appendix Two - Anderson 1998:158; NZAA Site Record J41/60). While Mantell's sketch of the site indicates a fence or palisade (see Figure 5.4), the extent of enclosure or nature of the fence/ palisade is unknown.

# Confidence Level: 3

*Known archaeological material?* Thought to be subsurface *Attributes of pa (see Section 3.5):* Fence or palisade?



Figure 5.4: Mantell's 1848 sketch of Huru Huru's pa (Brailsford 1981:235).

# 6. Cape Wanbrow

Located on the slopes of an eroding bank, no known cultural enclosing features exist and the natural features presently do not encompass the whole site (field visit 2010). While there is an ethnohistoric tradition of a 'dwelling' named Makotuku-tuku Pa somewhere on Cape Wanbrow, its exact location is unknown (Taylor 1952:103).

Confidence Level: 4

Known archaeological material? Yes Attributes of pa (see Section 3.5): None

### 7. Te Raka a Hine atea pa

Te Raka a Hine atea pa is the traditional name of the pa located on Katiki Point (Anderson 1998). There are six recorded sites in the area, with the umbrella NZAA Site J42/19 stretching from the mainland, across an isthmus and onto the peninsula (see Figure 5.5 and Figure 5.6). Ethnohistoric tradition refers to the site as a pa and mentions a gate (Taylor 1952:106). The only known tangible evidence of enclosure is the steep cliffs and banks that make up the sides of the peninsula and the two sides of the mainland. The large terraces and midden areas on the landward side of the isthmus are not protected by the natural enclosing features and are vulnerable to downhill attack.

Brailsford (1981:226) referenced a personal communication, which stated there was a shallow ditch present across the isthmus. However, the isthmus is currently bare to the bedrock and any ditch must have been shallow as the soil horizon on either size is no more than 40 cm (as observed by author in numerous field visits 2009 - 2011; area visible in Figure 5.6). Even if there was a ditch, it would not have been a formidable barrier by itself and no palisades have been identified. It should be taken into consideration that the reported 'ditch' may be the result of erosion that eventually led to its current state of bare bedrock.

### Archaeological Evidence

Katiki Point has an occupation layer of up to one meter thick (Trotter 1967a). There are at least twelve levels of terracing extending over an area about 100 by 80 meters, several of which extend over the hill for 60 to 80 meters (Hamel 1986:6). On the landward side of the isthmus NZAA sites J42/61 and J42/76 record an area over 200 by 200 meters containing pits, terraces, small depressions and midden exposed for at least 15 meters indicating the extended nature and area of the occupation of this site.

Trotter concentrated his 1960s excavations on terraces and midden areas, looking for signs of houses and habitation (1967a). He excavated two house sites and began a third. The house remains consisted of burnt totara posts and hearths, and were of such solid construction that Trotter thought they were reflective of long-term permanent occupation. Artefacts at the site included a wide range of lithic material, worked bone, human remains, house-related features and midden suggestive of a late prehistoric occupation (Trotter 1967a). The midden material at the site is of such a widespread nature that the occupation of the site is considered to have been "year after year" (Hamel 1986:7).



Figure 5.5: Map of Katiki Point, location of NZAA Site J42/19 (Te Raka a Hine atea pa - from Bing Maps 2011, NZAA Archsite and field visits, including GPS and tape and compass survey, October 2010).



Figure 5.6: View west of western portion of Te Raka a Hine atea pa, note the exposed bedrock on the isthmus (November 2009).

With the exception of nephrite and obsidian, the assemblage of lithic material from Katiki Point is mostly obtainable locally (Leach and Hamel 1978; Trotter 1967a). Stone sources, particularly chalcedony, chert, porcellanite and agates, are found on Katiki Peninsula, the island south of Katiki, and as cobbles on the beaches north and south of Katiki. These sources have been found not only in the lithic assemblages of Katiki, but also at other sites and pa on the east Otago coast, including Pukekura (Leach and Hamel 1978), Mapoutahi (Anderson 1983c) and Huriawa (Easdale and Jacomb 1984a, 1984b; Leach 1969). While Trotter recorded no obsidian, during a field visit in 2011, the author noted one piece of grey obsidian.

Midden from Katiki Point includes hard shore shellfish and barracouta (NZAA Site Recording Scheme Record J42/65). Hamel excavated midden from two areas where fencing posts were installed in 1989. The midden was analysed and fits the pattern of midden from the prehistoric east Otago coast (see Section 5.3.2, Figure 5.17, Figure 5.18, Figure 5.19 and Figure 5.20 for more detail). The bird species present also suggested there may have previously been forest in the area (NZAA Site Record J42/65).

## Traditional Evidence

Traditions about Te Raka a Hine atea suggest that the pa was established during the late prehistoric, thought to be in the mid 17<sup>th</sup> century (Anderson 1983c:39-41). The only recorded battle at Katiki was reportedly instigated as revenge against a killing that occurred further north. The attackers proceeded to Moeraki from either Tumuku or Kaiapoi. This was part of ongoing skirmishes between various hapu of Ngai Tahu, which included a number of other pa in the area (Pukekura, Mapoutahi, Huriawa and others - see Appendix Two - Anderson 1998:47; Beattie 1916a, 1919a:48, 1920a, 1920b:196, 1922:140; Hamel 1986:5; Roberts 1912:11-13; Stevens 1976:88-90; Taylor 1952:105; Trotter 1967a:237; White 1887:230).

## <u>Is Katiki a Pa?</u>

Pa were often located in areas with natural defences to reduce the initial input of labour required to establish a fortification (Best 1927:140; Jones 1994:44; Walton 2001). This was often countered by the extra labour involved in the long-term collection of resources, although this does not seem to be the case on Katiki Peninsula. Other than access to fresh water and exposure to southerly weather, Katiki is well situated for resources. Stone and food sources are available on the peninsula itself and in the immediate vicinity (see Appendix Two). While the people who named the site considered it a pa, Te Raka a Hine atea pa is a natural enclosure as it does not have any built fortifications.

# Confidence Level: 2

# Known archaeological material? Yes

*Attributes of pa (see Section 3.5):* Questionable "shallow ditch", natural features interpreted as having had a defensive function and ethnohistoric traditions

*Type of enclosure (see Section 3.5)*: The headland portion of the site could be considered a Natural Enclosure and the site is a Traditional Pa

### 8. Cornish Head

The coast in this area is heavily affected by erosion and slumping. This site has natural features that have been suggested to have been defensive, as well as cultural deposits within the bounds of these naturally defendable areas, but requires further research (see Appendix Two - Hamel 2001:64).

# Confidence Level: 3

Known archaeological material? Yes Attributes of pa (see Section 3.5): Natural features

# 9. Pa a Te Wera

At least two pa are traditionally recorded as having been located at Huriawa (see Figure 5.7 and Figure 5.8). Pa Katata is reported to have been an earlier pa (Taylor 1952:114), while Pa a Te Wera refers to the pa occupied by the chief Te Wera, by all accounts, in the mid-1700s (Anderson 1998; Beattie 1916a; Cowen 1960; Taylor 1952:114). Archaeologically visible defences, further examined within excavations, and including more than one phase of construction, consist of palisades, ditches, banks and defensive scarps. Natural features including cliffs and steep banks could have also been used for defence (Cowen 1906:88; Easdale and Jacomb 1984b:1; Knight 1964; MacKay 1961:27).

### Archaeological Evidence

While the whole of the Huriawa Peninsula is considered to have been enclosed, the site is complex and various areas have been the focus of investigation (Knight n.d.). The southern portion of the peninsula has not been excessively investigated, but cultural material including human remains, footpaths, cooking areas, stone work areas and midden has been identified (Easdale and Jacomb 1984b; Knight n.d.: 31.1.1963; NZAA Site Record I43/1). Area B, 'the village' is located on the central knoll with the trig station: "Around the hilltop and extending down the two ridges to the north are numerous terraces made to accommodate house and storage structures, and as level areas for food preparation and other activities" (Easdale and Jacomb 1984b:1-2). Unusual within the settlement, or in close proximity for a South Island pa, Pa a Te Wera is believed to have had access to the water of two springs (Cowen 1906:88; Gathercole 2009:1; MacKay 1961:26).



Figure 5.7: Site plan of Huriawa, location of Pa a Te Wera (Keen and Jacomb 1985 in NZAA Site Record I43/1).



Figure 5.8: Sketch map noting names and points of interest at Pa a Te Wera (Bristow 2000:15).

The defended knoll known as Area A, just south of the existing entrance to Pa a Te Wera, is considered the most heavily fortified portion of the peninsula (Briden 2007:2; Easdale and Jacomb 1984a:2, 1984b:1,8; MacKay 1961:27). Area A has been extensively modified, with the inclusion of five terraces, the topmost a platform; a wall approximately 1.2 meters in height; a ditch; and a large, by southern standards, pit (Briden 2007:2; Easdale and Jacomb 1984a:2, 1984b:1,8; MacKay 1961:27). Two rows of postholes were identified, some still containing wood. The interpretation of these postholes was that they represented temporal change in the alignment of the palisade (Easdale and Jacomb 1984a:2, 1984b:1,8).

During the 1960s excavation an ahi komau was discovered. An ahi komau is a type of pit built into the ground to keep the enclosed embers alive for a long period of time, for example, during a siege or for ritual purposes (Best 1924:70; Briden 2007:2; Gathercole 2009:2; Knight 1964:124). The ahi komau had been filled in, and defensive works built on top. These defences in turn had also been buried by later modifications (Knight 1964).

Excavation of the wall indicated the following sequence (Knight n.d.: 31.1.1963):

- 1. Hillside occupation, if defended then on a higher or lower terrace than it is currently;
- 2. Three meter high wall created by throwing material from a terrace up, creating a ditch at the bottom of the wall;
- 3. Trench dug behind wall with the trench fill thrown on top of wall;
- 4. A palisade erected in the trench, filled using material from above not from the wall;
- 5. Minor wall repairs such as clearing both sides, material added to top of wall;
- 6. Occupation during which cultural material deposited on and around the wall and palisades; and

7. Wall built-up using clay from the ditch at the bottom of the wall.

Area A was the location of multiple phases of structures. A number of ditch features, with postholes inside, have been interpreted as representing up to two house structures, located on the terraces of Area A (Gathercole 2009:1). A posthole found in ditch fill on 'Terrace 2' indicates more than one occupation period or a rebuild on the terraces (Gathercole 2009:1). The features interpreted as houses were found under a cultural deposit rich in chalcedony flakes and other stone debris (Gathercole 2009:1).

Finds from Area A are considerable, as this has been the main focus of excavations. Gathercole (2009:3) noted that, during the 1960s, excavation finds included lithics, particularly chalcedony, but also obsidian; fauna, notably dog, rat, seal, moa, other bird, shell and red ochre (see Section 5.3.2, Figure 5.17, Figure 5.18, Figure 5.19 and Figure 5.20 for more detail). Artefacts included a patu hilt, polished adze fragments, nephrite adze poll fragments, chisels,

adzes, fishhooks, and a bone needle. The stone assemblage of 1051 items analysed from Area A was made up of 78 percent Moeraki chalcedony, 12 percent Katiki point area porcellanite and only eight percent obsidian, 33 grey and three green in colour (Leach and Hamel 1978:249).

The current brushwood fence adjacent to Area A, was constructed in 2007. Cultural material located in the postholes of the fence consisted of midden: shellfish (80 percent rocky shore), fishbone (70 percent barracouta), land snail, mammal (dog and unknown) and bird bone (only Tui was identified), as well as artefacts: five flakes (four chert, one either chert or chalcedony) and a partial bone fishhook (Briden 2007:5). This was considered consistent with other cultural material found in Area A (Briden 2007:6; Easdale and Jacomb 1984a:10-12; Leach 1969:53-57).

During excavations in the southern area of Huriawa, it was thought that all the artefacts found were of chert, likely from Moeraki (Easdale and Jacomb 1984b:6). Many of the flakes had cortex, interpreted as the bringing of small boulders to the site before being broken up as required (Easdale and Jacomb 1984b:6). Other cultural material included pieces of red ochre, broken bird bone artefacts and midden consisting of hard and soft shore shellfish, fish (barracouta 60 percent, red cod 30 percent), dog, rat, seal, bush bird and duck (Easdale and Jacomb 1984b:7).

The midden analysed from Huriawa indicates the use of relatively local resources (Leach and Hamel 1978:247-248). Shellfish was available from the nearby soft shore, estuary and the hard shores of the peninsula itself (see Section 5.3.2, Figure 5.17, Figure 5.18, Figure 5.19 and Figure 5.20 for more detail). Fish remains, partially barracouta, the absence of the genus *Pseudolabrus* and the size of the individuals, indicates fishing was mostly done from canoes. Bird species are mainly shoreline and wetland species, while the majority of dog had not reached maturity (Leach and Hamel 1978:247-248).

The above, while only a brief overview of the cultural remains present at Huriawa illustrates the intensity of occupation at the site. At various locations there is evidence of rebuilt and permanent structures, which indicates this was a location that people continued to occupy for a considerable length of time. Huriawa is considered to have been "intensely occupied" (Knight n.d.: 31.1.1963). Its location commands a strategic position with views north and south (Cowen 1906:88; Easdale and Jacomb 1984b:1).

# Traditional Evidence

Traditional evidence describes Pa a Te Wera as the pa held by Te Wera and his followers, for six months, against a siege by his relative Taoka. The pa is reported to have been well prepared for the siege, and after Taoka gave up besieging the pa, reportedly from a lack of food, it was soon abandoned in favour of settlement by the Waikouaiti River (see Appendix Two - Cowen 1906:88; Easdale and Jacomb 1984b:1; Taylor 1952:117). Sometime later, Te Wera quit the pa and is reported to have travelled to the island at the mouth of the Taieri, Stewart Island and finally Matariki Island (Beattie 1916a:16-17; Cowen 1906; Taylor 1952).

Cowen (1906:88) noted: "The garrison must have been a very considerable one in order to have so successfully held the large pa. The defences appear to have been of unusual strength for a South Island pa, which seldom display such a formidable array of parapets and terraces as those of the North".

# Confidence Level: 1

# Known archaeological material? Yes

*Attributes of pa (see Section 3.5):* Palisades, ditches, banks, defensive scarps, natural features and ethnohistoric traditions including identification of a gate.

Type of enclosure (see Section 3.5): Mixed natural and cultural enclosure

### 10. Brinns Point

The site was noted as possibly being defendable, based on natural features that could have been used for defence (Hamel 2001:64). However, the isthmus to the headland is over 100 meters wide and there is currently no evidence of built enclosing features. A historic cemetery, midden, artefacts and oven are recorded on the peninsula (NZAA Site Records I43/38, I43/63).

Confidence Level: 4

*Known archaeological material?* Yes *Attributes of pa (see Section 3.5):* Natural features but not enclosed

### 11. Omimi

This site is thought to have been defendable based on its location on a cliff top, and the presence of what is likely a natural ditch (Hamel 2001:64). The 'ditch' is located by a steep drop off and is consistent with erosion and slump formation that occurs along that part of the coast, although it has not been confirmed as natural or cultural (see Appendix Two - field visit 2010; Hamel 1977b). Despite some boggy areas, the inland side of the site is unprotected, and excavation did not reveal any built defences (Hamel 1977b; NZAA Site Record I44/11; Peterson 2006). On the current evidence this site should not be considered an enclosure.

## Confidence Level: 4

*Known archaeological material?* Yes *Attributes of pa (see Section 3.5):* Some natural features but not enclosed

### 12. Mapoutahi

### Archaeological Evidence

Mapoutahi has archaeologically identified attributes of pa including visible built fortifications, which, along with the natural features of the peninsula, create a heavily fortified enclosure (see Figure 5.9; Anderson 1983c; Anderson and Sutton 1973; NZAA Site Record I44/17). This site has a considerable quantity of surface features and subsurface material. Built surface features include terraces, ditches, and banks, while multiple palisade rows were identified during excavations (Anderson 1983c; Anderson and Sutton 1973), all indicating a substantial labour input (see Appendix Two).

Mapoutahi is considered to have had a long occupation sequence based on faunal material, long distance acquirement of materials, and the presence of domestic items (Anderson 1983c). Stone material was primarily sourced from local areas. Volcanic stone, phonolite, is available between Mapoutahi and Doctors Point (volcanic stone), while other lithic material came from a greater distance (field visit, 2010; pers. comm. Phil Latham, University of Otago 2010). The 1966 excavation uncovered 98 stone items; including Moeraki chalcedony (nearly half of the assemblage), silcrete, porcellanite and 12 flakes of grey obsidian (Leach and Hamel 1978:249).



Figure 5.9: Map of Mapoutahi (NZAA Site Record I44/17).
Subsistence material recovered from the site indicates at least one summer and one winter seasons worth of occupation. Fishing focused on barracouta and cod; birding was from local colonial nesting birds; and shellfish remains were primarily mussel. Mammals included seal and dog (Anderson 1983c). Faunal evidence indicates local exploitation, at least during the summer (see Section 5.3.2, Figure 5.17, Figure 5.18, Figure 5.19 and Figure 5.20 for more detail - Anderson and Sutton 1973). The presence of needles and the other domestic materials, such as fishhooks, suggests the site was occupied by families, and for a lengthy period of time. Anderson (1983c:35) states that multiple occupations of the site should not be ruled out.

## Traditional Evidence

Traditions outline that Mapoutahi was occupied and successfully attacked during inter Ngai Tahu hapu warfare in the mid 1700s (Anderson and Sutton 1973:107; Bathgate 1904:6; Reed 1947:41; Taylor 1952:120). The east Otago pa sites are reported to have been held by an alliance between two cousins, Te Wera and Taoka, who fell out, which resulted in fighting. After Taoka unsuccessfully besieged Pa a Te Wera, Te Wera went to Stewart Island and eventually Matariki Island (location of the pa Te Kiri o Tunoho). An ally of Te Wera went to Mapoutahi, which in turn was successfully attacked by Taoka, resulting in the death of most of the reported 250 occupants (see Appendix Two; Anderson 1983c:38-40). It is reported that Mapoutahi and Purakanui were declared tapu areas, which resulted in no occupation occurring there after the 1750s attack. A Tohunga eventually lifted this tapu in the 1820s and Maori returned to live at Purakanui (Durry and Paterson 1998:36).

# Confidence Level: 1

#### Known archaeological material? Yes

*Attributes of pa (see Section 3.5):* Ditch, bank, palisade, entrance and suggested gate location, natural features, and ethnohistoric traditions

Type of enclosure (see Section 3.5): Mixed natural and cultural enclosure

### 13. Stream outlet at Long Beach

Hamel (2001:66) reported that Europeans had seen Maori huts in a location that could have once been an island in a swamp. While no further information is known on the 'huts', and further research is required to determine if the area is a former swamp, this site should not currently be considered a pa (Hamel 2001:66).

#### Confidence Level: 4

*Known archaeological material?* No *Attributes of pa (see Section 3.5):* None

#### 14. Whareakeake

The archaeological site Whareakeake is located on the flat area behind Murdering Beach/ Whareakeake, and accounts for the second identifiable occupation of the bay (see Figure 5.10). Excavations revealed postholes, which have been interpreted as a palisade surrounding the village, as indicated by the rich cultural material excavated from the site (see Figure 5.11 and Figure 5.12 - Bell 1956; Hamel 2001:65; Lockerbie 1959:92; Skinner 1959: 224). Records outline that the occupants traded goods, such as potatoes, with Europeans (Church 2008:113). They were also involved in long range resource procurement, as indicated by the high quantity of nephrite sourced from the west coast of the South Island (Bell 1956).

The middle ground of the continuum from open sites to heavily fortified is highlighted by Whareakeake. According to Best (1927:3), permanently occupied villages could be surrounded by a palisade, but should not be considered pa. Best (1927:17) then proceeded to present a conflicting argument by including a type of pa, although inferior, that was only defended with the use of palisades. Archaeologically, it would be difficult to determine the difference between the two (Kennedy 1969:111).

Whareakeake is located in an area that has no natural features that enclose the site. As has been previously addressed in Chapter Three, pa generally require naturally defensive features to be identified. Nevertheless, Whareakeake had a surrounding palisade that would have acted as an enclosing barrier, prohibiting access in much the same way as natural features. The input for the establishment of the palisade surrounding Whareakeake would have required more labour than may have been needed for a naturally defendable area. This would have allowed the

location of the site to be determined and could have lowered the labour input required in the long term, for such activities as access to fresh water (Walton 2001).

The palisade around the later occupation site at Murdering Beach encloses the whole site. If required, the palisade could have acted as a defence, and prohibited access. It should, therefore, be initially interpreted as an enclosure, and thereafter, the use of the site and palisade interpreted.

While no faunal remains have been retained or analysed from the 1950s excavation, the rich material culture links the site to those along the east Otago coast. Leach and Hamel noted:

Almost every item found at Katiki Point, Huriawa Pa and Mapoutahi Pa can be matched closely with one from the vast assemblage from Murdering Beach. The neighbouring open bay settlements at Long Beach and Purakanui are well represented in the Otago Museum collections by artefacts brought in by fossickers. Characteristic of all three sites are nephrite adzes, chisels and ornaments, elaborate notched and barbed fishhooks, fragments of stone and bone clubs, and toggles and flutes of *Diomedea* bone. Tarewai Point, close to Taiaroa Head, shares these characteristic artefact types (1978:248).

Whareakeake highlights the mobility of material in the early historic period, but also the permanency of settlements. The site illustrates the type of village from the protohistoric, but, how and when the settlement was established, and the influence of European trade, requires further investigation. The site does not have natural features that add defence and hence, the site is considered a cultural enclosure.

Confidence Level: 2

Known archaeological material? Yes Attributes of pa (see Section 3.5): Palisades

*Type of enclosure (see Section 3.5)*: Cultural enclosure



Figure 5.10: Oblique Google Earth (2011b) image of Murdering Beach with the location of Whareakeake indicated by the red oval, note this does not indicate the size or shape of the site



Figure 5.11: Units excavated in 1956, including those that revealed palisade posts. The units with the palisade are the four on the right hand side and the postholes are illustrated (Bell 1956: 36).



Figure 5.12: Postholes excavated in 1956 at Whareakeake, including those that have been interpreted as house walls (Bell 1956:37).

# 15. Teraepuha

Pulling Point is reportedly a pa of Taiaroa, however, no visible remains are confirmed on the promontory itself (NZAA Site Record I44/75). During the field visit to this site, a number of terraces and a possible umu/ tree throw were noted that could be further investigated to determine if they are cultural. The NZAA Site Record I44/75 refers to a midden on the side of the peninsula, closer to the bay than the top of the promontory. While the reported site is located on a peninsula (Pulling Point) it is a reported historic occupation site, so it is unknown if the term 'pa' refers to an open or fortified settlement.

Confidence Level: 3

Known archaeological material? Yes

*Attributes of pa (see Section 3.5):* Some natural features but not completely enclosed. Early European writers called the site a pa.

### 16. Otaheiti

Similar to Teraepuha, this peninsula is also reported as a residence of Taiaroa (Anderson 1998:167; Shortland 1851:22; Stevens 1976; Taylor 1952:134). However, Otaheiti contains confirmed archaeological remains of historic occupation (NZAA Site Records I44/137-140). No evidence of fortifications have been described or identified, which could indicate this site was an open settlement rather than a fortified one, with the use of the word 'pa' being the result of European terminology (see Chapter Two and Chapter Four). Natural features that could have been used to enhance defence (Hamel 2001:64) only surround three sides leaving the wide isthmus open.

## Confidence Level: 3

#### Known archaeological material? Yes

Attributes of pa (see Section 3.5): Some natural features but not enclosed and an early European's suggestion.

## 17. Pukekura

### Archaeological Evidence

Pukekura, situated on Taiaroa Head, is widely accepted in Murihiku as having been a pa (Anderson 1998; Hamel 2005; Leach and Hamel 1978; Stack 1877). More than three quarters of the headland is bounded by cliffs restricting access to only the isthmus. Furthermore, steep banks give additional protection within the naturally enclosed peninsula (Leach and Hamel 1978:247; NZAA Site Record J44/4). While it is clear that people occupied Taiaroa Head during the prehistoric period due to the presence of prehistoric midden (see Figure 5.13 - Leach and Hamel 1978; NZAA Site Record J44/77), the supposed built defensive features are currently questionable.

Taiaroa Head has been considerably disturbed by European modifications (Hamel 2005; Leach and Hamel 1978). It is thought that the original ditch and bank across the neck of the headland are at the end of Harrington Point Road, the current location of the 1888 stone parapet (Hamel 2005:1; Knight 1979:28; NZAA Site Record J44/4). A salvage excavation crossed this stone parapet and was reported on in 2005: "The ground surface followed the line of the present ground surface dipping down from the road edge towards the parapet, lending credence to the

belief that a Maori ditch and bank parapet existed on the site of the present stone wall parapet of the European fortification'' (Hamel 2005 in NZAA Site Record J44/4).

Although there is currently only a small sample, the material culture and midden from Taiaroa Head is similar to other late prehistoric sites on the east Otago coast. The midden at NZAA Site J44/77 on Taiaroa Head contained faunal remains from local resources. Midden was exposed for about 2.5 meters when a terrace was cut into the area in 1972. The 30 cm layer contained fish bone (84 percent barracouta); bird bone from seven different species; mammal bone (dog, seal and human), shellfish from three different species; and charcoal (see Section 5.3.2, Figure 5.17, Figure 5.18, Figure 5.19 and Figure 5.20 for more detail - Leach and Hamel 1978; NZAA Site Record Form I44/77). The resources are local and similar to other pa sites in the area (Leach and Hamel 1978).

A small assemblage consisting of three items were excavated from Taiaroa Head in 1972. One of the flakes excavated was green porcellanite, thought to have been obtained from Moeraki Peninsula (Leach and Hamel 1972:245; Trotter 1967a:242). The second flake from this excavation was a grey obsidian. With regards to a bone point recovered, Leach and Hamel (1972:246) stated: "In shape and cross-section it is more similar to the tooth of a hair comb than to a needle. A comparison with whalebone combs from Murdering Beach showed marked similarity in tooth shape, cross-section and appearance of the bone". Although only a small number of items, they highlight the trade networks in place between the occupants of this site and other groups that allowed them access to these material resources.

# Traditional Evidence

Ethnohistoric traditions indicate that Pukekura was established around 1650 and was an important site for Ngai Tahu for over 100 years (Anderson 1998; Leach and Hamel 1978:240; Stack 1877). The establishment of Pukekura is reported to have been the first move by Ngai Tahu into the area (Leach and Hamel 1978:240; Stack 1877). The coast was a vital resource location for people living in Murihiku, and the establishment of a site at the head of the Otago harbour, over an area requiring continued occupation by someone who did not have ahi kā (manawhenua) (Garven *et. al.* 1997:27) would have been a bold statement. Pa have been argued to have been symbols of group identity (Allen 1994; Irwin 1985; Marshall 2004; Phillips and Campbell 2004; Walter *et al.* 2006) and Pukekura may be a local example of this.



Figure 5.13: Oblique Google Earth (2011c) image of Taiaroa Heads/ Pukekura (NZAA Archsite; Google Earth 2011c; Hamel 1994; Hamel 2005; NZAA Site Records J44/3, J44/4, J44/71, J44/77, J44/103, J44/148, J44/151, J44/152, J44/154 and J44/158).

An account about the Ngai Tahu chief Tarewai describes Pukekura as the location of tensions with a Ngati Mamoe hapu who established a palisaded enclosure, known as Rangipipikoa, on the hill opposite Pukekura (Leach and Hamel 1978:242-3). Whether this was an inter-iwi conflict, or represented inter-hapu conflict is unknown, as is the time of this conflict. In the story of Tarewai, the Pukekura occupants spoilt fishing grounds at Papanui out of jealousy, an aggressive move on another's manamoana (mana over the sea). Continued retributions led to the Ngati Mamoe establishing their "last pa", Pa a Te Whare, at Preservation Inlet, where they were reportedly defeated by Ngai Tahu (see Appendix Two - Anderson 1998).

The traditions associated with Pukekura highlight the local focus, particularly in regards to subsistence. The traditions outline the importance of the fishing grounds and immediate resources. They also provide a link into wider events, for example, the movement of people south and the conflict between hapu in the wider area.

## Is Pukekura a Pa?

There is a lot of evidence to suggest Pukekura is a pa. However, confirmed tangible evidence of built defences is currently lacking. While there is some evidence for a ditch and bank, further research in the form of excavation is required to confirm this theory and the status of Pukekura as an archaeologically visible pa site.

### Confidence Level: 2

## Known archaeological material? Yes

*Attributes of pa (see Section 3.5):* Possible ditch, natural features, ethnohistoric traditions and early records from European visitors

Type of enclosure (see Section 3.5): Likely mixed natural and cultural enclosure

## 18. Tarewai Point

Tarewai Point has now been greatly disturbed by European activities, but was excavated by Teviotdale in the 1930s and no fortifications were noted (extracts from Teviotdale's Diary, Hocken Library; relevant copies of entries in NZAA Site Record J44/3). However, this site is argued to have been defended via two sources. Firstly, Leach and Hamel (1978) thought that the site may have been within the main defences of Pukekura pa, despite the site being located outside the current defensive wall assumed to be the location of a prehistoric ditch and bank. Secondly, (Knight 1979:13) suggested that Tarewai Point was the location of Rangipipikoa, traditionally the pa of Ngati Mamoe and reported to have been located on the hill across from Pukekura (Anderson 1998:55). While this site was traditionally reported to have had a palisade, Knight described it as a village rather than a fortified pa. Furthermore, Rangipipikoa was traditionally believed to have been occupied and burnt during the prehistoric, while the site Teviotdale excavated contained historic material (Anderson 1998; NZAA Site Record J44/3). On the basis of current evidence Tarewai cannot be considered enclosed.

# Confidence Level: 4

*Known archaeological material?* Yes *Attributes of pa (see Section 3.5):* Some natural features but not enclosed

# 19. Pa o Ngatikuri

MacArthur (1951:47) wrote of a strongly fortified Maori pa a quarter mile landward from a site he was excavating, now considered to be NZAA Site I44/106. About a quarter mile west from I44/106 is a large flat area on a headland surrounded by cliffs identified as 'Pa o Ngatikuri' by Stevens (1976:27). However, this area contains no known archaeological material, nor was any identified when the site was visited by the author in April 2010. Yet, directly below the cliffs, a midden site is located (NZAA sites J44/45 and J44/104) indicating activity in the vicinity. Immediately to the west of I44/106 is a high outcrop that is mostly naturally enclosed. While no cultural material is known, this outcrop would be suited to a refuge pa (Phil Latham pers. comm. 2010; field visit 2010). Another large site, NZAA Site 144/6, is located just seaward of I44/106 and has terraces, extensive midden and three burials that were excavated in the 1940s (NZAA Site Record 144/106; field visit 2010). While the southern side of Papanui Inlet is rich in sites, further investigations would be required to verify the existence and location of this pa.

## Confidence Level: 3

### Known archaeological material? No

Attributes of pa (see Section 3.5): Assumed natural features and ethnohistoric tradition

## 20. Aurakitaurira

Aurakitaurira, better known as Little Papanui, was extensively excavated between 1929 and 1931, and again in 1965 (see Appendix Two). The site was interpreted as a seasonal fishing camp (NZAA Site Record I44/1; Skinner 1960). No mention was made of the site being enclosed or defendable. It is identified as a pa based on ethnohistoric traditions (Taylor 1952:138). Consequently, three conclusions are possible. Firstly, the site is not the pa referred to in the ethnohistoric tradition. Secondly, the site is not a fortified settlement, and has not

been referred to as a pa in this regard. Thirdly, the site was regarded as a fortified pa but the enclosing features are currently archaeologically invisible. For example, the palisades were not discovered, as only the internal area of the site was excavated. Based on the archaeological evidence, the first two options are more likely than the third. Therefore, while the site may be referred to as a pa, it has none of the features attributed to fortified sites. This signals that caution should be used when identifying pa based on ethnohistoric traditions.

Confidence Level: 4

Known archaeological material? Yes Attributes of pa (see Section 3.5): None

# 21. Pa a Tu Pare Taniwha

This site is recorded by ethnohistoric traditions as having had a double palisade and as being occupied by 240 warriors from the northern South Island for a short time. The location is reported to have been on what was once a swamp island (Joseph 1899; NZAA Site Record I44/11; Taylor 1952:181). This former island is reportedly the find spot of two adzes (pers. comm. Brian Allingham 2011). This site is a naturally defended site and enclosure, but requires further research.

Late in this research, new equipment became available at the University of Otago that allowed geophysical survey to be conducted using resistivity. It was decided that this was an opportunity to test the problem of sites identified as pa that have no known archaeological material but natural features that could have been used for defensive purposes. Amoka, on the Taieri Plains, the reported location of the traditional pa Pa a Tu Pari Taniwha (I44/11) was chosen as it fitted these criteria, was easily accessible and all interested parties agreed to the research. Furthermore, the mound was once a swamp island before Europeans drained the plains for farming and so had a distinguishable boundary within which a reasonable area could be surveyed (Potts and McCoy 2011).

A geophysical survey using resistivity was targeted at gaining information that could possibly indicate if there were any cultural features remaining in the area. A total of 28 squares of 20 by 20 meters were surveyed. Subsequently, test excavations were undertaken in order to determine the nature of anomalies identified in the resistivity survey, including three two by six meter areas and nineteen spade test units (Potts and McCoy 2011).

While the results of the resistivity survey suggested further excavation was warranted, subsequent test excavation identified no material culture or features. This may mean that, while targeted at identified areas, excavations missed intact deposits; or more likely, that the site was destroyed, or that the location of the pa site was not at Amoka (Potts and McCoy 2011). Consequently, this investigation highlighted the importance of further investigation of this type of site. In addition, this investigation supported the need to critically investigate ambiguous pa sites.

## Confidence Level: 3

*Known archaeological material?* Reported find spot *Attributes of pa (see Section 3.5):* Natural features and ethnohistoric traditions

## 22. Whakapaupuka

Located on Ram Island on the Taieri Plains, no built fortifications have been identified at this reported pa site (Beattie 1944:39; NZAA Site Record H45/5; Roberts 1913:35; Taylor 1952:180) and its enclosure derives naturally from its location (see Figure 5.14). An island in the middle of a swamp, this site would be difficult to access, and anyone approaching it would be visible. Steep sides on the island further increase the difficulty of access. The location of known archaeological material is above a steep incline on the northern portion of the island (field visit 2011). While the site recorders advocate the potential of palisades (NZAA Site Record H45/5), it is currently identified as an enclosure based on its natural defences.

Archaeological evidence on Whakapaupuka includes now destroyed umu ti (pers. comm. Steve Bryant 2010) and an occupation layer in a road cut from which silcrete flakes have been identified (field visit 2010; NZAA Site Record H45/5). The locations of these are near the high point of the island, from which the surrounding area can be seen. The area where cultural material is currently visible is not the most suitable living area due to its exposure to wind, and there is a sheltered bay further to the west (pers. comm. Steve Bryant 2011). The current archaeological evidence reveals little about the type or length of occupation on the island.



Figure 5.14: Plan of Ram Island/ Whakapaupuka (field visit 2011; Bing Maps 2011; NZAA Site Record H45/5)

Whakapaupuka is the traditional location of the pa of Tukiauau, a Ngati Mamoe chief, who came south from Marlborough after killing a Ngati Tahu chief around 1720 (Joseph 1899; Sutherland 1962:8; Taylor 1952:180). The island itself was located in a resource rich area, which is given as the reason for the location of the pa (see Appendix Two - Joseph 1899; Sutherland 1962:8; Taylor 1952:180). The traditions state that the site was not occupied for a great length of time as Tukiauau became afraid of attack, and moved to Stewart Island (see Appendix Two - Joseph 1899; Sutherland 1962:8; Taylor 1959; Sutherland 1962:8; Taylor 1952:180).

The position of this site on the Taieri Plains is in a resource rich wetland (pers. comm. Steve Bryant 2011). The use of defence in this case appears to have been a response to inter-hapu disputes and revenge. This fits within the theories for the use of defendable places that have been proposed by Leach (1978), Orchiston (1979) and Anderson (1982a:123, 1998).

Confidence Level: 2

Known archaeological material? Yes

Attributes of pa (see Section 3.5): Natural features and ethnohistoric traditions

Type of enclosure (see Section 3.5): Natural enclosure

#### 23. Omoua Pa

While this site is reported by ethnohistoric traditions (Anderson 1998:43; Beattie 1916a:9,11; Joseph 1899; Roberts 1912:35, 1913:80; Taylor 1952:180-81) to have been a strongly fortified pa with palisades, its exact location on the ridgeline is unknown. It is reported a ditch, thought to have been near the existing water tank, was bulldozed in the 1960s (NZAA I45/25). While the ridgeline affords excellent visibility and cliffs on either side that could be used for defence (field visit 2010), there is no known archaeological material recorded from the site, and further research is required.

Confidence Level: 3

*Known archaeological material?* Not currently- report of destroyed ditch *Attributes of pa (see Section 3.5):* Ditch? Natural features and ethnohistoric tradition

## 24. Te Anau

This site was described in the late 1800s as a pa (White 1893). However, White's descriptions of the site make no mention of enclosure, and it therefore should not currently be considered to have been enclosed or defensive.

Confidence Level: 4

*Known archaeological material?* Yes *Attributes of pa (see Section 3.5):* None

#### 25. Anchor Island

In 1895, R. Henry, the curator of Anchor Island believed a pa was located on it (Coutts 1969). While he did use both the words pa and village for various locations, no evidence has been found for a pa site or a village and the exact location is unknown with no corresponding archaeological remains known.

## Confidence Level: 4

*Known archaeological material?* Yes, but European in origin *Attributes of pa (see Section 3.5):* None, based on an early visiting European's suggestion

# 26. Pa a Te Whara

This pa was reported to have been the last fort of the Ngati Mamoe, and was attacked by Ngai Tahu (Anderson 1998:53-5; Beattie 1922; Buddle 1912:178; Carrington *et al.* 2008:155-6; Hall-Jones 1945:101; Roberts 1913:101; Taylor 1952:149-50). The exact location of the reported pa is unknown. No archaeological material has been found to show there was a fortified site on Spit Island, the reported location of the pa (NZAA Site Record B45/40-41). The island was searched, and consequently, the site record was removed from the NZAA Site Record B45/41).

Confidence Level: 4

Attributes of pa (see Section 3.5): Natural features and ethnohistoric traditions

### 27. Te Kiri o Tunoho

Te Kiri o Tunoho is located on Matariki Island just offshore from Pahia, Cosy Nook (see Figure 5.15). There is a small bank and a shallow ditch visible on the landward side of the island (field visit 2011; Teviotdale's personal diary December 7, 1929 in NZAA Site Record D46/64). The top of the island appears to be unnaturally flat compared to the steep sides, which may indicate cultural modification has occurred (field visit 2011). It has been noted that a gate and posts used to be visible, although the island has been used for whaling (Buddle 1912:180; Teviotdale's personal diary December 7, 1929 in NZAA Site Record D46/64).

While there are visible built fortifications at Te Kiri o Tunoho (see Appendix Two), there is no other visible evidence of occupation on the island itself. However, there is a considerable amount of material present, both prehistoric and historic in nature, on the mainland at the village known as Pahia. This evidence may support the island being a refuge pa, as outlined by the method presented by Orchiston (1979 - see Figure 2.1). Higham (1968:158) noted of the material culture from Pahia that there was "evidence of argillite working, fish and shellfish collecting, as well as trading in gun flint, pottery, iron nails and clay pipes. No archaeological evidence for potato cultivation." He was also unsure as to the permanency of the occupation.

While Te Kiri o Tunoho currently appears to have been a pa in the early historic period, it is also reported by ethnohistoric traditions to have been a prehistoric pa. Ethnohistoric traditions state that the pa was the refuge used by the inhabitants of the adjacent mainland village. The use of the island in prehistoric times is reported to have been by Te Wera after he left Pa a Te Wera, proceeded to Stewart Island, and finally onto Matariki Island. Traditions describe a battle between Ngai Tahu and Ngati Mamoe, during which Ngai Tahu caught by surprise and Matariki Island was captured and burnt. Despite this, Ngai Tahu took revenge and recaptured their island, reportedly the final defeat of the Ngati Mamoe (Anderson 1998:50; Buddle 1912:174; Carrington *et al.* 2008:153; Hall-Jones 1945:66; Taylor 1952:158). Beattie (1945:66) noted the location of cultivations in the area, so when this battle occurred could be open to dispute. While these traditions could be extrapolated to infer explanations, a sounder understanding would be achieved through further archaeologically based research in the area.

There are few written records from the early European sealing in Foveaux Strait between the 1790s and 1820s, however, it is clear that there was conflict in the area between Maori and

Europeans (Stark 1986). The first European records of Pahia indicate local Maori were trading with European boats moving through the area. When Boultbee travelled past Matariki and Pahia in the 1820s, trading canoes were launched and he described a village and garden (in Stark 1986). The pa was thought to have been re-established or reused by the chief Pahia, a known agitator, during this early historic period (Brailsford 1981:183; Buddle 1912:175). Pahia drowned in about 1823 and the village was abandoned by 1836 (Anderson 1998:183). Buddle (1912:175,180) claimed the chief Te Wero rebuilt the pa against an expected attack from Te Rauparaha, presumably in the early 1830s.

Confidence Level: 1

Known archaeological material? Yes

Attributes of pa (see Section 3.5): Ditch, bank, natural features and ethnohistoric traditions, including reported gate and palisades

Type of enclosure (see Section 3.5): Mixed natural and cultural enclosure



Figure 5.15: Te Kiri o Tunoho and surrounding area (field visit, February 2011 - aerial photograph (2008), courtesy of Environment Southland 2011).

## 28. Otauira pa

Otauira is reported to have been a pa located on the naturally defendable peninsula where the Waipapa Lighthouse is situated (Beattie 1920b:194). While it appears on NZAA Archsite that there is an archaeological site on the peninsula, the site is actually more towards the bay (NZAA Site F47/15). The headland has been heavily modified by European activities, including the construction of the Waipapa Lighthouse (field visit 2011). Currently there is no visible evidence of an enclosed site on the cape, nor is there evidence of pre-European activity.

# Confidence Level: 4

*Known archaeological material?* Not on the peninsula itself *Attributes of pa (see Section 3.5):* Natural features, ethnohistoric tradition

# 29. Parangiaio

Two pa are reported to have been established at Parangiaio Point; one in the prehistoric and one uncompleted in a response to the historic invasion of the South Island by Te Rauparaha (Carrick 1903:108; Coutts and Jurisich 1972:9; NZAA Site Record E48/33; Roberts 1913:80; Taylor 1952:162; see Beattie 1944:74 who disagreed with the early occupation). Excavation at the neck of the isthmus revealed what was considered prehistoric period cultural material (Coutts and Jurisich 1972). Built fortifications on the point have not been noted (Coutts and Jurisich 1972). This historic pa is assumed to have relied on the natural defences of the peninsula including steep banks and rocks as well as a palisade (Coutts and Jurisich 1972:9), which should be the focus of any future research on the idea. However, at this point the site requires more research to determine its status as a pa site.

# Confidence Level: 3

*Known archaeological material?* Yes, on the isthmus *Attributes of pa (see Section 3.5):* Natural features and ethnohistoric traditions

### 30. Putatara

There is an ethnohistoric tradition that records that there was once a pa at Ruggedy, Stewart Island (Anderson 1998:43; Ashwell 2002:3; Beattie 1916a; Buddle 1912:178). Three locations were explored as possible candidates for the pa site during a field visit in December 2009. A Department of Conservation (DOC) worker reported there were fortifications visible after a large fire in "1988/90". The DOC worker thought there was a small body of water in the middle of the site (pers. comm. Rachael Egerton, NZAA Southland File Keeper, 2009). Exploration of the area did not confirm this report. A small swampy area was identified with what could be interpreted as a bank and terraces. However, these could not be confirmed as cultural. A large ditch near the sand dunes also appeared to have been the result of erosion and dune deflation. Two archaeological sites are recorded in the area and could be considered as candidates for the pa site. D48/1, deflated and disturbed by wind and sand erosion, was eroding at the high tide mark at the time of the field visit. Alternatively, D48/2, although not located on the surface at the time of the field visit, is reported to have been located on a headland that would offer natural protection and good visibility. Other than the reported location of site D48/2 in an area that had natural features that could have been used for restricting access, tradition continues to be the primary source of information on this pa and further investigations are required.

### Confidence Level: 3

*Known archaeological material?* Unknown *Attributes of pa (see Section 3.5):* Natural features? ethnohistoric traditions

## 31. Freshwater River

The exact location of this site/ pa is not known. It is recorded as existing somewhere in the vicinity of Freshwater River, Stewart Island (Kershaw in NZAA Site Record D48/8). Hence, the site is not currently able to be included in the sample.

## Confidence Level: 4

*Known archaeological material?* No *Attributes of pa (see Section 3.5):* None

Therefore, in summary:

Site Num (see 5.1)	ıber Figure	Site Name	Confidence Level of the site being a pa
Base	d on curren	t evidence the following should be considered p	a sites:
	1	Te Waiateruati	1
	9	Pa a Te Wera	1
	12	Mapoutahi	1
	27	Te Kiri o Tunoho	1

Sites that should	be considered	enclosed	sites	but not	ра	within	a strict	archaeologi	cal
definition:					-			_	

7	Te Raka a Hine atea pa	2
14	Whareakeake	2
17	Pukekura	2
22	Whakapaupuka	2
Potentially en	closed sites that require further investigation:	
5	Huru Huru's pa	3
8	Cornish Head	3
15	Teraepuha	3
16	Otaheiti	3
19	Pa o Ngatikuri	3
21	Pa a Tu Pare Taniwha	3
23	Omoua Pa	3
29	Parangiaio	3
30	Putatara	3
On the current	nt evidence these sites are not considered enclosed	or pa:
2	Otipua	4
3	Camp Hill	4
4	Te Kapa	4
6	Cape Wanbrow	4
10	Brinns Point	4
11	Omimi	4
13	Stream outlet at Long Beach	4
18	Tarewai Point	4
20	Aurakitaurira	4
24	Te Anau	4
25	Anchor Island	4
26	Pa a Te Whara	4
28	Otauira pa	4
31	Freshwater River	4

Table 5.2: Confidence levels of sites identified as pa in Murihiku.

## 5.3 Chronology and Archaeological Evidence at Murihiku Pa and Enclosures

The above section critically assessed the sites currently identified as pa in Murihiku and determined that eight of those sites should be considered enclosures; four archaeological pa (Te Waiateruati, Pa a Te Wera, Mapoutahi and Te Kiri o Tunoho) three natural enclosures (Te Raka a Hine atea Pa, Pukekura and Whakapaupuka) and one cultural enclosure (Whareakeake) (see Table 5.2 and Figure 5.16). This section examined these eight sites with regard to archaeological data with the aim of investigating occupation length, subsistence and mobility. There are three reasons for examining these eight sites, rather than the four strictly identified as pa. Firstly, the four enclosed sites are located on the east Otago coast, are in close proximity to two of the Murihiku pa, and these sites are considered to have been occupied by a homogenous culture group (Hamel 1986; Leach and Hamel 1978:249). Secondly, is that there is limited data available for many of the pa sites, and the four enclosures can add to a better understanding of these sites. Finally, the four enclosure sites, while not considered archaeological pa, are also not open sites and may contribute to the general theory on why sites are enclosed.



Figure 5.16: The current sample of recorded pa and enclosure sites in Murihiku

## 5.3.1 Chronology

Three types of evidence are available to date the sites considered enclosures and pa in Murihiku: absolute dating evidence, relative dating evidence and ethnohistoric traditions. Each will be reviewed in turn and summarised in the conclusion.

## Absolute Dating Evidence

Radiocarbon dates have been obtained from cultural material taken from the locations of four Murihiku enclosures: Te Raka a Hine atea Pa (at Katiki Point, J42/20), Pukekura Pa (at Taiaroa Head, J44/4), Mapoutahi (I44/17) and Whareakeake (J44/20) (see Appendix Two and Table 5.3). A caveat of the absolute dating of enclosures is that if the dated material does not come from the built fortifications and no stratigraphic links exist, then the date may reflect any period of occupation, not limited to the time period, during which the site was fortified. Radiocarbon dates obtained from these localities may represent occupation within a natural enclosure, but perhaps not within built fortifications, as has been illustrated at other pa, for example, Pouerua (Sutton *et al.* 2003). Furthermore, establishing an occupational chronology should not be ruled out.

Smith and James-Lee (2009) have reviewed the radiocarbon dates available for the Otago and Catlins coastal areas, which contain the only pa sites that have been excavated in Murihiku. Their review of dates identifies three sites, Te Raka a Hine atea Pa (at Katiki Point, J42/20), Pukekura Pa (at Taiaroa Head, J44/4) and Mapoutahi (I44/17), with admissible dates from the late prehistoric period, defined as post 1650. Te Raka a Hine atea Pa has one admissible date from shell, and one rejected date due to inbuilt age; Pukekura Pa has one admissible date from an unidentified charcoal source providing a maximum estimate of age; and Mapoutahi has three admissible dates from charcoal. While inbuilt age must be a consideration for the date from Pukekura, the source was a twig, which should reduce the additional age (pers. comm. Jill Hamel 2009). Radiocarbon dates for Whareakeake were all obtained from the outer ring of palisade posts from an unspecified species of wood, therefore, the potential for inbuilt age exists (see Table 5.3 and Appendix Three).

### Relative Dating Evidence

Material culture and faunal remains representative of the prehistoric period are present at Pukekura, Te Raka a Hine atea pa, Pa a Te Wera, Mapoutahi and Whakapaupuka (see Table 5.3 and Appendix Two). All these sites contain sealed midden and material culture layers with no contextual European artefacts identified (see Section 5.3.2).

There is currently no visible archaeological material indicative of the period of occupation at Te Kiri o Tunoho, the only Foveaux Strait pa site. However, on the mainland adjacent to the island there are sites from both the prehistoric and historic periods. Prehistoric material was heavily fossicked in the area in the early 1900s (NZAA Site Record D46/64). Boultbee (in Starke 1986:204-205, 207) visited and wrote about the area in the early 1820s. Excavations at the Pahia village site uncovered gun flints, pottery, iron nails and clay pipes (Higham 1968:158). Further research is required to determine when the initial occupation of this site occurred and, in turn, when Te Kiri o Tunoho was first established as a pa.

Archaeological evidence at Murdering Beach indicates Whareakeake was the location of prehistoric and historic occupation. Excavations at Whareakeake revealed earlier and later periods of occupation, the latter extending into the historic period before the site was abandoned and burnt, perhaps by the sealer Kelly in 1817 (see Whareakeake in Appendix Two - Bell 1956). European records indicate that the occupants traded goods, such as potatoes, with Europeans in the early 1800s (Church 2008:113). The site was considered to have been abandoned around 1817 (Bell 1956; Church 2008:113; Lockerbie 1959:91; McNab 1907:162-3; 1909:225-230).

The site of Te Waiateruati is a gunfighter pa. A number of Europeans visited this site, including Shortland, Mantell and Bishop Selwyn in the 1840s, and left accounts and sketches of the site (Hall-Jones 1956:49; Mantell 1886; NZAA Site Record K38/12; Taylor 1952:163-4). The site was finally abandoned in the late 19<sup>th</sup> century (NZAA Site Record K38/12; Taylor 1952:163-4). The current layout of fortifications resulted from the 1831 establishment, or renovation, of the defences in anticipation of an attack from Te Rauparaha and his forces (Beattie 1919a:48; Brailsford 1981:232; NZAA Site Record K38/12; Taylor 1952:163-4).

## Ethnohistoric Traditions

Researchers of ethnohistoric traditions state that the first of the Murihiku pa to be established was Pukekura around 1650, and that it was an important site for Ngai Tahu for over 100 years (Anderson 1983c:42; 1998; Leach and Hamel 1978:240; Stack 1877). Four sites, Pukekura, Pa a Te Wera and Mapoutahi are linked through tradition at around 1750, and Te Kiri o Tunoho a little later (Anderson 1998).

Traditions associated with Whakapaupuka note that the establishers and occupiers moved into the area for only a short period of time (see Ethnohistoric Traditions of the Taieri Plains in Appendix Two - Joseph 1899; Sutherland 1962:8; Taylor 1952:180). Traditions state that the occupants were afraid of attack and eventually this fear became so great that they moved further south to Stewart Island. The recorders of these ethnohistoric traditions estimated that the events occurred between approximately 1720 and 1750 (see Appendix Two - Joseph 1899; Sutherland 1962:8; Taylor 1952:180).

## Conclusions

Current research, based on both ethnohistoric traditions and archaeological evidence, indicates that enclosures and pa were present in Murihiku during the prehistoric and historic periods (see Table 5.3). From limited radiocarbon dating, relative dating and ethnohistoric evidence, Pukekura, Te Raka a Hine atea pa, Pa a Te Wera, Mapoutahi and Whakapaupuka are all thought to have been occupied in the prehistoric period. Archaeological evidence signifies that Whareakeake, Te Waiateruati and Kiri o Tunoho (or the surrounding areas) were in use into the historic period. Traditions state that the later two of these sites was established in the prehistoric period.

Two of the four confirmed pa sites, Pa a Te Wera and Mapoutahi and the less certain pa/ enclosure, Pukekura, were occupied during the late prehistoric period. The other two pa, Te Waiateruati and Kiri o Tunoho, have confirmed occupation during the historic period, with further research required to determine when they were initially established as pa. It would appear that pa were established, if perhaps, according to traditional sources, somewhat later than the earliest northern pa, in line with other pa sites in New Zealand, after 1500 (Schmidt 1996). Pa sites are represented in the late prehistoric period and the historic period.

Pa Site	Date	Lab no.	Date Referen	ice	Reference	Period
	Source	& material	cal AD 1σ	cal AD 2σ		
Katiki Point (Te Raka a Hine atea Pa)	C14 Date	NZ697 M	1700-1877	1670-1951	RCDB; Smith and James-Lee 2009; Trotter 1967b	Late
Te Raka a Hine atea Pa	Tradition				Taylor 1952:106	Late
Huriawa (Pa a Te Wera)	Assemblage				Easdale and Jacomb 1984b; Leach and Hamel 1978	Late
Pa a Te Wera	Tradition				Anderson 1998; Beattie 1916a; Cowen 1906; Smith and James-Lee 2009; Taylor 1952:114	Late
Mapoutahi	C14 Date	NZ6698, 6670, 6758 pooled (229±28 BP) T	1664-1675 1739-1798	1643-1696 1725-1807 1840-1840 1948-1950	RCDB; Smith and James-Lee 2009	Late
Mapoutahi	Tradition				Anderson and Sutton 1973:107; Bathgate 1904:6; Reed 1947:41; Taylor 1952:120	Late
Taiaroa Head (Pukekura)	C14 Date- maximum age	NZ1935 T	1651-1700 1722-1809 1838-1845 1867-1878 1928-1950	1643-1819 1823-1900 1904-1951	Leach and Hamel 1978; RCDB; Smith and James-Lee 2009	Late

Table 5.3: Chronological information for Level 1 and 2 Sites in Murihiku. or radiocarbon (C14) dates, sample materials are distinguished between terrestrial (T) and marine (M) reservoirs (see Appendix Three).

Table 5.3 (cont.): Chronological information for Level 1 and 2 Sites in Murihiku. or radiocarbon (C14) dates, sample materials are distinguished between terrestrial (T) and marine (M) reservoirs (see Appendix Three).

Pa Site	Date	Lab no.	Date		Reference	Period
	Source	&	Reference			
		material	cal AD 1σ	cal AD 2σ		
Whakapaupuka	Tradition				Anderson 1983c:38; Bray et al. 1998:28; Parer	Late
					and Hislop 1980:38-9	
Te Kiri o Tunoho	Tradition				Beattie 1945:66; Buddle 1912:173-180	Late and
						Historic
Te Waiateruati	Tradition				Beattie 1919a:48; NZAA Site Recording	Late
					Scheme record K38/12; Taylor 1952:163-4	
Te Waiateruati	Historical				Hall-Jones 1956:49; Mantell 1886; NZAA Site	Historic
					Record K38/12; Taylor 1952:163-4	
Whareakeake	Assemblage				Bell 1956	Into the
	C					Historic

### 5.3.2 Archaeological Assemblages

A limited number of excavations have occurred at Murihiku pa and enclosure sites over the last 60 years, with various levels of success. The information gathered from these investigations allows far more interpretation of these sites than the sites which have not been excavated. These sites present the best data, particularly in regard to subsistence and occupation type. Only two of the four confirmed pa in Murihiku have associated archaeological assemblages from excavations: Pa a Te Wera and Mapoutahi (see Appendix Two). The probable pa Pukekura, at Taiaroa Head is also the location of a number of small, mainly salvage excavations, and has produced a small archaeological assemblage (see Appendix Two). Large-scale excavations were undertaken at the enclosures Whareakeake and Te Raka a Hine atea Pa (see Appendix Two).

This section will briefly outline how the material culture from the late prehistoric pa and enclosure sites is very similar. Pa a Te Wera, Mapoutahi, Pukekura and Te Raka a Hine atea pa are located on the Otago coast within a 50 kilometre stretch of coastline, running north from Taiaroa Heads. The sites along this coastline are thought to have been occupied by a culturally homogenous group of people belonging to the late prehistoric period (Hamel 1986; Leach and Hamel 1978:249). Ethnohistoric traditions suggest that the four sites, as well as a number of other sites in the area were established and occupied by different related hapu who, at times, fought each other (Anderson 1998; Carrington *et al.* 2008). The archaeological assemblages of these sites will, therefore, be explored together to gain a wider understanding of the pa and the area they were located in. The area currently appears to have been the most intense focus of activity during this period in Murihiku, with its archaeologically visible population and settlements particularly identifiable through late prehistoric pa.

The material culture from the four sites is very similar. Material culture at Murihiku enclosures is varied and covers all aspects of life, including lithic working, domestic activities and fishing, and includes items such as patu. Most of the lithic material was available on the east Otago coast. All of the sites contain lithic material that was most likely sourced from Katiki Point, the location of the naturally enclosed Te Raka a Hine atea pa (Leach and Hamel 1978:249). Sources of other stone types are located further afield. Nephrite generally derives from the West Coast in the South Island (Cable 2006; Turner 2000). While present, it does not appear to have been present in the large quantities reported for Whareakeake from the early historic period (Bell 1956). Grey obsidian is sourced from the northern half of the North Island (Cruickshank 2011; Moore 2012). Grey coloured obsidian has been noted at all four sites, which contrasts to earlier sites where green obsidian is more common. While it may be the

result of recycling, further investigation of obsidian exchange networks is required for the region (Leach and Hamel 1978:250).

In comparison to earlier sites, late prehistoric are missing several stone types, including silcrete, available from inland Otago and river cobbles, and of particular importance, Southland argillite (Jennings 2009). Jennings (2009) concluded that the densest cluster of Southland argillite adzes outside of Foveaux Strait was coastal Otago, with the majority found on the Otago Peninsula, however, these adzes are all recorded as Archaic type adzes. The movement of argillite into Otago appears to have ended by the time pa were established.

Compared to earlier sites, the faunal remains of the east Otago pa and enclosure sites reflect the loss of moa and an increase in dog and possibly human (Leach and Hamel 1978; Smith and James-Lee 2009). The majority of midden deposits consists of barracouta, with ling, red cod and groper also represented. These species suggest local, offshore canoe fishing (see Figure 5.17 - Hamel 2005:8; Leach and Hamel 1978:248; Smith and James-Lee 2009). Shellfish identified at Katiki Point (Te Raka a Hine atea pa) and Taiaroa Head (Pukekura) are dominated by hard shore species, while Huriawa (Pa a Te Wera) and Mapoutahi have a mixture of both soft and hard shore species (see Figure 5.18). The former of these two sites are located on rocky shores while the latter is located in close proximity to soft shores and estuary environments. Bird bone suggests a range of species and is thought to represent local and casual/ opportunistic rather than selective capture (see Figure 5.19). Seal, dog and human bone also occur in midden from these sites, all likely available locally (see Figure 5.20 - Anderson 1982a:124; Leach and Hamel 1978:248-249; Smith and James-Lee 2009).

All four sites encompass areas large enough to have supported habitation, and each appears to have experienced extended occupation. The possible occupation areas are visible in the form of terraces at Pa a Te Wera, Mapoutahi and Te Raka a Hine atea pa, but not Pukekura, although this may be because it has been greatly disturbed by later European fortifications. Pa a Te Wera, Mapoutahi and Te Raka a Hine atea pa contain evidence of occupation over more than one season or building phase. These sites contain built features, including terraces and houses, as well as the enclosing features at the pa sites (Anderson 1983c; Anderson and Sutton 1973; Briden 2007:2; Easdale and Jacomb 1984a:1,8, 1984b:2; Hamel 1986; Knight 1964; MacKay 1961:27; Trotter 1967a).

The east Otago coastal pa and enclosure sites appear to be areas that people occupied as village sites. Archaeological evidence suggests that these sites were occupied for a considerable time. Te Raka a Hine atea pa appears to have experienced long-term occupation, with an occupation layer of up to one meter thick and permanent houses (Trotter 1967a). Pa a Te Wera appears to

have experienced at least two periods of occupation, indicated by a rebuild of the fortifications (Knight 1964). Based on faunal material and the presence of domestic items, it is suggested that Mapoutahi experienced a long occupation sequence (Anderson 1983c). Pukekura is reported by ethnohistoric traditions to have been occupied for over a hundred years (Anderson 1983c:42). The material culture of these four sites signifies the lengthy occupation of villages on the coastal headlands by people who were related and traded between each other.

Pa sites in Murihiku, while few in number, display diversity. However, those that have been excavated display many similarities in regard to occupation, subsistence and material culture. These similarities are also evident when compared to natural enclosures/ headland settlements on the surrounding coast.

	Assemblage Number	51	57a	57b	60a	60b	63a	63b	63c		
	Assemblage Code	КТК-20	HUR 1961-3	HUR 1984	MAP 1966	MAP 1983	TRH 1972	TRH 1992	TRH 2005	No of Assemblages	Sum of MNI
barracouta	Thyrsites atun	р	277	23	9	52	32	83	51	8	527
red cod	Pseudophycis bachus		94	12	1	76	3	9	6	7	201
Ling	Genypterus blacodes	р	6	3		10	2	3	7	7	31
hapuka	Polyprion oxygenios		35	1	2	3	1		2	6	44
wrasses	Labridae sp.					4			1	2	5
blue cod	Parapercis colias		1			1				2	2
blue moki	Latridopsis ciliaris		1							1	1
ghost shark	Callorynchus milii					1				1	1
Elasmobranch ?sp	Chondrichthyes sp.					1				1	1
Total Fish		P	414	39	12	148	38	95	67	8	813

Figure 5.17: Fish species present in assemblages from KTK-20 (Katiki Point, Te Raka a Hine atea pa), HUR (Huriawa, Pa a Te Wera), MAP (Mapoutahi) and TRH (Taiaroa Heads, Pukekura) (Smith and James-Lee 2009:74)

									(r	numbei	rs = MNI; p =	present)
	Assemblage Number	51	53	57a	57b	60a	60b	63a	63b	63c		
8	Assemblage Number Assemblage Code Perna canaliculus Austrovenus stutchburyi Amphibola crenata Haliotis iris Mytilus galloprovincialis Turbo smaragdus Paphies australis Cellana radians Cellana sp. Ostrea chilensis Mytilidae sp. Cookia sulcata Scutus breviculus Paphies subtriangulata Aulacomya ater maoriana limpet sp. Lepsithais lacunosus Umbonium zelandicum (=Zz) Cellana strigilis	KTK-20	KTK-139	HUR 1961-3	HUR 1983	MAP 1966	MAP 1983	TRH 1972	TRH 1992	TRH 2005	No of Assemblages	Sum of MNI
green-lipped mussel	Perna canaliculus				8	4	48	1		1	5	62
cockle	Austrovenus stutchburyi			р	18	3	22			1	5	44
mudsnail	Amphibola crenata			p	103	7	4				4	114
paua	Haliotis iris	14		p	2		29				4	45
blue mussel	Mytilus galloprovincialis		р				2661			89	3	2750
cats eye	Turbo smaragdus	19		р			97				3	116
pipi	Paphies australis					5	95	2			3	102
radiate limpet	Cellana radians			p	86		3				3	89
limpet Cellana sp.	Cellana sp.	42			1		2				3	45
mud oyster	Ostrea chilensis		р	р			15				3	15
mussel sp	Mytilidae sp.	9		р					р		3	9
cooks turban	Cookia sulcata			р	3		5				3	8
shield limpet	Scutus breviculus	13					4				2	17
tuatua	Paphies subtriangulata	3					2				2	5
ribbed mussel	Aulacomya ater maoriana						3			1	2	4
limpet ?sp	limpet sp.		р	р							2	0
rock shell Ll	Lepsithais lacunosus						13				1	13
wheel shell	Umbonium zelandicum (=Zz)						7				1	7
striated limpet	Cellana strigilis						2				1	2
spotted top shell	Melagraphia aethiops						2				1	2
tusk shell	Antalis sp						1				1	1
knobbed whelk	Austrofusus glans						1				1	1
limpet Bo	Benhamina obliquata						1				1	1
paua sp.	Haliotis sp.							1			1	1
opal topshell sp.	Micrelenchus sp.						1				1	1
toheroa?	Paphies ventricosa?				1						1	1
limpet Patellacea sp	Patellacea sp						1				1	1
chiton sp.	Polyplacophora sp.						1				1	1
green top shell	Trochus viridius						1				1	1
Total Shellfish		100	Ρ	Р	222	19	3021	4	Р	92	9	3458

Figure 5.18: Shellfish species present in assemblages from KTK-20 (Katiki Point, Te Raka a Hine atea pa), HUR (Huriawa, Pa a Te Wera), MAP (Mapoutahi) and TRH (Taiaroa Heads, Pukekura) (Smith and James-Lee 2009:72)

	Assemblage No	51	57a	57b	60a	60b	63a	63b	63c		
	Assemblage Code	КТК-20	HUR 1961-3	HUR 1983	MAP 1966	MAP 1983	TRH 1972	TRH 1992	TRH 2005	No of Assemblages	Sum of MNI
fur seal	Arctocephalus fosteri	р	2			1	1		1	5	5
fur seal?					1					1	1
hectors dolphin	Cephalorhyncus hectori					1				1	1
common dolphin	Delphinus delphis					1				1	1
whale ?sp		<b>p</b> *								1	0
total marine mammal		Ρ	2		1	3	1		1	6	8
dog	Canis familiaris	p	13	3	3	3	2	1	1	8	26
rat	Rattus exulans	р		2		1		1	2	5	6
total terrestrial mamm	als	Ρ	13	5	3	4	2	2	3	8	32
total mammals		Р	15	5	4	7	3	2	4	8	40

Figure 5.19: Mammal species present in assemblages from KTK-20 (Katiki Point, Te Raka a Hine atea pa), HUR (Huriawa, Pa a Te Wera), MAP (Mapoutahi) and TRH (Taiaroa Heads, Pukekura) (Smith and James-Lee 2009:85)

							<i>(</i> 2)				
	Assemblage Number	51	57a	576	60a	60b	63a	63b	63c		30
	Assesmblage Code	20 KTK-	HUR 1961-3	HUR 1983	MAP 1966	MAP 1983	TRH 1972	TRH 1992	TRH 2005	No of Assemblages	Sum of MNI
White-capped albatross	Thalassarche cauta	3	2		1	1	1	2	2	7	9
Spotted shag	Stictocarbo punctatus	2	3	1	1	3	1			6	9
Kingshag	Leucocarbo carunculatus	1	7	2		1	1			5	11
Wanderingalbatross	Diomedea e xulans		2			1	1			3	4
Yellow-eyed penguin	Megadyptes antipodes	1	1			2				3	3
Black-backed gu ll	Larusdominicanus		1	1		1				3	3
Northern diving petrel	Pelecanoides urinatrix		1			1				2	2
gull ?sp	Larus ?sp		1			1				2	2
Grey-headed albatross	Thalassarche chrysos toma								2	1	2
Pied cormorant	Phalacrocorax varius		2							1	2
Royal albatross	Diomedea sandfordi							1		1	1
albatross ?sp	Diomedea ?sp			1						1	1
Southern Buller's albatross	Thalassarche bulleri		1							1	1
mollymawk ?sp	Thalassarche ?sp		1							1	1
Fluttering shearwater	Puffinus gavia		10			1				1	1
Broad-billed prion	Pachyptila vitata							1		1	1
Cook's petrel cf	Pterodroma cookii cf							-	1	1	1
White-faced storm petrel	Pelaaodroma marina		1							1	1
NZ crested penquin	Futurities pricharburchus					1				1	1
Pied stilt	Himantonus kurazenhalus		1			16				1	1
red-billed oull	Lanis novaehollandii						1			1	1
Great cormorant	Phalacrocoray carbo	2								1	0
marine subtotal	Phalaclocordx caloo	0	24	5	2	12	5	4	5	9	59
marme subtotal		9	24	,	-	13	2	-	,	8	50
Paradise shelduck	Tadorna variegata	2	1		1		1			4	3
Grev duck	Anas superciliosa		1	1			-			2	2
Shoveler	Anas rhynchotis		1							1	1
duck Anas ?sp	Anas 7sp		1							1	1
wetland subtotal	And the	2	4	1	1		1			5	7
wettand subtotal		-								5	1
NZpigeon	Hemiphaga novaes eelandiae		1	1		1				3	3
Tui	Prosthemadra novaeseelandiae		1	1		1				3	3
Red-crowned parakeet	Cyan oramphus novaezelandiae		1			1				2	2
Southern brown kiwi	Apteryx australis		1							1	1
Australasian harrier	Circus approximans					1				1	1
NZguail	Coturnix novaezelandiae				1					1	1
Weka	Gallirallus australis		1							1	1
Kaka	Nestormeridionalis		1							1	1
parakeet ?sp	Cyan oramphus ?sp			1						1	1
Laughing owl	Sceloglaux albifaces					1				1	1
South Island kokako	Callaeas ánerea		1			10				1	1
forest/dryland subtotal			7	3	1	5				4	16
					1						
bird ?sp					1					1	1
Total Small Birds		11	35	9	5	18	6	4	5	8	82
moa ?sp		p*				p*	p*			3	
Total Moa		P*				P*	P*			3	

Figure 5.20: Bird species present in assemblages from KTK-20 (Katiki Point, Te Raka a Hine atea pa), HUR (Huriawa, Pa a Te Wera), MAP (Mapoutahi) and TRH (Taiaroa Heads, Pukekura) (Smith and James-Lee 2009:82)

# 5.4 Summary

This chapter explored and answered the first sub-question of this research, by establishing the sample of pa sites in Murihiku. This was necessary due to the conflicting number of pa identified in the literature. The NZAA Site Recording Scheme identified fourteen sites under variations of the site type 'pa'. Based on the methodology presented in the previous chapter, 31 sites were identified as potential pa sites in Murihiku (see Table 5.1). Each site was critically reviewed and given a confidence level from 1 to 4. Level 1 sites should be considered pa; Level 2 sites should be considered enclosures, but not pa within the archaeological definition; Level 3 sites required further investigation; and, finally, Level 4 sites were not considered pa based on current information (see Table 5.2 for a summary).

Four sites were given Level 1 status based on current information and should be considered archaeological pa, in that they have built fortifications, as well as naturally enclosing features: Te Waiateruati, Pa a Te Wera, Mapoutahi and Te Kiri o Tunoho. Four sites were given Level 2 ratings and should be considered enclosures, but not archaeologically visible pa as they lack earthworks. These sites are Te Raka a Hine atea pa, Pukekura, Whakapaupuka and Whareakeake. Pukekura requires further work, but is probably also a pa (see Table 5.2 and Figure 5.16). If there was any doubt that there were fewer recorded pa in Murihiku than more northern areas, this dispels the possibility.

Of the 31 sites investigated in this chapter, nine were given confidence Levels of 3 indicating the need for further research. One of these sites, Pa a Tu Pare Taniwha (I44/11) (see Figure 5.1 for location), a traditionally recorded pa with little or no known archaeological material, was investigated using geophysical and test excavation to search for tangible evidence. No cultural material or features were located (Potts and McCoy 2011). This confirms the caution required for this type of site, and advocates the need for further investigations into these sites. Potts and McCoy (2011) concluded that either excavations missed intact deposits, the site was destroyed, or that the location of the pa site was not consistent with records. These options must be considered for all sites recorded within traditions, but especially those for which there is no known cultural material.

The use of assemblage dating, radiocarbon dating and traditional evidence show that pa were present in Murihiku in both the late prehistoric and historic periods. From limited radiocarbon dating, relative dating and ethnohistoric evidence, Pukekura, Te Raka a Hine atea pa, Pa a Te Wera, Mapoutahi and Whakapaupuka are all thought to have been occupied in the prehistoric period. Archaeological evidence signifies that Whareakeake, Te Waiateruati and Kiri o

Tunoho (or the surrounding areas) were in use in the historic period. Traditions state the latter two of these sites were established in the prehistoric period. This resulted in two confirmed archaeological pa, Pa a Te Wera and Mapoutahi, existing in the late prehistoric period and Te Waiateruati and Kiri o Tunoho, existing in the early historic period.

An examination of the four enclosure sites, Pa a Te Wera, Mapoutahi, Pukekura and Te Raka a Hine atea pa, located on the east Otago coast reveal places of extended and locally focused occupation during the 18th century. Excavation and material analysis have been conducted at Mapoutahi, Pa a Te Wera and Te Raka a Hine atea Pa and to a lesser extend Pukekura. Features of these sites include houses, terraces, fortifications and extensive cultural material, in places up to a meter thick. Subsistence was focussed primarily on locally available marine sources. While some items appeared to have been acquired from afar, such as obsidian, the general trend is a local focus by a culturally homogeneous group, as suggested by the standing settlement theory for this area during this time period (Hamel 1986; Jacomb *et al.* 2010; Leach and Hamel 1978:249).
# Chapter Six: Reviewing the Research Methodology

The practice of pa building was time-consuming. If self-preservation was the only reason for constructing a pa on the [Pouerua] volcanic cone, it would have been more efficient (and expedient) just to become invisible in the landscape.

(Sutton *et al*.2003:233)

## 6.1 Introduction

The previous chapter established the current sample of archaeologically visible pa sites in Murihiku (see Table 5.2 and Figure 5.16), which resulted in the exclusion of some sites that had been identified as pa through the research methodology. The categorisation and systematic review of features and attributes at identified pa sites was an important component in the recognition of sites as pa within this research. The critical review of each attribute in Chapter Five highlighted the difficulties of confirming built structures in the field. The way in which each site was recorded (with regard to detail, time spent investigating, or the extent of the study) made it difficult to examine and compare/ contrast each pa site. Consideration of each site on its own merits was the most productive method for exploring what attributes were important for pa site identification.

While the research method refined the sample of the archaeological site type pa in Murihiku, it also confirmed a smaller sample of pa sites than has been previously considered. The NZAA Site Recording Scheme currently identifies 14 pa sites. Brailsford's (1981) investigation described nine sites as pa and this research confirmed four archaeologically visible pa sites. The reasons for the variation between the aforementioned sources on the number of Murihiku pa requires further investigation. Furthermore, the variation and reason for this discrepancy between samples of pa may contribute to the few recorded pa sites in Murihiku.

This chapter examines four variables in the identification of pa: the attributes used to identify pa, the sources that recognise sites as pa, the NZAA Site Recording Scheme and the nature of the archaeology in Murihiku. The first section of this chapter is an examination of the results of the research methodology, specifically, the number and type of attributes used to identify pa. The second section inspects the source that advocated the pa sites outlined in Chapter Five. The third section is a review of how Murihiku sites currently identified as pa within the NZAA Site Recording Scheme compared and contrasted to the sample of pa sites identified by this research.

Finally, the forth section assesses whether the way in which we view the site type pa corresponds to the reality on the ground. The view that the site type 'pa' is a bounded entity is simplistic when what physically constitutes an enclosed site is more representative on a continuum. This section of this chapter reviews the morphological attributes of the sites identified as enclosures and pa in Murihiku in order to explore the range of enclosures (not only pa) and what they can tell us about how pa in Murihiku fit into a continuum of site sites, from open to enclosed sites. Furthermore, this section examines if the methodology used to identify pa in New Zealand is appropriate for the Murihiku area.

#### 6.2 Attributes used to Identify Pa Sites in Murihiku

The methodology of this research focused on the attributes used to locate and confirm the existence of pa sites. Chapter Three outlined ten attributes that are used to identify pa sites: ditch; bank; defensive scarp; palisade; fighting stage; gate and entrances; platform/ tihi; artificial islands; natural features and ethnohistoric sources. All bar fighting stages and artificial islands are present in Murihiku. The variation between samples of pa sites in Murihiku may be influenced by the attributes being used to identify these sites.

A review of the attributes used to identify pa sites in Murihiku illustrates the ambiguity of many of these attributes and the critical examination required to positively identify these sites. Table 6.1 outlines the confirmed and uncertain attributes at the 31 sites identified as pa in Chapter Five. There are 50 confirmed attributes and 18 uncertain attributes. This uncertainty arises from conflicting information or the inability for confirmation on the ground and illustrates the importance of critically assessing all attributes. Of the 50 positively established attributes, 23 were identified as Level 1 sites, which were confirmed as pa sites.

Many sites in Murihiku have been recorded as pa based on European accounts, ethnohistoric traditions, and/ or natural features. The attributes resulting from these sources can be ambiguous if a site has no known cultural material or defensive structural features and is therefore not visibly identifiable as an archaeological pa (see Table 6.1, Appendix Four,

Appendix Five and Appendix Six). Of the 50 attributes identified at the Murihiku pa, 18 are natural features with defensive potential and 16 are from ethnohistoric sources. This results in 16 attributes that are structural features, which come from only five sites.

The four sites with confirmed structural defensive features in Murihiku are Te Waiateruati, Pa a Te Wera, Mapoutahi, Te Kiri o Tunoho and Whareakeake (see Table 6.1; Figure 5.16; Appendix Two; Appendix Four). Excavations at Whareakeake uncovered a palisade line but, as previously mentioned, archaeologists are not in agreement as to the status of the site as a pa or palisaded village, with the latter favoured (Bell 1956; Davidson 1984; Hamel 2001:65). This further highlights the continued problems of confirming the sample of pa sites in Murihiku. With the exception of Whareakeake, these sites represent the current sample of archaeologically visible pa in Murihiku.

Of the 68 potential attributes at identified Murihiku pa, only 16 could be confirmed as structural attributes of pa. The variation in this number of features highlights the problematic nature of identifying and confirming attributes at Murihiku pa. The fluctuating nature of attributes at Murihiku may influence the number of pa sites identified if the definition of pa is different, for example the inclusion or exclusion of natural features. However, when the 31 sites identified as pa were reviewed within the archaeological definition of pa and only four sites confirmed, the rarity of pa sites in Murihiku and the very few recorded sites became particularly evident

Site	Confid- ence	Ditch	Bank	Defence Scarp	Palisade	Entrances	Platform or Tihi	Natural Features	Ethnohistoric Sources	Gun Pit
	Level									
Te Waiateruati	1	Y	Y		?	Y		Y	Y	?
Pa a Te Wera	1	Y	Y	Y	Y	?	Y	Y	Y	
Mapoutahi	1	Y	Y		Y	Y	Y	Y	Y	
Te Kiri o Tunoho	1	Y	Y			?		Y	Y	
Te Raka a Hine atea pa	2	?				?		Y	Y	
Whareakeake	2				Y			?		
Pukekura	2	?						Y	Y	
Whakapaupuka	2							Y	Y	
Huru Huru's pa	3				?				Y	
Cornish Head	3							Y		
Teraepuha	3							Y	Y	
Otaheiti	3							Y	Y	
Pa o Ngatikuri	3							Y	Y	
Pa a Tu Pare Taniwha	3				?			Y	Y	
Omoua Pa	3	?			?			Y	Y	
Parangiaio	3							Y	Y	
Putatara	3							?	Y	
Otipua	4							?	Y	

Table 6.1: Attributes of Murihiku Pa

Site	Confid- ence Level	Ditch	Bank	Defence Scarp	Palisade	Entrances	Platform or Tihi	Natural Features	Ethnohistoric Sources	Gun Pit
Camp Hill	4	?	?							
Те Кара	4								Y	
Cape Wanbrow	4							Y	?	
<b>Brinns Point</b>	4							Y		
Omimi	4	?						Y		
Long Beach	4							?		
Tarewai Point	4							Y	?	
Aurakitaurira	4								Y	
Te Anau	4								Y	
Anchor Island	4							Y	Y	
Pa a Te Whara	4							Y	Y	
Otauira pa	4							Y	Y	
Freshwater River	4							?	Y	

Table 6.1 (cont.): Attributes of Murihiku Pa

#### 6.3 Sources Identifying Murihiku Pa

The source of pa identification is important, as some sources tend to be vague, inconsistent and/ or can be open to unsupported interpretation (see Chapters Three and Four). Three types of sources are distinguishable: oral traditions written down by Europeans and later Maori, early European visitors who wrote or illustrated their knowledge in the early historical records of New Zealand, and inference by archaeologists based on physical remains.

In general, sites given a confidence rating of Level 1 were identified by all three source types, while those from Levels 2 to 4 had only one or two source types (see Table 6.2). Furthermore, ambiguous sources decreased the certainty of the site as an enclosure and pa. This result would generally be expected as a greater amount of evidence from multiple sources allows greater confidence in the identification of a site as a pa. Less expected was Whareakeake, which challenged the trend. Davidson (1984) and Hamel (2001) noted that Whareakeake was palisaded and therefore defendable, while others (Bell 1956; Lockerbie 1959:92; Skinner 1959: 224) have called it a palisaded settlement, but have not suggested a function of defence. This further highlights the confusing nature of the definition of the pa site in New Zealand, and the need to distinguish the enclosure type.

Sites with a confidence level of 3 required further research and highlighted the need for critical examination. While the above paragraph indicated that a greater number of sources increases confidence in the identification of a site as a pa, two Level 3 sites, Pa a Tu Pare Taniwha and Omoua Pa, were identified as pa by all three source types. While they may superficially appear to be well supported by sources, they highlight the need to critically review all resources of information before determining if a site is a pa and may contribute to the variation between pa samples in Murihiku.

			Source of Site Identification as Pa				
Site (see Figure 5.1)	Site Name	Level of Confidence	Ethnohistoric Traditions	Early Written Records	Archaeologist's Inference		
1	Te Waiateruati	1	Y	Y	Y		
9	Pa a Te Wera	1	Y	Y	Y		
12	Mapoutahi	1	Y	Y	Y		
27	Te Kiri o Tunoho	1	Y	Y	Y		
7	Te Raka a Hine atea	2					
	pa		Y	Y	Y		
17	Pukekura	2	Y	Y	Y		
22	Whakapaupuka	2	Y	Y	Y		
14	Whareakeake	2			?		
21	Pa a Tu Pare Taniwha	3	Y	Y	Y		
23	Omoua Pa	3	Y	Y	Y		
29	Parangiaio	3	Y	Y	?		
15	Teraepuha	3		Y	Y		
16	Otaheiti	3		Y	Y		
30	Putatara	3	Y	Y			
19	Pa o Ngatikuri	3	Y	Y	Y		
5	Huru Huru's pa	3		Y			
8	Cornish Head	3			Y		
20	Aurakitaurira	4	Y	Y			
26	Pa a Te Whara	4	Y	Y			
18	Tarewai Point	4	?		Y		
6	Cape Wanbrow	4		?	?		
3	Camp Hill	4			Y		
4	Te Kapa	4		Y			
13	Long Beach	4			Y		
24	Te Anau	4		Y			
25	Anchor Island	4		Y			
28	Otauira pa	4		Y			
10	Brinns Point	4			?		
11	Omimi	4			?		
2	Otipua	4		?			
31	Freshwater River	4		?			

Table 6.2: Source types identifying pa in Murihiku (see Appendix Two for further information and sources)

#### 6.4 Murihiku Pa in the NZAA Site Recording Scheme

The NZAA Site Recording Scheme records archaeological sites in New Zealand, and is therefore an important tool for archaeologists identifying pa sites. A critical review of the sites identified as pa in this research and compared to those recorded as such in the NZAA Site Recording Scheme, is therefore helpful in determining how these records should be approached. The second portion of this section is a short discussion on the important role of the NZAA Site Recording Scheme in recording pa in Murihiku and some potential improvements to the recording system.

#### 6.4.1 The NZAA Sample of Pa Sites in Murihiku

Not all 31 reported pa sites identified from the literature in Chapter Five were identified in the NZAA Site Recording Scheme, but for the 29 that are (see Table 6.3), three types were noted:

1. Sites that had a single NZAA Site Record form that described the site;

2. Numerous records with an umbrella record for the pa site: there were numerous site records for archaeological sites and then one umbrella site record for the pa site. For example, at Pukekura there are nine identified archaeological sites in the vicinity and J44/4 is the umbrella record for Pukekura pa; and/ or

3. The site is mentioned in a site record for a nearby archaeological site. This is especially the case when no archaeological material exists or the specific site location is unknown.

Only 13 of the 31 sites were identified within the NZAA site record as being a pa. The other sites were identified through literature sources, illustrating the variation between different sources. If a site was identified as a pa, this was usually done within the record 'site type'. A total of 12 of the 13 sites identified as pa within the site record were also identified as pa by their site type. There were a mixture of words used to describe pa as a site type including: 'Pa' (n = 4), 'Fortified terraced hill pa' (n = 2), 'Terrace Pa' (n = 1), 'Pa site' (n = 1), 'Traditional Pa site' (n = 2), 'Traditional pa site and find spot-?canoe carving' (n = 1) and 'pa?' (n = 1).

Three broad categories of type can be derived from this:

1. The sites identified as pa that have archaeological evidence. This accounted for the first five site types listed above. These sites tend to have associated ethnohistoric traditions, archaeological material, and either identified or potential structural fortifications;

2. Traditional pa sites. This accounted for the two site types, 'Traditional Pa site' and 'Traditional pa site and find spot- canoe carving'. These sites are identified based on ethnohistoric traditions, but do not necessarily have any archaeological material and therefore, would not normally be considered an archaeological site (Walton 1999). Even if the site does have material culture, it does not have known structural fortifications; and

3. Ambiguous pa sites. This group contains a single site at Freshwater River and is labelled 'pa?' The inclusion of this site record is as a point of reference, as the site location is currently unknown.

Of the 13 sites, there is one site that is identified as a defendable site within the NZAA Site Record Scheme, but is not classified by its site type. Teraepuha is recorded as a historic site in the Otago Harbour by early European writers (Barnicoat in NZAA Site Record I44/137; Hamel 2001; Tucket in NZAA Site Record I44/137). The site has no identified built fortifications, although it has natural features that could be used as defences as it is located on a peninsula (Hamel 2001).

There are 16 sites that are recognised within the NZAA Site Recording Scheme, but are not identified as pa, rather as site locations of named places. The identified site type for these sites in most cases record the archaeological material type found at the site. These sites do not have visible structural fortifications and may only be identified as a pa based on ethnohistoric traditions, or the opinion of an archaeologist due to their location in a naturally defendable area.

Of the 31 sites identified as pa in Murihiku, the NZAA Site Recording Scheme identified 13 of these sites as pa. This research could only confirm four sites as pa for the Murihiku region (see Section 5.2; Table 6.4; Figure 5.16). The reasons for this variation was outlined in the above two sections; that the attributes or sources for the identification of pa were vague and were unable to be confirmed. The NZAA Site Recording Scheme is inclusive and there are fewer pa in Murihiku than indicated within the schemes records. This illustrates the variation between sites and the importance of critically examining all attributes identified at pa sites.

Site (see Figure 5.1)	Site Name	NZAA Site Record Identification Number	Does the NZAA Site Record Identify the Site as a Pa?	Site Type Indicated on NZAA Site Record (exactly as indicated on the file)	Confidence Level
1	Te Waiateruati	K38/12	Y (Yes)	Pa	1
9	Pa a Te Wera	I43/1	Y	Fortified, terraced Hill Pa	1
12	Mapoutahi	I44/17	Y	Pa	1
27	Te Kiri o Tunoho	D46/64	Y	Pa	1
7	Te Raka a Hine atea pa	J42/20 (also others)	Y	Terrace pa	2
14	Whareakeake	J44/20	N(No)	Occupation	2
17	Pukekura	J44/4 and others	Y	<u>Pa</u> site	2
22	Whakapaupuka	H45/5	Y	Traditional pa site and find spot- canoe carving	2
16	Otaheiti	I44/137-141	Ν	Four records: midden, midden/ oven, Dwelling Historic, Dwelling (Historic)	3
5	Huru Huru's pa	J41/60	N recorded as a village	HABITATION AREA	3
8	Cornish Head	J43/42, I43/16-7	Ν	Terraces, midden	3
15	Teraepuha	I44/75	Y	Midden	3
19	Pa o Ngatikuri	Mentioned in I44/106			3
21	Pa a Tu Pare Taniwha	I44/11	Y	Traditional Pa site	3
23	Omoua Pa	I45/25	Y	Traditional pa site	3
29	Parangiaio	E48/34	Ν	Midden oven	3
30	Putatara	Mentioned in D48/1-2	?		3
2	Otipua	No NZAA Site Record (from Hall-Jones 1956)			4
3	Camp Hill	E40/13	Y	Fortified terraced pa	4
4	Те Кара	J41/62	Y	Pa	4
6	Cape Wanbrow	J41/75	Ν	Midden and ovens	4

Table 6.3: Suggested Murihiku Pa Sites and the NZAA Site Recording Scheme (see Appendix Two - NZAA Archsite)

Site (see Figure 5.1)	Site Name	NZAA Site Record Identification Number	Does the NZAA Site Record Identify the Site as a Pa?	Site Type Indicated on NZAA Site Record (exactly as indicated on the file)	Confidence Level
10	Brinns Point	I43/38	Ν	Cemetery	4
11	Omimi	I44/11	Ν	Occupation, stone working, terraces (?)	4
13	Stream outlet at Long Beach	No NZAA Site Record (site from Hamel 2001)			4
18	Tarewai Point	J44/3	Ν	House Sites	4
20	Aurakitaurira	I44/1	Ν	Fishing site of several phases	4
24	Te Anau	D43/2	Ν	Maori Village Site	4
25	Anchor Island	Mentioned in A44/10	?		4
26	Pa a Te Whara	Mentioned in B45/40-1	?		4
28	Otauira pa	F47/15	Ν	Midden	4
31	Freshwater River	D48/8	Y	pa?	4

Table 6.3 (cont.): Suggested Murihiku Pa Sites and the NZAA Site Recording Scheme (see Appendix Two - NZAA Archsite)

Pa Sites in the NZAA Site Recording Scheme	Pa or Enclosure Sites in this Thesis (confidence
(from the 'site type')	Level 1 or 2)
Te Waiateruati	Te Waiateruati (pa)
Pa a Te Wera	Pa a Te Wera (pa)
Mapoutahi	Mapoutahi (pa)
Te Kiri o Tunoho	Te Kiri o Tunoho (pa)
Te Raka a Hine atea pa	Te Raka a Hine atea pa (naturally enclosing
	features, traditional pa)
Pukekura	Pukekura (potential pa, naturally enclosing
	features, traditional pa)
Whakapaupuka	Whakapaupuka (naturally enclosing features,
	traditional pa)
-	Whareakeake (structurally enclosing features)
Camp Hill	-
Те Кара	-
Teraepuha	-
Pa a Tu Pare Taniwha	-
Omoua Pa	-
Freshwater River	-

Table 6.4: Sites identified as being pa in the Murihiku area by the NZAA Site Recording Scheme and this thesis

#### 6.4.2 Recording Murihiku Pa Sites in the NZAA Site Recording Scheme

The NZAA Site Recording Scheme contains some pa sites that are currently unable to be confirmed as archaeologically visible pa. Many site records have little evidence or details provided for a recorded pa site. An example of this would be the reported pa at Freshwater River, Stewart Island (D48/8). This site has no known location and is documented from a European map. However, if this information was not recorded within the NZAA Site Recording Scheme then it would likely be lost. Furthermore, if in the future a pa site were located in the area, the D48/8 record is easily accessible and could help provide information regarding the pa. The use of the question mark for the site type suggested is an excellent way of highlighting that the site is problematic in its identification. However, it is only useful if all archaeologists understand the nature of the site. More useful would be the inclusion of a section in which the site recorder can justify their choice of site type. In this way, the identification process would be more thorough, with greater transparency and understanding of the site type was chosen.

Some work has been undertaken with regards to validating the identification of sites described as pa in the Murihiku site records. For example, the former Site Record B45/41 contained

information on the ethnographically recorded pa, Pa a Te Whara. Searches of Spit Island, in Preservation Inlet, did not reveal any archaeological evidence of the pa and so the record was removed by the file keeper in the 1980s (NZAA Site Record B45/41). While the information is still kept within the NZAA Site Recording Scheme by being included in the record of another site on the island, it is difficult to search for this information. Furthermore, the available information about this site is equivalent to other sites with their own site records, for example Pa a Tu Pare Taniwha (I44/11) or Omoua Pa (I45/25). The records for Pa a Tu Pare Taniwha (I44/11) have been kept, but recently updated to include new information that that site is unlikely to be the location of a pa. In this way, it is accessible and the unlikelihood of this site as a pa clearly demonstrated.

The inclusion of sites without tangible evidence could create a situation where any 'site' could be 'recorded'. However, it is prudent to acknowledge areas that are of significance to Maori, whether they are archaeologically visible or not. Thus, the use of the site type 'traditional pa' is a constructive way of indicating a site is not an archaeological site (as defined by Walton 1999:3).

The above paragraphs illustrate variations in recording of site. It could be argued a reason there are few recorded pa sites in Murihiku is the result of poor site recording, however, this has not been demonstrated by the data. If anything, there are more pa recorded within the NZAA Site Recording Scheme then can be confirmed as archeologically visible pa sites. Recent survey projects, such as The Southland Coastal Heritage Inventory Project (SCHIP) between Waiparau Head and Rowallan Burn (Jacomb *et al.* 2010) created an inventory of 431 archaeological sites, including 154 sites that were not re-located in the field and 109 previously unrecorded sites. This provides evidence that the recording of sites in the past is not so poor as to account for the fewer recorded pa sites in Murihiku can. Nonetheless, there continues to be inconsistency between the number of recorded archaeological sites compared to the number of sites identified in the traditional records (Jacomb *et al.* 2010).

# 6.5 The Continuum from Open to Enclosed Sites in Murihiku

While there are a low number of recorded pa sites in Murihiku, there are also fewer sites confirmed as pa for Murihiku in this research than in the wider literature. The methodology used by this thesis to identify pa is based on the need for archaeologically visible attributes of pa. Only four sites had enough tangible evidence, specifically structural fortifications, to be confirmed as archaeologically visible pa. The above sections illustrated that while some of the

31 sites identified as pa were not considered pa due to data or source concerns, others were discounted as pa because, while they had some attributes of pa, they lacked other essential ones.

Restriction of the archaeological site type pa to sites with structural fortifications excludes sites that are not considered enclosed fortifications and yet, are also not open sites. What these sites demonstrate, and this is particularly evident in Level 2 sites, is the fluid and dynamic range of site types in Murihiku. The strict bounding of the site type pa simplifies the reality of the range of sites presenting on the ground in the late prehistoric and early historic periods in Murihiku. This range of sites represents a continuum from open to enclosed sites, with pa only being the extreme end of this scale (see Figure 6.1). The settlement types and enclosures identified in Murihiku are consistent with the settlement types identified as late period in other parts of New Zealand (Davidson 1984; Groube 1964; Walter *et al.* 2006).

This section will explore the morphology of Murihiku pa sites in order to explore how the continuum of sites may be affecting the identification of pa sites in the region. Initially, the morphology of Murihiku pa will be outlined based on the attributes used to identify these sites as pa. Following this, a discussion of why some, but not other, naturally defendable sites were fortified occurs.



Figure 6.1: Theoretical model of the continuum from open through to enclosed sites, including the position of Murihiku Level 1 and 2 sites

Archeologically visible structural features, particularly defensive ditches and banks, are conceivably the most supportive evidence of a site as an archaeological pa. Other structural features include: ditches, banks, defensive scarps, palisades, fighting stage, entrances and platforms or tihi (see Table 6.5). There are 15 structural attributes present at Murihiku pa sites (see Table 6.1, Appendix Two and Appendix Four). The most commonly identified type of structural fortifications are ditches (four), banks (four) and palisades (two). Ditches and banks are the most common and visible feature of pa in wider New Zealand (Lilburn 1985; Walton 1999), and Murihiku pa are consistent with this. The only structural feature not identified from a pa site in Murihiku was a palisade at the enclosure Whareakeake.

Attribute of pa	Number of said attributes in Murihiku that are visible or				
	well documented in the archaeological literature				
Ditch	4				
Bank	4				
Defensive scarp	1				
Palisade	3				
Fighting Stage	0				
Entrances	2				
Gates	Four sites have traditionally recorded gates				
Platform or tihi	2				
Artificial Island	0				
Natural features interpreted as	7				
having a defensive function	1				
Ethnohistoric report/ suggestion	7				
Historic gun pit	One site has possible gun pits				

Table 6.5: Confirmed structural attributes at pa sites in Murihiku (see Appendix Two and Appendix Four)

Natural features that reduce access to a site are an important attribute of Murihiku pa. Of the eight Murihiku enclosed sites, all except Whareakeake, have existing natural features that could restrict access to the site (see Table 6.6). Four of the sites, Pa a Te Wera, Mapoutahi, Te Raka a Hine atea pa, and Pukekura, are located on peninsulas and are partially enclosed by impassable cliffs, steep slopes and the sea, reducing the need for extensive structural fortifications. Two sites are located on islands, Te Kiri o Tunoho on a coastal island and Whakapaupuka within a swamp. Unlike peninsulas, islands are completely cut off from foot access.

Site	Site Name	Confidence	Are Naturally	Physical	Type of Natural Feature/s:	Occupation Period (see
(see		Level of Site	Defensive	Location		Table 5.3)
Figur		as a Pa	Features			
e			Present?			
5.1)						
9	Pa a Te Wera	1	Y	Peninsula	Cliff/ inclined slope/ water	Prehistoric
12	Mapoutahi	1	Y	Peninsula	Cliff/ water	Prehistoric
7	Te Raka a Hine	2	Y	Peninsula	Cliff/ inclined slope/ water	Prehistoric
	atea pa					
17	Pukekura	2	Y	Peninsula	Cliff/ inclined slope/ water	Prehistoric
27	Te Kiri o	1	Y	Island	Coastal island/ water/ inclined	Historic/ ?Prehistoric
	Tunoho				slope	
22	Whakapaupuka	2	Y	Island	Swamp island/ water/ inclined	?Prehistoric
					slope	
1	Te Waiateruati	1	Y	River side	Inclined slope to stream- is a	Historic/ ?Prehistoric
					gunfighter pa so different	
					requirements to prehistoric pa.	
14	Whareakeake	2	?	Currently on	Former swamp?*	Historic/ ?Prehistoric
				the flat,	•	
				possibly		
				bav/		
				swamp*		
. ~ .				r r		

Table 6.6: Naturally defendable features at Level 1 and 2 sites in Murihiku (see Appendix Five)

\* Suggestion the current bay could formally have been a swamp environment (Hamel 2001).

The two enclosed sites that are not located on peninsulas or islands have fewer natural features that could have been used for defence. Whareakeake and Te Waiateruati were occupied during the historic period when muskets were a threat (Bell 1956; Brailsford 1981; Crosby 1999). Whareakeake is thought to have been enclosed by a palisade (Bell 1956). Te Waiateruati, a gunfighter pa, contains extensive built fortifications and is partially protected by a river (Brailsford 1981). Te Waiateruati was established on the flat, following the common trend of gunfighter pa throughout New Zealand (Jones 1994:88-89).

The use of natural features that reduce access and help form the enclosures of pa in Murihiku appears to have been extensive. The favoured site type for pa appears to be peninsulas, followed by islands. Walton (2001) proposed that the location of pa was a choice between an initial input of labour for built defences or continued labour for resource acquisition, if locating a site in a naturally defendable area. While, on the surface, it would appear the people who established Murihiku pa largely chose the second option, some pa, such as those on coastal peninsulas, may have required both the decreased labour of initial establishment as well desired resources within close proximity.

#### 6.5.2 From Open to Enclosed Sites in Murihiku

Walton (2001) argued that pa may have been established, if not to defend a place from direct attack, then from the fear of attack. The ethnohistoric traditions speak about the continued fear of attack throughout the late prehistoric and early historic periods (Anderson 1998; Carrington *et al.* 2008). This may have been particularly so on the east Otago coast, the focus of the late prehistoric period and through which more northern hapu moved south (Anderson 1998; Carrington *et al.* 2008). If this was the case, the natural headlands along this coast would offer ideal locations for pa sites.

There is a shift from bay sites to headland sites from the early into the late prehistoric period (Hamel 2001). That these sites were occupied, but not necessarily fortified, may have been the difference between the threat of attack and the reality of attack. The partially, naturally defendable areas may have been occupied or settled nearby as they would have required less labour to establish structural fortifications if the risk of attack became real. Pa on the Murihiku coastline are traditionally associated with sieges and direct attacks. Traditional evidence suggests this may have occurred at Pa a Te Wera and Mapoutahi (see Chapter Five and Appendix Two). When the threat of attack became reality, additional resources and labour

were put into the development of structural fortifications at natural defences, establishing the site as an archeologically visible pa.

This concept, that places were chosen and settled as potential pa, but were not structurally developed as such until a situation called for structural fortifications, may be taken a step further. While some sites with naturally defendable features, such as Te Raka a Hine atea pa, were the location of settlements, others appear never to have been used for settlements, and yet are known as traditional pa. Headlands, particularly in the very south of New Zealand, are not ideal occupation areas due to the climate and other factors, such as a lack of a water source. Orchiston (1979) suggested some pa in the north of the South Island were refuge pa. People occupied an open settlement and had a refuge pa nearby. Perhaps Maori in late prehistoric Murihiku choose to locate their settlements near partially naturally defendable areas and if necessary, these naturally defendable areas could be established into pa with structural fortifications. This may explain why some places are called pa but have no structural fortifications or known archaeological evidence.

A number of sites illustrate the locating of settlements near or on natural features that could be more suitable for development into pa than other locations. The standout site that exhibits this arrangement in Murihiku is Te Raka a Hine atea pa. The previous chapter clearly established that this site currently cannot be considered an archaeologically visible pa, as it has no known structural fortifications. That this site could very quickly have been developed into a pa with the addition of structural fortifications is demonstrated by the narrow isthmus and almost complete enclosing of the peninsula by natural features. The long history of settlement on and around Katiki Point, but its status as a partially naturally defendable area and not a archaeologically visible pa could suggest that the threat of attack may never have materialised and hence, no formal fortification was required despite the existence of a named pa.

This arrangement of an open settlement and refuge pa should perhaps be considered for other naturally defendable areas identified as pa, particularly those identified as Level 3 sites requiring further research due to a lack of identifiable archaeological material. For example, Pa o Ngatikuri and Otaheiti are both identified as Level 3 sites, requiring further research. Both sites are located in areas of occupation as demonstrated through known archaeological sites (se Chapter Five and Appendix Two). Both Pa o Ngatikuri and Otaheiti refer to naturally defendable places named pa, but have no known fortifications.

Sites identified in Appendix One may also benefit from landscape analysis looking for partial natural defences and known archaeological material. Puke Mataa Pa is reported to have been located at Moeraki. There are mentions in the ethnohistoric traditions of Moeraki being settled

for short periods by Te Wera, Taoka and Takatahara, who are linked to the mid 18th century pa in Murihiku (see Chapter Five - Maclean 1986; Taylor 1952). Cultural material in the form of midden has been noted in the area (J42/33 and J42/138). While the 'pa' is reported to have been located at the current helipad, Mantell's 1848 sketch does not show it. The author visited the headland rising to the south of the helipad in December 2012 and noted two flakes on a hilltop with natural enclosing features immediately south and east of the helipad. This area may be conducive to establishment as a pa with minimal structural fortifications. Examining the surrounding landscapes at reported pa and known settlements in Murihiku, may help determine potential targets for further investigations.

The function of sites that are partially naturally defendable may add to the understanding of the role of pa in Murihiku. The theory on the function of pa has already been briefly covered in previous chapters, particularly the importance of defence, ownership and display at pa (see Chapter Three - Allen 1994, 2006; Burridge 1995:92; Davidson 1984; Marshall 1987; Phillips 2000; Phillips and Campbell 2004; Potts 2008; Sutton *et al.* 2003; Walter *et al.* 2006; Walton 2006). While pa may have been used for these functions, other types of enclosures, particularly partially naturally defendable areas, may also reflect these uses. Ideas of ownership and display are evident at naturally defendable places, such as peninsulas, for example, Te Raka a Hine atea pa and Pukekura. These capes are very visible upon the landscape, particularly from the ocean and surrounding coastlines. In turn, headlands provide the occupants with a place to observe the movement of people through the area. These peninsulas also provide lookouts for more utilitarian pursuits, such as spotting schools of barracouta (Anderson 1981b:156, 1983a:42, 1998:137; Hamel 2005:8).

With very few pa sites existing in Murihiku, the reason for their existence at all is an important consideration. A benefit of investigating pa as part of a continuum of sites, is the additional data available to explore an evolving site type dependant on the needs of the community at the time. Furthermore, by exploring the range of sites that exist on this continuum, a broader picture of what happening in the late prehistoric in Murihiku can be understood. In general, but particularly on the east Otago coast, it appears people were situating themselves in places with, or in close proximity to, natural defences that could be established as pa with structural fortifications if the risk of attack become reality. Partially enclosing natural features may have been referred to as pa and could have provided some sense of ownership, communal cohesiveness and a sense of safety for the occupants of the area.

The existence of traditional pa sites without archaeologically visible fortification brings into question the use of the New Zealand wide methodology of identifying pa for the Murihiku context. The exclusion of partial defences in the study of Murihiku pa also excludes the bigger

picture of the development of fortifications within the area. Pa sites in Murihiku are a part of a wider development of sites that were specifically chosen for their natural features, and may help explain settlement patterns with regards to the placement of villages and settlements.

The concept of the enclosure may help capture the landscape of site development in the late prehistoric and early historic period in Murihiku. Examining places identified as pa to determine the presence of defences at these sites, and their proximity to known archaeological material, may help establish the settlement pattern of the late prehistoric period in Murihiku. This late prehistoric period settlement pattern has been problematic for investigators of Murihiku, and has been largely ignored. Landscape archaeology, with a focus on open sites, partial defences and fully enclosed pa may help address the way in which people chose and located their sites during this period in Murihiku.

## 6.6 Conclusions

This first section of this chapter illustrates that the research methodology is consistent with the current way of identifying pa in the wider New Zealand literature. However, it the methodology highlights the problematic nature of pa identification in Murihiku. The methodology also emphasises a potential reason for variations in the number of identified pa sites in Murihiku. While pa sites in Murihiku were identified based on attributes sourced from literature, many needed individual and contextual consideration that may be open to interpretation and were ambiguous. This demonstrated the need for individual and critical examination of every attribute identified at a reported pa site. While perhaps not unexpected when considered within the context of a geographically marginal area of pa sites, this result does focus the need to investigate each individual attribute at an identified pa site.

One of the reasons there were questionable attributes was the sources of information and this was explored in the second section of this chapter. Most of the sites that were given confidence levels of 1 or 2 were identified by multiple types of sources, including archaeological, ethnohistoric and early European sources. Less expected however, were the sites that, while identified by all three sources, were given confidence levels of 3 or 4. The main conclusion drawn from this finding was the need for further research on these sites. The rather apparent difference between the 31 suggested pa sites and the four eventually determined as currently having the attributes of an archaeological pa resulted from either inaccuracies or a lack of site recording. Consequently, nine of the sites identified as pa in the NZAA Site Recording Scheme were discounted, while four were considered archaeological pa.

Consideration of the attributes used to identify pa in Murihiku and the sources these were obtained provided the foundations for why the variation between samples has occurred in Murihiku. When the sample of archaeological pa confirmed in this research was compared to those in the NZAA Site Recording Scheme in the third section of this chapter, it became apparent that the reason there are few recorded pa sites in Murihiku cannot be attributed to poor site recording. While there could be improvements in the way sites are recorded as well as the level of information, more sites were recorded as pa within the NZAA Site Recording Scheme than were confirmed in this research. Furthermore, all the sites identified as pa were also recognised as such in the NZAA Site Records. Hence, other, non-recording related reasons for the few recorded pa sites in Murihiku must be considered.

The forth section of this chapter examined how the site type pa corresponded to the sites on the ground in Murihiku and whether this may be contributing to the few and variable number of sites identified as pa in the region. While a testable and stringent definition of pa is helpful in classifying the site type 'pa', the reality is that there is a continuum of sites - from those sites that are completely open, through to those that are partially defendable and finally, pa. When the settlement patterns of the late prehistoric and early historic period are examined, this continuum of site types should be considered.

In the Murihiku area, particularly on the east Otago coast, there appear to be many more recorded pa sites than there are archaeologically visible pa (see Figure 5.1 and Figure 5.16). This may be because, while sites were chosen and named as pa based on their natural defences as precaution to attack, this risk of attack never materialised and hence, the additional labour and resources required for intensive structural fortifications needed to complete a pa were not needed. Some of these naturally defendable areas were occupied, such as Te Raka a Hine atea pa, while others appear to have been linked to nearby settlements, which are visible in the archaeological record. Targets for future archaeological investigations could be found through landscape analysis of known traditional pa, archaeological sites and associated naturally defendable features. This questions the use of the stringent definition of pa for the Murihiku area. A better approach may be to consider theory on enclosures when examining confirmed archaeological pa within the context of this continuum of site types in order to explore the role and development of pa in Murihiku; ultimately contributing to why there are few recorded pa sites in Murihiku.

# **Chapter Seven: Southern Pa, Southern Influences**

Pa whawhai (fortified sites) became a feature of the social organisation as Kati Mamoe and Kai Tahu in turn sought mana over the land. Pa whawhai were almost always established to protect major access routes and valued resources. Pa whawhai or well established kaika nohoaka, were instrumental in ensuring that travellers that passed through the rohe were obliged to provide information to the tangata whenua about any recent event occurring in the area the visitors had recently travelled from.

(Central Otago District Council 2008:2:5)

## 7.1 Introduction

This chapter uses the data on the current Murihiku sample of archaeologically visible pa sites (see Figure 7.1) to evaluate and contribute to the theoretical literature on why there are few recorded pa in the area. Sutton *et al.* (2003) argued that pa had three components: form, function and meaning. International literature on enclosed sites stress three aspects that require exploration: practical function, social meaning and symbolic significance (Neustupny 2006). These theoretical perspectives will be discussed within this chapter.

Based on the model presented in Chapter Four for the identification of pa sites, there are currently four sites which can be classified as pa in Murihiku: Pa a Te Wera and Mapoutahi, likely to have been established during the late prehistoric period, as well as Te Waiateruati and Te Kiri o Tunoho from the early historic period. The first section of this chapter discuses why pa are found where and when they are in Murihiku. In this way, why there are pa at all, and their role in the area can be addressed. The second section reviews and assesses the theories on why fewer pa are recorded in Murihiku than in more northern areas of New Zealand in order to address the third sub-question of this research. These theories were summarised in Chapter Two under four main themes: chronology, population, warfare and the other roles of pa.



Figure 7.1: The current sample of recorded archaeologically visible pa sites in Murihiku

# 7.2 Murihiku Pa: Late Prehistoric

The archaeologically visible prehistoric pa sites, Pa a Te Wera and Mapoutahi, are located within 12 km of each other on the east Otago coast. The two pa can be seen from each other. Pukekura, currently a Level 2 natural enclosure, but another likely pa, is visible from Pa a Te Wera (see Figure 7.2). The location of these isolated, late prehistoric pa sites in close proximity to each other requires exploration of what was happening in this part of Murihiku during this period. Initially, Pa a Te Wera and Mapoutahi are reviewed individually. Following this, a wider discussion of the east Otago coastal pa and Murihiku is presented.



Figure 7.2: Oblique Google Earth (2013) image looking south of a 16 km stretch of the east Otago coast. Mapoutahi and Pukekura are visible from Pa a Te Wera, but not from each other

#### 7.2.1 Pa a Te Wera

Analysis of this pa requires the consideration of disparate information sources. While there have been a number of excavations at Pa a Te Wera, there is a lack of clarity regarding how the results from the excavations can be integrated to provide a detailed interpretation of how the different elements of the site existed, and were utilised spatially and temporally. However, what can be said is that the natural defences and resources have made this peninsula a more attractive site to establish a fortification than other locations in the area. The site "occupied a strategically strong position, commanding as it did a very comprehensive view of the sea and shore" (Cowen 1906:88). Furthermore, "With its natural defenses of sea and cliffs, Huriawa Peninsula is ideally suited for use as a fortified pa, while its strategic position gives it commanding views of the coast to the north and south" (Easdale and Jacomb 1984b:1).

An advantage of the Huriawa Peninsula is that the resources and features on the peninsula itself would have minimised the need for leaving the area at all. Resources on Huriawa Peninsula, include: two water sources, access for canoes, rich and accessible marine resources, as well as the structural features that create multiple defendable areas. This could have resulted in people being able to stay on the peninsula for long periods of time (see Chapter Five). Tradition holds that the occupants waited out a siege of this site for six months (Cowen 1906:88; Easdale and Jacomb 1984b:1; Taylor 1952:117).

#### 7.2.2 Mapoutahi

Mapoutahi is well positioned for visibility and resources. However, unlike Pa a Te Wera, Mapoutahi does not have a fresh water resource within its enclosed area. On the other hand, the site is perhaps more naturally secure than Huriawa. The large sea cliffs limit access to the headland to the narrow isthmus. With the additional fortifications on this headland, Mapoutahi became a strong defence.

Like Huriawa, there are few tangible archaeological reasons to indicate why Mapoutahi was fortified. Other than the location of this site in a naturally defendable area, there is no physical evidence of warfare, other than perhaps the defences themselves. While ethnohistoric traditions indicate that the pa was attacked, there is no tangible evidence to link the abandonment of this site with warfare. Consideration of the site within the wider archaeological landscape may offer further insight into the motivations for the establishment and maintenance of the fortifications of both Mapoutahi and Huriawa.

# 7.2.3 The East Otago Coastal Pa

The ethnohistoric traditions suggest that disagreements between different Ngai Tahu hapu were to blame for the skirmishes on the east Otago coast. The enclosed sites involved in these disputes included Te Raka a Hine atea pa, Pa a Te Wera, Mapoutahi, Pukekura, and Te Kiri o Tunoho, located at Cosy Nook, Southland. The first four of these sites, including the two confirmed archaeological pa, Pa a Te Wera and Mapoutahi, are located on the Otago coast within a 50 km stretch of coastline running north from Taiaroa Heads. These disagreements are reported in ethnohistoric traditions to have been triggered primarily by revenge and family honour (Anderson 1983a:41, 1998). It is reported that the movement of Ngai Tahu hapu into the area did begin as a planned attack against the Ngati Mamoe, but subsequently, both the interior and the coastal assaults faced internal conflicts (Anderson 1983a:38, 1998). The east Otago pa sites are reported to have been held at this time by an alliance between two cousins, Te Wera and Taoka. The fighting was purportedly the result of a fall out between these two. After Taoka unsuccessfully besieged Pa a Te Wera, Te Wera went to Stewart Island, while an ally went to Mapoutahi, which in turn was successfully attacked by Taoka (Anderson 1983a:38-40). While ethnohistoric traditions describe how the east Otago coastal pa were the

sites of battles and sieges, it is important to remember these would only account for a small part of the history of these sites (Anderson 1998).

The archaeologically visible pa, recorded traditional pa and natural enclosures in Murihiku cluster on the east Otago coast, illustrating the focus of the cultural landscape on this coastline during the late prehistoric period (see Figure 7.1). The previous chapter examined why there are fewer recorded archaeologically visible pa compared to traditional pa in Murihiku. The chapter concluded that while sites may have been recognised as potential pa, the establishment of fortifications likely only eventuated as the result of specific triggers and events. The specific causes for the establishment, or potentially, several chronological formations of fortifications at Pa a Te Wera and Mapoutahi set these sites apart from all other late prehistoric sites in Murihiku. These two headlands were established into pa in preference to other peninsulas, which, in the case of Te Raka a Hine atea pa, had similar natural resources. The above section illustrates that there are few archaeological clues to suggest why fortifications were built. These fortifications represent social events, however what these events were, and how to identify them in the archaeological record, is more problematic.

Pa can be viewed as symbols of ideological, military and economic power, as discussed in Chapter Three. Both Pa a Te Wera and Mapoutahi can be considered as symbols of leadership, wealth and resources. That there are currently only two recorded prehistoric archaeological pa in Murihiku makes these sites distinctive in the prehistoric archaeological landscape. The development of built fortifications in the area may have created a subtle, but sure shift, in the settlement landscape from solely utilitarian structures, such as houses, to structural fortifications that required significant additional labour. This move may be tied into social themes, be they military or ceremonial. Furthermore, the knowledge of how to construct pa in an area with few pa sites raises questions about the movement of knowledge, and the leadership required to construct a fortified enclosure.

While there are other sites with permanent structures in Murihiku, such as houses at Te Raka a Hine atea pa (Trotter 1967a), the fortifications of pa would have been distinctive on the landscape. To an outsider, these relay a message of capability. These built fortifications would have required the organisation and resources to enable their construction by the group that established them. "Interpretation of the form of Pā may explain their function. These were to express the prestige, stability, and permanence of the tribal group which claimed them and to express mauri, mana and permanence of ownership" (Sutton 1991:547 - also Allen 1994:33; Marshall 1987). In Murihiku, where there were very few pa, this would be particularly true. Internally, members of the group may connect and associate with the idea, construction and establishment of a pa. Externally, visitors may have felt not only physically excluded, but

psychologically excluded from, and continually reminded of, the permanence and connection to place that pa create.

It has been argued that pa were symbols of group identity, and the investment required for these sites would have been considerable to a local community (Irwin 1985; Marshall 1987, 2004; Phillips and Campbell 2004; Walter *et al.* 2006). The east Otago coastal pa would have required planning, labour and organisation that stands out in the context of late prehistoric Murihiku. To be associated with structural fortifications would have linked these people together to what can only be considered a rare site type in the region. That these sites represent symbols of group identity should be strongly considered because of the rarity of pa in Murihiku, and the additional effort required to construct these places.

The physical barriers and protection afforded by defensive features, as well as the symbolic nature of deterrence leverage should be considered when investigating pa in Murihiku. "Fortifications are most symbolically useful when they are militarily functional... [but] Because fortifications usually surround sites with many other functions and because they are so useful as symbols, their features often incorporate elements that either exceed or, to some degree, undercut military necessity" (Keeley *et al.* 2007:81-82). Furthermore, "Widespread *paa* building may also be correlated with the socio-political development of the ancestral landscape and, eventually, the formation of new founding traditions and descent associations" (Barber 1996:877 - also Sissons 1988). The movement of new people into the area and the symbolic impact this had on the inhabitants already in the area, as well as the tying of the new people to place, should be not be underestimated in the establishment of new pa sites in Murihiku, where traditions speak extensively of the movement of new people into the area (Anderson 1998; Carrington *et al.* 2008).

The positioning of Pa a Te Wera and Mapoutahi in areas with excellent natural resources, particularly coastal resources adds to the importance of these sites, and may help explain their existence. The resources in the area, and the permanent nature of the fortifications means that these pa may have sent a message of ownership to those in the surrounding area. The coast was a vital resource location and travel route for people living in Murihiku, and the location of pa sites on the coast may have enforced the manamoana (mana over the sea) and wakawaka (sections of exclusive use) of the occupants. Pa would have included permanent structures, both fortifications and houses, required for ahi kā (manawhenua over an area required continued occupation) (Garven *et. al.* 1997:27). These concepts are outlined in the Ngai Tahu resource management scheme as it was later known, however, how the scheme operated in the late prehistoric period is more difficult to establish (Garven *et. al.* 1997:27).

While ethnohistoric traditions describe settlements in other areas of Murihiku, the archaeological data skews towards coastal Otago. Recent developments in settlement theory enable better interpretation of the late prehistoric period in Murihiku than has been formerly possible. Jacomb *et al.* (2010) presented three models and favoured the third for the Foveaux Strait area (see Chapter Two for a summary of the models). This third model, 'The Resource Network' postulates that in the late prehistoric period, from the 16th century until European contact, the focus of settlement in Murihiku was on the east Otago coast. The number of archaeological sites dramatically decreases in all other areas of Murihiku during this late period, to the point of abandonment in some areas, such as the Catlins (see Chapter Two for further information - Hamel 1982; Jacomb *et al.* 2010). It is, therefore, unsurprising that the two prehistoric pa in Murihiku are located on the east Otago coast.

The contemporary time period and close proximity of Pa a Te Wera and Mapoutahi illustrates the importance of the east Otago coast during the late prehistoric period. These pa were established where they were, for social reasons rather than environmental factors. Their positions are not the only potential pa locations, as illustrated by the existence of a number of other headland settlements along the coast. Like the vast majority of pa in New Zealand, Pa a Te Wera and Mapoutahi reveal no direct evidence of warfare. Traditions suggest that the late prehistoric pa of Murihiku were fortified for battles and direct threats, yet there are fewer traditional accounts of battles than there is stratigraphic evidence of fortifications. These sites reflect pa throughout New Zealand, in that they may represent defences, but also other, nonmilitary functions tied to the cultural landscapes of the late prehistoric period. Where there are people and cultural material in the late prehistoric period of Murihiku, so too are there pa sites.

A recent report (Central Otago District Council 2008:2:5) further illustrates the social importance of Murihiku pa:

"Pa whawhai (fortified sites) became a feature of the social organisation as Kati Mamoe and Kai Tahu in turn sought mana over the land. Pa whawhai were almost always established to protect major access routes and valued resources. Pa whawhai or well established kaika nohoaka, were instrumental in ensuring that travellers that passed through the rohe were obliged to provide information to the tangata whenua about any recent event occurring in the area the visitors had recently travelled from."

The location of Murihiku pa on the east Otago coast during the late prehistoric period further illustrates the importance of the area and the sites.

#### 7.2.4 Murihiku Pa Sites as Villages

Current theory suggests that villages had re-emerged in southern New Zealand by the early historic period (Anderson 1982a; Anderson and Smith 1996), and the east Otago coast pa sites support this. Settlements were the focus of winter activity, supported with preserved foods from gathering, as well as trade, and movement during warmer months to collect food for immediate and long-term consumption. Food sources were spatially restricted, but kinship networks were used to widely disperse these resources (Anderson 1998). The late period on the east Otago coast is the best place in Murihiku to examine when villages re-emerged, as this is where the most activity was occurring at the time.

The recurrence of villages in Murihiku had certainly occurred by the early historic period (Anderson 1998; Anderson and Smith 1996; Walter *et al.* 2006). Rather than simply people moving around, goods came to the people using socio-political networks of direct acquirement and exchange (Anderson 1980, 1988; Anderson and Smith 1996). If villages existed in the late prehistoric, then the emphasis may have been on anchoring property rights (Anderson and Smith 1996). Villages were desirable for five possible reasons: storage, a place to hold events, burial grounds, displays of spiritual significance, and a place for the elderly to reside (Anderson and Smith 1996; Ingold 1987).

Walter *et al.* (2006) viewed pa sites as fitting within the settlement forms that existed throughout the entire prehistoric sequence. They argued that pa were not a discrete monumental site type, but rather "defended versions of, or adjuncts to, settlement forms that persisted throughout the prehistoric sequence", namely the transient village. The transient village, a settlement occupied by highly mobile people, was first proposed by Anderson and Smith (1996 - also Anderson *et al.* 1996) as a model for the early period in the southern South Island. Walter *et al.* (2006) extrapolated this model to the entire prehistoric period throughout New Zealand. However, they noted that "in southern New Zealand transient villages may have disappeared briefly with the depletion of big game...[but] they had re-emerged by the contact period (Anderson and Smith 1996a)" (Water *et al.* 2006:281). The pa sites on the east Otago coast, Pa a Te Wera and Mapoutahi, as well as a number of headland settlements, such as Raka a Hine atea pa and Pukekura, have significant cultural material that may be considered for having some relationship to later permanent villages. Of these sites, Pa a Te Wera would be the paramount candidate for a permanent village.

Williams identified four types of settlements in north Otago/south Canterbury:

*Kāika Mahika Kai* 'occasional camping place[s]', which were not maintained continuously;

*Kāika Nohoanga* 'regular, seasonal camping places', probably with rudimentary dwellings, which would be maintained at each visit;

*Kāika Nohoanga Tūturu* 'semi-permanent settlements', the most important of which were associated with *urupā*, thus committing at least some of the people to regular visits. Many *kāika nohoanga tūturu* also had gardens, and/or *tūāhu*...; and

 $P\bar{a}$   $T\bar{u}watawata$  'palisaded forts', always with *urupā*. These are settlements where the folk spent quite some time, and where the old and the very young would probably have wintered. The majority have gardens and nearby  $t\bar{u}\bar{a}hu$  'sacred places', with the appropriate *mauri* 'spiritual features', at which *karakia* 'incantations' were said (2010:161-162).

While these apply to the historic period, it is thought they may have been developed from earlier systems, created by iwi such as Waitaha and Ngati Mamoe (Williams 2010:163). The east Otago pa would seem to represent what would later be known as  $P\bar{a}$   $T\bar{u}watawata$ . Each hapu had a wakawaka, from which they accessed resources for most of the year for a permanent settlement (Williams 2010:170). While it is difficult to ascertain whether or not this system existed in the prehistoric period, pa do seem to fit the settlement type. This is particularly the case with Pa a Te Wera, where substantial occupation deposits and human remains have been excavated (Easdale and Jacomb 1984b; Knight n.d.: 31.1.1963; NZAA Site Record I43/1) and traditions describe the establishment of a wooden image of a god kahukura on the terrace with the contemporary trig station (Beattie 1916a:16-17; Cowen 1906; Taylor 1952).

# 7.3 Murihiku Pa: Early Historic

While the late prehistoric pa cluster on the east Otago coast, the two early historic pa are in very different geographic positions (see Figure 7.1). In the very north of Murihiku, inland and on the banks of a tributary, is the musket pa Te Waiateruati. The other pa, Te Kiri o Tunoho, is located on an island just accessible at low tide in the Foveaux Strait. Both of these sites represent the reaction of Maori to wider, external events and influences.

Although the focus of Ballara's (1976) early historic period research is on the northern areas of New Zealand, the general trends are worth considering for Murihiku. She described the settlement patterns of the early historic period as revolving around the village and pa. While the early historic period was a time of dynamic and often rapid change, pa tended to be used in times of danger whereas seasonal subsistence activities dictated when villages were in use. Ballara (1979) suggested that this settlement pattern was similar to that outlined for the late prehistoric period by Groube (1964). While pa were intended as temporary refuges, they were not necessarily maintained during peace time, and were restored when required for warfare (Ballara 1979:206-7).

According to Ballara (1976: 502-503), Maori warfare during the early historic period, specifically, the first half of the 19th century, was motivated by the same grievances as earlier times, but also new aggravations associated with the arrival of Europeans, particularly economic friction. However, war weariness and peacemaking generally amplified over the early historic period. Warfare eventually declined in the 1840s and 1850s due to greater opportunities to trade with Europeans "combined with the political ferment over land-selling, [which] increasingly occupied the attention of the Maori population" (Ballara 1976:503).

# 7.3.1 Te Waiateruati

The threat posed by Te Rauparaha in the years around 1830 was certainly recognised by the Maori of Murihiku (see Chapter Two and Chapter Five). The most northern pa in Murihiku, Te Waiateruati, is an early musket pa, and its current layout is said to have been established in anticipation of an attack in 1831 (Beattie 1919a:48; Brailsford 1981:232; NZAA Site Record K38/12; Taylor 1952:163-4). The location of Te Waiateruati differs from the other pa in Murihiku. The use of muskets by Te Rauparaha's forces (Crosby 1999) may have meant that locating this pa on the flat was appropriate. Other considerations, not applicable in the late prehistoric period, may have needed to be taken into account when deciding where to fortify against Te Rauparaha, such as the protecting of stores, gardens and introduced European animals.

Like Te Waiateruati, reports indicate Te Wero rebuilt Te Kiri o Tunoho to defend against an expected attack from Te Rauparaha (Buddle 1912:180). One aspect that differs between these two sites is that Te Waiateruati continued to be used as a village, albeit the occupants continued to be highly mobile (Anderson 1980; Challis 1995:49; Leach 1969: 48), and was visited by Europeans, including Shortland, Mantell and Bishop Selwyn in the 1840s. Hence, there are a

number of written records about the site (Hall-Jones 1956:49; Mantell 1886; NZAA Site Record K38/12; Taylor 1952:163-4).

Te Rauparaha invaded Ngai Tahu territory for land, mana and resources, such as muskets (Crosby 1999). Te Rauparaha's forces moved as far south as Banks Peninsula, however, around that time, renewed fighting further north took his attention, and upon learning that Te Waiateruati was fortified, Te Rauparaha did not venture further south (Taylor 1952:163-4). By the time the northern fighting concluded, Ngai Tahu had obtained muskets, and Te Rauparaha did not move south again (Crosby 1999).

# 7.3.2 Te Kiri o Tunoho

The introduction of European cultigens, particularly potatoes, allowed agriculture to occur for the first time in Foveaux Strait, and its increased use saw the subsistence patterns of the south shift to incorporate this new food source (Jacomb *et al.* 2010). Te Kiri o Tunoho illustrates that people were prepared to establish fortifications, suggesting that they were willing to settle in an area in order to see the production of crops through one or more growing seasons. Unfortunately, there has been little archaeological investigation into the site, and the motivation for the initial establishment of the pa is unknown. Unlike Te Waiateruati, Te Kiri o Tunoho is not mentioned in early European records, such as those by Boultbee and records from the '*Snapper*' in the 1820s (McNab 1907:202; Starke 1986:204-205, 207). According to the earliest European records on Foveaux Strait, although more than 20 years after the arrival of the first sealers in 1792, there were several Maori villages and indications of a growing Maori population (Anderson 1998; Jacomb *et al.* 2010). Jacomb *et al.* (2010) outline the reasons for this increase in population and suggest it was the result of migration triggered by the encouraging new economic environment.

The ethnohistoric and historical records outline various periods of use of Te Kiri o Tunoho. Of particular note is the idea of reuse and reestablishment, initially by Te Wera in the late prehistoric, then the chief Pahia, who died in approximately 1823, and finally Te Wero in anticipation of Te Rauparaha invading (Brailsford 1981:183; Buddle 1912:175, 180). While Te Kiri o Tunoho is the only identified pa in the area, its associated village, Pahia, is not the only recorded early historic period village (Anderson 1998). This raises the question, if there was an increased population, and villages in the area, why was there not a parallel increase in the number of pa and does this help explain why there are few recorded pa? This is particularly

curious when known threats, such as the arrival of Te Rauparaha, and conflicts between Europeans and Maori, and Maori and Maori, were occurring (Anderson 1998).

Comparison of observations of Foveaux Strait and more northern areas of New Zealand shows parallels but also differences. The influence of trade on warfare is an interesting consideration, particularly with the reports of large gardens very early in the historic period (Anderson 1998; in Starke 1986). While there is a recorded increase in population, agriculture and number of permanent villages, there is currently little evidence for a parallel increase in the number of pa. Te Kiri o Tunoho fits the general pa/ village model outlined by Ballara (1976). That it is the only archaeologically visible pa in an area with recorded tensions illustrates the fluid and dynamic responses by Maori to situations faced in the early historic period. If this is correct, then the low number of pa sites in Foveaux Strait was constant during both the prehistoric and the early historic periods.

The lack of pa sites in the late prehistoric period in Foveaux Strait may be indicative of a smaller population, but could also be accounted for by other reasons, such as increased mobility. Jacomb *et al.* (2010:49) highlighted the discrepancy between the traditional records and archaeological evidence from the late prehistoric period in Foveaux Strait. This is also illustrated by the number of pa mentioned in traditional accounts (see Appendix One) compared to the number of sites identified on the ground. Nonetheless, Te Kiri o Tunoho should be a starting place for future examination into the potential late period sites and early prehistoric pa. Further archaeological investigation of this area could elaborate on why Te Kiri o Tunoho was built where and when it was.

#### 7.3.3 Change into the Historic Period

The differing location of prehistoric period pa and historic period pa reflect shifting influences on the Murihiku region during those periods (see Figure 7.1). The arrival of Europeans, not only in Murihiku, but also further north, changed the cultural landscape, particularly in regard to agricultural subsistence and the socio-political situation. This is most notable in the southern most areas of Murihiku, previously sparsely inhabited, as illustrated by the increasing numbers of recorded villages in the Foveaux Strait area (Anderson 1998; Jacomb *et al.* 2010). This allowed greater numbers of people to inhabit areas for longer and have a source of not only food, but trade goods, with which to acquire European items. These trade goods included the musket, which altered the dynamics of warfare (Crosby 1999).

The pa of Murihiku illustrate that, while these sites can all be identified through similar morphological features, the reasons for their establishment were dynamic and multifaceted. While wider influences were at play, local context needs to also be considered. The two early historic pa of Murihiku appear to have been fortified, or renovated in response to specific social events that originated from outside the region. In the north, Te Rauparaha's forces moved ever nearer, to the gates of Te Waiateruati (Beattie 1919a:48; Brailsford 1981:232; NZAA Site Record K38/12; Taylor 1952:163-4). In the south, the influx of Europeans and Maori brought new challenges, such as muskets and agriculture (Jacomb *et al.* 2010). Both Te Waiateruati and Te Kiri o Tunoho are thought to have been fortified against potential attack from Te Rauparaha. While both were renovated due to the real fear of attack, Te Waiateruati is reported to have only escaped attack due to its readiness for war (see Appendix Two; Beattie 1919a:48; Brailsford 1981:232; Crosby 1999; NZAA Site Record K38/12; Taylor 1952:163-4).

#### 7.4 Pa in Murihiku: Why so Few?

This section examines the proposed theories on why there are so few pa sites in Murihiku. Previous suggestions for the few recorded pa sites in Murihiku tend towards single cause explanations. These theories were summarised in Chapter Two, and were grouped into the following categories: chronology, population, warfare and other uses of pa.

The four sites which have been currently identified as pa represent sites from both the prehistoric and historic period (see Figure 7.1). The single reasons for fewer pa in the south that have been previously offered are not sufficient or thorough enough to explain the lack of these sites. They represent a mixture of purposes, which have been suggested by archaeological interpretations and ethnohistoric traditions. It could be that the number of pa sites further north represents the full range of reasons for the establishment of pa, i.e. population pressure, resources pressure and social reasons. Some systemic reasons, such as the need to defend gardens and kumara stores, do not exist in Murihiku and may begin to explain why fewer pa exist. What is also absent is a thorough investigation of the causal factors that could have led to the construction of pa sites; future examination of other factors is required to determine the full influence that various reasons had on the number of pa sites recorded in Murihiku.

Chapter Two outlined the suggested reasons for the fewer recorded pa sites in Murihiku than more northern areas. The following section briefly reviews each of these reasons. While each has its own section, they should be viewed as components, and no single component stands alone.

#### 7.4.1 Chronology

Chapter Five presented the known chronology of pa sites in Murihiku. While traditional histories suggest the two prehistoric pa were occupied in the mid 18th century, this does not mean they were not established as fortified sites earlier than this date. Furthermore, there are other areas of New Zealand that have many more pa that were also established later, for example, the Pouto area on the Kaipara Harbour (Irwin 1985). Therefore, the argument of a shorter chronology resulting in fewer pa cannot be supported.

# 7.4.2 Population

If there were less people in Murihiku than in more northern areas, there should also be less sites in general, not just pa sites. Murihiku covers just over 30 percent of the total surface area of New Zealand and yet has only ten percent of the sites recorded in the NZAA Site Recording Scheme (estimates from ArchGIS and CINZAS 2008). This suggests there is a smaller quantity of sites than may be expected by surface area. However, with currently only four archaeologically visible pa sites there are still far fewer pa than would be expected when the decrease in the number of all sites in Murihiku is considered.

Large areas of Murihiku are thought to have been abandoned during the late prehistoric period, which would account for the lack of pa sites in some areas. It is argued that the interior was a transit zone, while the Catlins, Foveaux Strait, and much of the western areas of Murihiku was very sparsely populated, if not abandoned in the late prehistoric period (Anderson 1982b; Coutts 1982; Hamel 1982; Jacomb *et al.* 2010). A low population could account for the lack of pa sites anywhere in Murihiku bar the east Otago coast. The location of late prehistoric pa on the east Otago coast appears to support this notion (see Figure 7.1).

Although many of the above lines of argument were based on estimates, a lower population certainly appears to be a good reason for the lower number of pa sites. Certainly, there are few or no pa in areas thought to have been abandoned during the late prehistoric period. However, there are still fewer recorded pa sites than would be expected if a lower population was the
only reason, and other factors need to be accounted for in regards to the fewer recorded pa sites in Murihiku.

## 7.4.3 Warfare

Like the rest of New Zealand, there is little archaeological evidence of prehistoric warfare in Murihiku, (Davidson 1984:191-192). That the enclosing features of pa were automatically for defence cannot be assumed (Sutton *et al.* 2003). While it has been suggested that the find of an ahi komau (fire pit) at Huriawa may indicate warfare and possibly a siege, an alternative interpretation is that an ahi komau could have been used for ritual purposes (Best 1924:70; Briden 2007:2; Gathercole 2009:2; Knight 1964:124). While the archaeological evidence for warfare is sparse, ethnohistoric traditions give a very different perspective.

If the ethnohistoric traditions are correct, the reason for the establishment of pa in Murihiku was for warfare. Inter-hapu fighting and the subsequent revenge attacks were apparently the main motivations for warfare (Anderson 1982b:60). According to traditions, pa such as Mapoutahi, may have been located where they were due to the fear of imminent attack (Brailsford 1981). According to the ethnohistoric traditions this was not unfounded, as the site was attacked and taken (Anderson and Sutton 1973:108; Bathgate 1904:7; Beattie 1922:141; Stevens 1976; Taylor 1952:120). However, the ethnohistoric traditions do not completely align with the archaeological record. For example, Pa a Te Wera has more than one phase of earthwork construction (see Chapter Five). This said, as Marshall (1987:238) noted: "Tribal histories record significant outcomes. They are not concerned with what may have been, or was about to happen".

It has been proposed based on traditional accounts that the inland areas of Murihiku were places of retreat, therefore, pa were not required (Anderson 1982b:74-74, 1983a:34). Anderson (1983a:34) argued that warfare in Murihiku primarily involved mobile raiding rather than sieges, as tactical retreats were possible due to a less populated landscape. The ethnohistoric records support this theory as groups fled, usually in a southerly direction (Anderson 1998). That no pa are known to exist in inland Murihiku supports this. However, while there appear to have been retreats and mobile raiding, this does not explain why so few pa sites exist. Researchers and recorders of ethnohistoric traditions record many instances of warfare (Anderson 1998). Pa a Te Wera and Mapoutahi have at least one associated tradition involving warfare, usually a siege or attack (see Chapter Five - Anderson 1998). While there is little

tangible evidence of warfare in Murihiku, it does not appear to indicate that the population engaged in warfare any differently to those further north.

## 7.4.4 Other Roles of Murihiku Pa

Murihiku pa sites were not only places with fortifications; they were also places of occupation. Both Pa a Te Wera and Mapoutahi contain evidence of extensive occupation, with people using the area for everyday activities, for example fishing, stone working and cooking (see Chapters Five, Six and the above section). In addition, they may have been used as lookouts for barracouta schools. Furthermore, they link into ideas about ownership (see above section). While the historic pa, Te Waiateruati, was a recorded village when visited by Europeans, written evidence suggests it was fortified in response to an expected attack (see Chapters Five, Six and the above section). Although no excavations have been conducted on the island itself, Te Kiri o Tunoho is currently the only archaeologically confirmed refuge pa, linked to the village on the mainland.

Pa sites in Murihiku were established for multiple motivations and they need to be viewed as enclosures in the full sense: that they were also established with social meaning and symbolic significance (Neustupny 2006:1). Unlike the general model of upward channelling of tribute represented by monumental buildings, pa are seen by many archaeologists as representing community and shared purpose (Phillips and Campbell 2004; Walter *et al.* 2006). However, others, such as Allen (2006) suggest pa represent chiefs. Future studies on pa in Murihiku should consider these sites with regard to both international literature on enclosures and national theories on the community aspect represented by these sites.

Murihiku pa represent places of occupation and refuge with evidence of housing, domestic use and subsistence. However, sustainable prehistoric horticulture and the large-scale storage pits associated with this did not occur in Murihiku. This could perhaps account for fewer pa being required in Murihiku than in areas further north during the prehistoric period. There does not appear to have been an increase in the number of historic pa sites when European cultigens had been introduced.

## 7.5 Summary

This chapter began by addressing the theoretical aspects required to study pa and enclosures. Sutton *et al.* (2003) argued that pa had three components: form, function and meaning, while Neustupny (2006) stressed three aspects that required exploration for enclosed sites: practical function, social meaning and symbolic significance. The four confirmed Murihiku pa sites require all of these aspects to be considered when exploring why they exist and why so few are recorded compared to more northern areas.

The two late prehistoric pa, Pa a Te Wera and Mapoutahi, are located on the east Otago coast. Recent theoretical developments by Jacomb *et al.* (2010) indicate that the east Otago coast of Murihiku was the focus of occupation during the late prehistoric period. Reviewing the information from the two pa suggest that these sites should be considered to potentially be linked to later permanent villages with a local focus. Pa a Te Wera is currently the best candidate for a transient village for this time period. Archaeological evidence suggests that the pa sites were occupied by people from a homogenous cultural group that occupied this part of Murihiku (Hamel 1986; Leach and Hamel 1978:249). While the traditional accounts of these sites tell of sieges and attacks, there is less archaeological evidence for the reasons behind the establishment of these pa, and further research would be useful.

A change in the location of pa occurred between the late prehistoric and historic periods. The two historic pa, Te Waiateruati and Te Kiri o Tunoho, are located in the most northern and southern parts of Murihiku respectively. There is a move from the local focus of the east Otago coastal pa to external influences. The introduction of European trade, agriculture and muskets highlights the fluid and dynamic shift in the cultural landscape, including the establishment of pa in anticipation of an attack from the north by Te Rauparaha.

The second section of this chapter outlined the various motivations to establish or not to establish pa in Murihiku. A generally lower population may go some way to accounting for the lower number of pa sites. Some of the economic motivations that have been given for the establishment of pa in more northern areas of New Zealand, such as protecting gardens do not exist and therefore, other motivations for the establishment of these sites have some merit. Barracouta was an important resource, particularly in east Otago, and may represent a utilitarian use of the coastal headland as lookouts. While traditions suggest that pa sites were established from natural enclosures with structural fortifications for specific threats of direct attack, the numerous layers of fortifications at sites such as Pa a Te Wera may indicate a more complex narrative. There are many headlands along the east Otago coast, and the conversion

of particular ones into pa may indicate social reasons were more at play in the establishment of these defences, rather than environmental factors.

The social meaning and symbolic nature of Murihiku pa should not be underestimated. The construction of fortifications created a permanent tie to the land previously unseen in Murihiku. The social power associated with enclosures/ pa would have been particularly evident at this very rare site type in Murihiku. The establishment of these pa appear to have been socially motivated, as described in the traditions, by such triggers as revenge, mana and social disputes.

Murihiku pa sites can give some insights into population, mobility and settlement in the region. While population was lower than other areas, the existence of pa at all confirms that people were present. The pa sites that have been the location of test excavations indicate extensive occupation and in the case of Pa a Te Wera, potentially a transient villages. While people may have been relatively mobile, the existence of pa sites indicates that they were staying long enough in one place to establish an enclosure, and were motivated to establish structures that required additional labour. If the threat of attack was the only consideration in establishing a fortification, retreat would have been a less laborious option. The locations of pa reflect the areas of importance in the cultural landscape of Murihiku, the east Otago coast in the late prehistoric and the north and south of the region in the historic period.

No single proposed theory was found to account for the scarcity of recorded pa, and it is more likely components of various theories contribute to the dearth of recorded pa in Murihiku. Although pa certainly existed in the prehistoric period, when they were first established in Murihiku requires further absolute dating. However, they appear to align with the chronology of pa in New Zealand and hence, cannot explain why there are few recorded pa in Murihiku. A smaller population in Murihiku as a whole certainly goes some way to explaining the few recorded pa sites. There is little archaeological evidence of warfare, although traditional histories describe a mixture of sieges, battles and retreats, which accounts for the presence of some pa sites. Other uses of pa in Murihiku certainly existed, however, the some functions of pa, such as sometimes being used as extensive storage places for food (Law and Green 1972) do not appear to have occurred. This last factor certainly contributes to the lack of pa in Murihiku.

# **Chapter Eight: Conclusions**

It must have required enormous determination to develop the social organisation and the pattern of seasonal gathering, preservation, and storage needed to support village life once again in the 18<sup>th</sup> century Otago

(Hamel 2001:91).

#### 8.1 Research Conclusions

The central goal of this thesis has been to investigate why there are so few recorded pa sites in Murihiku. This investigation contributes to research involving pa in the late prehistoric and early historic periods, which until now, has not been the main focus in the general literature on Murihiku. The majority of previous research on Murihiku has focused on the early prehistoric period. The exception in regards to the wider pa landscape is Brailsford's (1981) publication concerning pa sites throughout the South Island. However, there have been a number of recently published settlement pattern theories, such as research by Jacomb *et al.* (2010) on the Foveaux Strait, which warrants a more current and detailed investigation of pa sites in the Murihiku region. The primary research question this thesis asked is:

1. Why are there so few recorded pa in Murihiku?

Three sub-questions addressed this primary research question and are detailed in the sections of this chapter, they concentrate on: the sample of pa sites in Murihiku, the nature of these pa sites and why there are so few recorded pa in the region.

The NZAA Site Recording Scheme holds records for over 6500 pa sites in throughout New Zealand, however, based on archaeological evidence, this research project determined there are currently only four sites that can be classified as pa in Murihiku. This thesis has explored why there are so few recorded pa sites in the Murihiku region. When investigated internationally, pa fit within the theoretical literature on enclosures. Recent research on pa tends to have a broad scope to include utilitarian and ceremonial uses and symbolic meaning.

By analysing the context and use of pa sites within the wider literature of pa and enclosures, a fuller understanding of why these sites appear when and where they do in Murihiku has been achieved. In this way, the reasons why there are so few recorded pa were able to be systematically explored.

## 8.2 Establishing a Sample

The first step in addressing the research question was to establish a sample of sites in the Murihiku region that had been identified in various sources as pa sites. In order to achieve this, a testable methodology by which to identify and assess these sites was required. The first subquestion of this research asked:

1.1 Using a testable methodology, what is the current sample of pa sites in the Murihiku region?

While the enclosure is not exclusive to defendable sites, it does provide a platform from which to view the pa site without predetermined interpretation of their purpose. Limited previous research in New Zealand had defined a pa as a type of enclosure, for example by Best (1927). Later research, such as by Sutton *et al.* (2003), began to introduce concepts similar to international literature on enclosures when examining the form, function and meaning of pa, as separate components in their research on the Pouerua pa landscape.

In order to determine whether a site was a pa archaeologically, the definition of this site type, as used by archaeologists, required examination. Although the site type 'pa' is generally considered to be a 'fortified site', there is no consensus or single source on the finer details of identifying them in the field. Hence, based on the wider literature on pa, ten attributes used to identify pa were outlined in Chapter Three: ditch; bank; defensive scarp; palisade; fighting stage; gate and entrances; platform/ tihi; artificial islands; the natural feature interpreted as having had a defensive function; and finally, ethnohistoric sources.

This research stressed the importance of viewing each individual site within its own context. Therefore, the method outlined in Chapter Four involved identifying pa sites using archaeological and ethnohistoric evidence and traditional accounts. Each site was critically reviewed, and where a definitive location was able to be identified, the sites were visited. In this way, some sites that had previously been identified as pa were discredited, while others of which little was known could be clearly identified as pa or not. A total of 31 sites had been identified as pa from either ethnohistoric, early historic writings and/or archaeological sources

using the methodology outlined in Chapter Four (see Table 5.1). Each site was critically reviewed and given a confidence level from 1 to 4. Level 1 sites were considered to be pa; level 2 sites were considered to be enclosures, but not pa within the archaeological definition; level 3 sites required further investigation; and, finally, level 4 sites were not considered pa based on current information.

Based on the methodology outlined in Chapter Four, Chapter Five established the sample of archeologically visible pa and enclosures in Murihiku. It concluded that four sites should be considered archaeologically visible pa in Murihiku, as indicated by their level 1 status: Te Waiateruati, Pa a Te Wera, Mapoutahi and Te Kiri o Tunoho. Four sites were given level two ratings and should be considered enclosures, three natural and one cultural respectively: Te Raka a Hine atea pa, Pukekura, Whakapaupuka and Whareakeake. Pukekura requires further work, but may be a pa based on the very limited archaeological evidence of a defensive ditch. Of the remaining sites, nine were given confidence levels of 3 and fourteen were given level 4 ratings.

The NZAA Site Recording Scheme currently identifies fourteen sites under variations of the site type 'pa'. Chapter Five determined that number was more accurately four archaeologically visible pa and four enclosures. This resulted in some of the original sites suggested to have been pa in the NZAA Site Recording Scheme being discounted, while others were added. Specifically, Whareakeake was included as an enclosure, while it is not currently possible to identify Camp Hill, Te Kapa, Teraepuha, Pa a Tu Pare Taniwha, Omoua Pa and the reported pa at Freshwater as pa or enclosures.

There are a number of limitations for establishing the current sample of pa sites in Murihiku. It must be considered that the current sample of Murihiku pa sites established in this thesis are just that, current. There may be more archaeological pa that have not been recorded; the ethnohistoric traditions certainly mention many more pa (Appendix One). All of the identified archaeological pa tend towards the coastal areas, conversely, this is where most surveys of the area have been carried out, for example the SCHIP project survey (Jacomb *et al.* 2010). Furthermore, erosion of the east Otago coast allows easier identification of eroding cultural material than inland areas, where sites may not be visible on the surface. However, this continued loss of cultural material along the coast justifies the focus and urgency of recording these sites.

This research used a methodology that broke down the definition of archaeological pa by recognising the attributes used by archaeologists to recognise defendable sites in the field. Much of this research focused on this, while many other studies of pa simply outline the sample of sites without great consideration of the reasons those sites were considered fortifications.

The usefulness of an in-depth review of what a pa site is, particularly in Murihiku, is that many of the sites in the region may only be considered fortified within some definitions of the site type 'pa'.

The interpretation and analysis of the attributes archaeologists used to identify archaeological pa should be qualitatively analysed, as quantitative analysis is not representative of the data. While ditches and banks are recognised throughout New Zealand as the most identified feature of pa (Lilburn 1985:86), they are so because they are very visible structural features. Other attributes, for example fighting stages, palisades and gates, are usually only identified through excavation, and therefore, require more investigation than some other attributes (Fox 1976).

The methodology used to determine the current sample of pa sites in Murihiku enabled a testable platform from which to assess individual sites and the site type. Examinations of a traditionally recorded pa site, Pa Tu Pare Taniwha, determined there was no tangible evidence of an archaeological site (Potts and McCoy 2011). Investigations such as this one demonstrate the importance of further investigation of all sites considered to be pa, and substantiates the additional effort required by the methodology, rather than simply using the pre-existing sample of pa sites for an area.

While the methodology used in this research enabled more precise and accurate identification of pa, biases remain. Inherent foregone conclusions exist within the sources of information for attributes as highlighted by the previous paragraph. Classification of surface features also can contain prejudices, for example, natural features are *interpreted* as having had a defensive role. While these biases exist, they are they are sometimes useful. Every pa site is unique and requires contextual consideration. The process of critical assessment used in this research may also contain preconceived notions. This process was described for the purpose of transparency.

## 8.3 The Nature of Pa Sites in Murihiku

The first sub-question addressed the sample of Murihiku pa sites, while the second examined the nature of these sites. Exploring the nature of pa in Murihiku primarily focused on the assessment of attributes of these sites, allowing greater understanding of the nature of the site type 'pa'. The second-sub-question asked in this research was:

#### 1.2. What is the nature of pa sites in Murihiku?

As outlined in Chapter Two, the general consensus in the New Zealand literature on Murihiku pa sites is that they are simple in form and function, with the primary structural fortification being the palisade (Anderson 1983a:34; Hamel 1986:6; Vayda 1960:10-2; Walton 2001:47). This research does not support this conclusion. Although this thesis identifies only four archaeologically visible pa, they aligned with the general structural attributes of pa throughout New Zealand that were presented in Chapter Three.

Pa and enclosed sites existed in both the prehistoric and historic periods in Murihiku. Based on the relative dating, limited radiocarbon dating and ethnohistoric evidence outlined in Chapter Five, the following pa and enclosures in Murihiku are likely to have been occupied in the prehistoric period: Pa a Te Wera (pa), Mapoutahi (pa), Pukekura (enclosure), Te Raka a Hine atea pa (enclosure) and Whakapaupuka (enclosure) (see Section 5.3.1 and Appendix Two). Archaeological evidence indicates that Te Waiateruati (pa), Kiri o Tunoho (pa) and Whareakeake (enclosure), (or the surrounding areas) were in used in the historic period. Traditional accounts suggest that Te Waiateruati and Kiri o Tunoho were established during the prehistoric period. The two historic pa sites have not been excavated, although Te Waiateruati is identified as a village (Beattie 1919a:48; Brailsford 1981:232; NZAA Site Record K38/12; Taylor 1952:163-4), and further research is required. However, there has been more archaeological research on the two prehistoric pa.

The prehistoric pa in Murihiku are both located on the east Otago coast, an area thought to have been the focus of activity during this time period. An examination of four pa and enclosure sites, Pa a Te Wera, Mapoutahi, Pukekura and Te Raka a Hine atea pa reveals places of extended and locally focused occupation during the 18th century. Excavation and material analysis have been conducted at both Mapoutahi and Pa a Te Wera, as well as at the enclosures Te Raka a Hine atea Pa and to a lesser extent Pukekura. Features of these sites include houses, terraces, fortifications and extensive cultural material (see Chapter Five and Appendix Two). Also, as discussed in Chapter Five, it has been suggested that both pa had multiple phases of structural fortifications (Anderson 1983c; Trotter 1967a, 1967b). Subsistence strategies focussed primarily on locally available marine resources, both hard and soft shore species (Smith and James-Lee 2009). While some items appeared to have been acquired from afar, such as obsidian, the general trend is a local focus, particularly on lithics sourced from Katiki Point, the location of Te Raka a Hine atea Pa (Leach and Hamel 1978). This indicates that the area was occupied by a culturally homogenous group, as suggested by the standing settlement theory for this area during this time period (Hamel 1986; Jacomb et al. 2010; Leach and Hamel 1978:249).

The attributes that identify Murihiku pa sites are similar to those that have been used to identify pa throughout New Zealand. All four sites that this thesis identified as pa were also were recognised as pa within the ethnohistoric traditions, have traditionally recorded gates, visible ditches and banks, and natural features that could have aided in defence (Pa a Te Wera, Mapoutahi, Te Waiateruati and Te Kiri o Tunoho). Palisades have been identified at all the pa sites within Murihiku (Pa a Te Wera, Mapoutahi and Te Waiateruati), with the exception of Te Kiri o Tunoho. Platforms or tihi have been identified at both prehistoric pa (Pa a Te Wera and Mapoutahi). Mapoutahi and Te Waiateruati both have had entrances identified. Some attributes were only identified at one pa site: Pa a Te Wera has defensive scarps, and Te Waiateruati has potential gun pits to counter the introduction of muskets. Attributes identified in other parts of New Zealand, but not confirmed in Murihiku include fighting stages and artificial islands. All four pa sites are located in naturally defendable positions, the late prehistoric pa sites are both located on peninsulas (Pa a Te Wera and Mapoutahi), while the historic pa are located on an island (Te Kiri o Tunoho), and river curve (Te Waiateruati). The use of water and steep inclines is notable at all four sites.

The establishment of the sample of pa using a testable methodology, and an examination of the nature of pa site within theory based on enclosures, highlighted that some sites are neither open sites nor are they pa, but fall somewhere in between. This issue is further illustrated by the varying number of pa sites in Murihiku identified by a range of sources, including Brailsford (1981), the NZAA Site Recording Scheme, the traditional records (Anderson 1998) and this research. Initially, Chapter Six considered whether this was the result of the current working methodology contrasting with previous methods. However, the method used for this research was in line with New Zealand standards. Rather, a critical examination of this methodology demonstrated that a continuum of sites exist within Murihiku, from open to enclosed, as occurs in other areas of New Zealand (Davidson 1984). A further explanation of the variation between the high number of recorded pa sites and archaeologically visible pa in Murihiku was also presented in Chapter Six.

Sites in Murihiku may have been identified as pa due to their locations including natural features assumed to have been chosen for defence purposes, despite a lack of structural fortification. Natural features that could have been used for defence are a common element of identified pa in Murihiku. However, while many traditional pa are recorded in Murihiku, these sites were not considered pa due to a lack of structural fortification, or in some cases, a complete lack of cultural material. While Pa a Tu Pare Taniwha is a cautionary tale, many of these sites exist in the Murihiku NZAA Site Records. It may be that at some of these sites, the feared attack never eventuated and hence, the additional labour and resources required for intensive structural fortifications to complete a pa were not needed. Some of these natural

partial defences were occupied, such as Te Raka a Hine atea pa (Trotter 1967a, 1967b), while others appear to have been linked to nearby settlements, which are visible in the archaeological record.

Partial defences should be targets for future archaeological investigations, investigation of which could provide a better understanding of the different roles habitation sites fulfilled in the late prehistoric period in Murihiku, bridging the spectrum gap between the more generalised kainga or open site, and the enclosed site/ pa. This research should be carried out through landscape analysis of known traditional pa, archaeological sites and associated naturally defendable features. The existence of partially defended sites also questions the use of the stringent definition of pa for the Murihiku area. A better approach is to consider sites within enclosures theory and the context of the continuum of site types.

## 8.4 Theory on Pa in Murihiku

The third sub-question directly addressed the theories for why there are relatively few recorded pa in Murihiku. The third and final sub-question this thesis asked was:

1.3. How do theoretical interpretations of pa compare with the archaeological evidence for pa in the Murihiku region and how does this evidence compare and contrast to the theory on why there are fewer recorded pa sites in Murihiku?

Initially, the function of pa sites in Murihiku was examined and subsequently why so few have been recorded. Having discussed pa from archaeological, traditional and historical view points, this thesis used this information to examine how pa, which have been identified using the aforementioned sources, fit into existing models of settlement and mobility in the Murihiku region.

While pre-existing information regarding pa sites in Murihiku suggested that the occupation of particular places may have been more than a brief stop, further archaeological research was required to determine the nature of settlements in the late prehistoric in Murihiku. As Leach and Hamel noted over three decades ago with regards to the movement of people and their adaption on the Otago coast:

No amount of comparative study of present artefact collections or of sparse faunal assemblages will clarify the situation, because it involves several interlocking segments of a single system of human behaviour. What is required is an integrated analysis of new material, excavated in a manner which preserves the relationships of artefactual, structural and economic evidence, and considering community size, site location and subsistence base within new theoretical frameworks (1978:249).

While there have been few further excavations at pa sites in Murihiku, there have been developments in theory on the Murihiku region during the late prehistoric period.

The current data set on pa in Murihiku aligns with the third proposed model by Jacomb *et al.* (2010), the Resource Network Model. The location and cultural material at pa sites in Murihiku suggest the late prehistoric focus for the region was on the east Otago coast with only one possible pa site in the Foveaux Strait area. A limitation for this section of research was the lack of cultural material at pa in Foveaux Strait, as little was able to be determined about the region in the late prehistoric period. Alternatively, this is consistent with the Resource Network Model, which proposed that the south coast was effectively abandoned during the late prehistoric period. This model helps explain why there are relatively few recorded pa in Murihiku.

New research on the Foveaux Strait area by Jacomb *et al.* (2010) introduced three models, of which the late prehistoric period portion of the third, the Resource Network Model, was favoured by this thesis project because of the views that it presented with regards to the location and local focus of pa sites in Murihiku. Jacomb *et al.* (2010) indicate that the east Otago coast of Murihiku was the focus of occupation during the late prehistoric period. However, they suggest this time period required further research. The only two late prehistoric pa in Murihiku, Pa a Te Wera and Mapoutahi, were established during this time, and are located on the east Otago coast. They align with the theory, in that this coastal area had a local focus.

There is a distinct shift in the location of pa sites in Murihiku between the late prehistoric and historic periods. While the late prehistoric period pa are both located on the east Otago coast, the two historic pa, Te Waiateruati and Te Kiri o Tunoho, are located in the most northern and southern parts of Murihiku, respectively. The introduction of European trade, agriculture and muskets highlight the fluid and dynamic shift in the cultural landscape, including the establishment of pa in anticipation of an attack from the north by Te Rauparaha. The shift in pa site locations between the two periods indicates the change in focus of the east Otago coastal pa from local to external influences.

In the past, proposed reasons for the lack of recorded pa sites in Murihiku have tended towards single reasons. This research found that there is no single reason for the low number of recorded pa in Murihiku, but more likely it is a combination of factors that contribute to the phenomenon. Chapters Five and Six concluded that sampling problems have not greatly reduced the number of recorded pa. In contrast, this research reduced the sample of pa sites in Murihiku to fewer than have been previously identified. As already outlined in the previous section, partial defences, with the potential to be structurally fortified exist in Murihiku. Why so few of these were established into pa needs to be considered.

A proposal for the reason why there a fewer pa in Murihiku is that they were only established for a very short period of time (Bellwood 1978:1). Archaeological and traditional evidence suggests that pa existed in Murihiku in the late prehistoric period. Other regions in New Zealand have very late chronologies for the emergence of pa and yet, a great number of pa have been recorded (Irwin 1985). Therefore, chronology cannot account for the few recorded pa sites in Murihiku.

The Murihiku region is thought to have had a small population of Maori and should be considered as a potential contributing factor to the relative rarity of recorded pa sites in Murihiku (Groube 1970; Sutton and Marshall 1980; Walton 2001). Fewer sites in general due to fewer people is certainly a reason why there are few pa in Murihiku. This discussion was limited by the problems associated with population estimates, but the lack of people in some areas for reasons including abandonment, aligned with the absence of pa in much of the Murihiku region. This said, there are fewer recorded pa than would be expected from a smaller population alone.

While there is little archaeological evidence of warfare, traditional histories describe a mixture of sieges, battles and retreats. If warfare was one of the key motivations for establishing pa, the presence of pa sites would imply that warfare occurred and was an aspect of life associated with the occupation of these settlements. Certainly, the current fortifications at Te Waiateruati were a defensive response to potential warfare in the area. While traditions link pa sites in Murihiku to specific battles, the stratigraphic record of multiple phases of defences at Mapoutahi and Pa a Te Wera indicates that there may be more to the history of these sites. Further archaeological excavations would assist in detailing the histories of these sites, and how the various portions of the sites fit together, both spatially and temporally.

The location of Murihiku below the horticultural line excludes the need to protect gardens and stores of kumara during the late prehistoric period (Anderson 1983a:34; Hamel 1986:6; Mihaljevic 1973:178-9; Walton 2001). While the population may have been relatively mobile, the existence of pa sites indicates that people were staying long enough in one place to establish structural fortifications and were motivated to set up places that required additional labour, be it the initial building labour or long-term procurement of resources. If motivated by warfare then other, less laborious options were available, such as retreat. The existence of pa

at all in Murihiku suggests that, while this may have occurred (Anderson 1998), it was not always the case. While warfare may have been one of the roles of pa sites, these sites also had other, non military roles.

The social meaning and symbolic nature of Murihiku pa sites should not be underestimated. While pa sites in Murihiku are linked to utilitarian purposes, such as residential places and subsistence practices, such as lookout points for barracouta (Anderson 1998:137; Hamel 2005:8), the ritualistic nature of these sites must also be considered. The establishment of fortifications created a permanent tie to the land, previously unseen in Murihiku. Pa are a rare site type in Murihiku, and the social power associated with these uncommon sites was made greater by their physically enclosing structural features. The display aspect of pa has been suggested for more northern pa (Marshall 1987; Sutton *et al.* 2003), and pa sites in Murihiku undoubtedly would have been distinctive in the cultural landscape. As outlined in Chapter Six and Seven, the reasons for the establishment and location of these defensive fortifications appear to have been socially motivated, by such triggers as revenge, mana and social disputes, rather than environmental factors. While these sites certainly were symbols of community, they do not share the display and storage of kumara function as more northern pa may have (Anderson 1983a:34; Hamel 1986:6; Marshall 1987; Mihaljevic 1973:178-9; Sutton *et al.* 2003 Walton 2001).

#### 8.5 Implications of the Research

This research has reached a number of conclusions that have wider implications for future archaeological research in Murihiku and New Zealand. The most significant of these conclusions has been the identification of relatively few pa sites within the Murihiku region relative to the number of sites identified as pa in other regions of New Zealand.

Previous research on prehistoric Murihiku has tended to focus on the early period, rather than the later. Most of the theory for the late prehistoric period has been generated based on early historic documents (Anderson 1982a). The methodology of this thesis included systematic review of the literature, which identified pa sites in Murihiku for this later period. The pa sites in Murihiku fill the gap between the early prehistoric period and the historic period. Walter *et al.* (2006) described pa sites as an adaption of the transient village and Pa a Te Wera is the candidate for this argument. Pa sites in Murihiku had not been extensively investigated and detailed as pa sites in northern areas have been in regional case studies (e.g. Buist 1964; Irwin 1985; Sutton *et al.* 2003). This research updated and expanded upon the other major research on pa in Murihiku by Brailsford (1981). Furthermore, the research firmly established the current sample of pa sites in Murihiku. Most suggestions for the relatively few pa sites in Murihiku were brief or unsubstantiated so the field visits as part of this research contributed to our current knowledge on the variety of recorded pa sites in Murihiku.

Regional studies add to the national understanding of the site type 'pa'. This thesis has contributed to the overall knowledge of the New Zealand pa phenomenon by focusing on a seldom addressed area of marginal pa establishment; Murihiku. In doing so, it has contributed to the knowledge of both these sites and the theoretical understanding of how pa are defined and identified by archaeologists.

This research indicates that there is currently no single source clearly outlining the definition and identification of pa that would allow easy, testable recognition of the site type in the field. In order to determine if identified pa sites in Murihiku should be considered pa, a list of ten attributes were defined as those used by archaeologists nationwide to identify pa. These, in conjunction with the methodology, could be used in any region to explore how pa are being identified and recorded.

Many of the pa in Murihiku are difficult to confirm as pa because they lack tangible fortifications. This issue is compounded if the identification of a 'site' is only by ethnohistoric tradition, and no archaeological material exists. While in more northern areas of New Zealand, large earthworks may make the identification of pa easier, the study of pa sites in Murihiku reinforces the need to consider that there may be other, less visible sites that could be considered defendable. It may be that some pa sites in more northerly New Zealand regions are also unrecorded as archaeological sites due to regional discrepancies in conventional definitions.

## 8.6 Summary

Murihiku represents an area of New Zealand with a very low concentration of recorded pa sites. This thesis has investigated why so few pa sites have been recorded in this region. Other than Brailsford's (1981) research over 30 years ago, there had been little previous broad scale research on pa sites and the late prehistoric period in Murihiku.

Three aspects were addressed in order to determine why few pa sites have been recorded in Murihiku. Firstly, the sample of pa sites was established through a testable methodology. This confirmed there are currently four sites that can be classified as archaeologically visible pa in Murihiku. Pa a Te Wera and Mapoutahi were in use during the prehistoric period, while Te Kiri o Tunoho and Te Waiateruati represent historic period pa sites. A contextual review of each pa site illustrated variation in occupation and suggested reasons for the establishment of the site as defendable.

The research has updated and expanded on Brailsford's (1981) work with the addition of new theoretical models on the area. The pa sites illustrate the shift in focus from the prehistoric to the historic period, from the east Otago coast to external pressures to the north and in the Foveaux Strait area. These sites present a range of functions, including residential, subsistence and warfare activities, as well as representing wider social ideas, such as symbols of community. Pa a Te Wera is the best candidate for a transient village for the late prehistoric period.

There is no single reason why there are few recorded pa in Murihiku. Recording issues should not be considered to have dramatically influenced the number of sites recorded as pa. Rather, these sites are part of a dynamic and fluid continuum of site types in Murihiku that range from open, to partial defences and finally, fully enclosed pa site. A lower population, varying motivations for warfare and their location south of the horticultural line may all contribute to why fewer of these sites exist, and hence, few have been recorded. While pa sites in Murihiku may be few in number, they support recent interpretations of Maori pa as multifunctional, multifaceted and complex sites that changed through time.

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### 1

#### Appendix One

Reported pa that did not meet the methodology outlined in Chapter Four for inclusion in the results section

Note: This list may not be exhaustive.

Name of 'Pa'	Location	Other Information	Reference	
Arowhenua pa	Junction of the Temuka and Opihi Rivers	"principle Maori kainga of South Canterbury". Dates from the historic period, which may explain the use of the term 'pa'.	Taylor 1952:163	
Aakaea	Shag Point (wandering gaze)	"pa of the Ngati kane hapu of the Ngai Tahu Tribe"	Taylor 1952:103-104	
Kaitakata/ "fortified village"	"the balloon" at Kaitangata, near the town of that name	"There is a spot below the seacliffs at Orepuki (rightly Aropaki, on Foveaux Strait) called Kaitakata (N. I. = Kaitangata)."	Beattie 1915:131; 1917:63	
Kakaunui Pa	Kakaunui Bay		Brailsford 1981:234	
Ko te Kaiatiatua	At the south side of the Willowbridge Stream, which was called Punatarakio	"where stood a paIts chiefs were Kaikaia waro and Te Karara, and they controlled the lives of two hundred people"	Taylor 1952:95-6	
Manuhaea Pa	Manuhaea is the name of the isthmus of Lake Hawea	"the site of an old-time pa of the Ngati Mamoe Tribe." (Taylor 1952:110-1)	Taylor 1952:110-1	
		In "1868 Chief Judge Fenton awarded 100 acres of land at Manuhaea, at the Western extremity of the middle arm of Lake Hawea, situated near a Lagoon at the foot of Isthmus Peak to include the site of an old pa" (Waitangi Tribunal Report 1995:64)	Waitangi Tribunal Report 1995:64	
Marama-te-taha	"Under the shadow of Mauka- arua (Maungatua) there is a small hill near Berwick"(Beattie 1915:139)		Beattie 1915:2139	
	"west of Lake Ascog" (Marama Te Taha) (Taylor 1952:180)		Taylor 1952:180	

Name of 'Pa'	Location	Other Information	Reference
Mataipipi and Otupatu	Near the Molyneux River mouth	"The Waitaha also had <i>pas</i> named Mataipipi and Otupatu near the mouth of the Molyneux River" (Beattie 1915:132)	Beattie 1915:132, 1918:98
Matuatiki pa	Northern end of the beach directly north of Tikoraki Point.	Located on sketch map in NZAA Site Record form J42/44.	Trotter 1968:98 from Mantell's map held in the Early Settlers Association Museum, Dunedin
Mokamoka	Oreti River estuary		Anderson 1998:41
Mouwaho and Takikarara	Lake Wanaka		Taylor 1952:112
Nehe nehe	Three miles up the Matukituki River near the Mate tapu creek	"a pa with its burial ground on a nearby hill"	Taylor 1952:111
O whitianga te ra (place of the shining sun)	Southern end of Lake Te Anau	"was the name of a Waitaha Pa close to the southern end of Lake Te Anau. An eeling pa at Lake Te Anau was called Te Rua-o-te Moko. Te Kowhai Pa was situated at the entrance to South Fiord"	Taylor 1952:150
Ohou	Near Arowhenua "on the Opihi [River]"		Taylor 1952:164
Okopihi Pa	Okopihi near Smoky or Orautahi	"geographically acceptable. Excellent look-outs they would be	Sansom 1982:24,52
		poke their noses into the Strait." (Sansom 1982:52)	Taylor 1952:158
Omaui	Oreti Estuary	Thought to have been a village (Hall-Jones 1979:35)	Taylor 1952:153

Name of 'Pa'	Location	Other Information	Reference
Orau	Near Seal Point/ Maori Pa Point/ southern extremity of Sandymount	A kati mamoe pa	Taylor 1952:138 Stevens 1976:26
Otaoka	Near Timaru	Taylor (1952) was of the opinion that this pa was located about where Saint Andrews now is. The Taiaroa map locates it on the coast south of Timaru.	Taylor 1952:107 Anderson 1998:47
Otaupiri or O-taupiri	Waimea Plains Otapiri Hill, Glenure	"Tu-te-makohu, who built the Taupiri <i>pa</i> , was an ancestor of mine, and there are six generations between us." Another said:— "Tu-te-makohu escaped in the fog, but did not go far, and after his enemies went away he returned to Taupiri, which is a hill. The creek the Europeans call Q-tapiri is really Q-hiriru?" (Beattie	Beattie 1916a:14 Anderson 1998:45
Otepopo	O-Te-popo Hill at Wai- anakarua	1916a: 14)	Beattie 1917:85
			2008:77
Pa-o-Katikuri	Mouth of the Okui stream, near Aropaki (Orepuki)		Beattie 1922:144
Parakarehu	Pembroke	"Ngati Mamoe Pa where Te Weka, grandson of Tutekawa, led a Ngai Tahu taua about 1710 A.D. and killed the chief Potika-tautahi"	Taylor 1952:111
Puia	Near the Humbolt Range (Te Koraka)		Taylor 1952:144

Name of 'Pa'	Location	Other Information	Reference
Puke Mataa Pa	Current helipad location at Moeraki	There are mentions in the ethnohistoric traditions of Moeraki being settled for short periods by Te Wera, Taoka and Takatahara, who are linked to the mid 18th century pa in Murihiku (Maclean 1986; Taylor 1952; see also Chapter Five). Midden is located in the area at NZAA Sites J42/33 and J42/138. Moeraki was the location of settlements associated with whaling from 1836 (Maclean 1986). Mantell visited Moeraki in 1848 and sketched the Maori settlement in the bay. The author visited the headland rising to the south of the helipad in December 2012 and noted two flakes on a hilltop with natural enclosing features immediately south and east of the helipad.	Taylor 1952 Maclean 1986
Puketai	Anderson's Bay	"defended forts, or pa" (Entwisle 1998:18)	Taylor 1952:138
			Entwisle 1998:18
Rangipipikao	Across from pukekura pa, Taiaroa Heads	Pa of the Ngati Mamoe	See Pukekura in Appendix Two
Tahitowaio	Above Te Puna-a-maru, which is situated at the junction of the Awamoko Stream with the Waitaki River	"an ancient deserted pa"	Taylor 1952:109-110
Tahuna	On shore near the lake at Queenstown		Taylor 1952:143
Takerehaka	Kingston		Taylor 1952:143

Name of 'Pa'	Location	Other Information	Reference
Takiharakeke	North bank of the Waitaki River	"stood a pa which Te Rakitauneke, the Ngati Mamoe chief, built after he left the Temuka district	Taylor 1952:95
Taranga Te Waru	On the Waihopia River, Invercargill		Te Au 1995
			Anderson 1998:41
Taurangitewaru	On the site of Invercargill and on the ancient Maori track to the north		Taylor 1952:153
Te Kirikiri Pa	The Park at Queenstown		Taylor 1952:143
Te Kowhai Pa	Entrance to South Fiord		Taylor 1952:150
Te Pa Hawea	The Yellow Bluff, Otago Coast	"is the site of a former pa" (Taylor 1952)	Taylor 1952:119
Te Pa-o-kiore	Pihaotakohia/ Jack's Island/ Tuhawaiki Island	"built by Kiore, who was later killed at Oraki-utuhia (Cannibal Bay) (as told in Vol. XXV., p. 90)."	Beattie 1922:144
Te Parekura	Takiharakeke	"was a pa up stream from Takiharakeke"	Taylor 1952:98
Te Rihatauriki	Kohu-rau (Kurow)	"an ancient pa"	Taylor 1952:110
Te Whero	Boat Harbour on the ocean side of the Bluff		Taylor 1952:153
Ti Muka and Upoko pipi	The Temuka Domain	"old time pas"	Taylor 1952:169

Name of 'Pa'	Location	Other Information	Reference
Tititea and Oteroto	Southern side and northern side respectively of Kawarau Falls, Lake Wakatipu	Tititea is mentioned by other authors (Anderson 1982, 1998) and not as a pa- however Beattie says the pa was located on the south side of the falls and there was another settlement on northern side of the Frankton Arm, presumably Oteroto.	Beattie 1917:83
			Taylor 1952:143
			Anderson 1982, 1998
Tu-te-kawa's pa	At Waikakahi		Beattie 1917:82
Upoko Tauia	Halfway up the Hunter River	"an old time pa"	Taylor 1952:111
Upokopipi	Near Tamuka		Taylor 1952:164
			Carrington <i>et al</i> . 2008:77
Waiharakeke	Lillburn	"a <i>pa</i> of Ngati-Mamoe on the Waiau river, up near Lake Te Anau" (Buddle 1912:177)	Buddle 1912:177
			Taylor 1952:154
Wairere	Cromwell		Taylor 1952:111
Wai te mati	Opihi River "situated at the Opihi River in the Waipopo Native Reserve where the road runs north and south"		Taylor 1952:164
Whitiaka-te-ra	Southern end of Lake Te Anau		Hall-Jones 1968: 22
?	Takerehaka (Kingston)	"stronghold"	Anderson 1998:45

Name of 'Pa'	Location	Other Information	Reference
?	Where Taratu creek enters Roto-nui-o-Whatu (larger lake at Kaitangata)	Kati mamoe stronghold	Beattie 1917:63
?	Lake Ohou	Pa belonging to Te-raki-tauneke	Beattie 1917:85
	Near Opihi, South Canterbury		Taylor 1952:93
			Carrington <i>et al.</i> 2008:241
?	Mt Grey	<b>"Tau-whare-kura</b> was a fight between Manuhune and Takapo in the lake district at a hill called Mt. Grey by the Europeans. Kati-Kuri built a fortification there, but the collector has no further details" (bold original, Beattie 1919b:110).	Beattie 1919b:110
	Gray's Hill		Taylor 1952:92
			Anderson 1982:56-7
		"Katikuri fort" (Taylor 1952:92)	
?	Taratu near Lovell's Flat	"very strong Ngati Mamoe pa"	Taylor 1952:182
?	Rarotoka/Centre Island	"a fortified headland" (Hjarno 1967:10) Fossicked material culture appears to be late. Church (2008:113) thought the fortified site was established at the time of Te Puoho's raid (1836).	Beattie 1954:77
			Hjarno 1967:10
			Harsant 1986
		Carrick (in Beattie 1954:77) suggested the promontory with the modern lighthouse was used by woman and children left behind during warfare in the 1780s. The island has had no modern archaeological investigations but Harsant (1986:33-55) visited the area and reported: "No ditches or banks, terraces or other earthworks can be seen today".	Church 2008:113

Name of 'Pa'	Location	Other Information	Reference
?	Mokamoka at the Bluff	"Waitai and his followers were tolerated for a while, [until] the Ngati Mamoe attacked the pa, took it and slew the whole garrison except two. Mokamoka was the scene of the first fight between the Ngai Tahu and Ngati Mamoe in Murihiku (Southland) about 1710 A.D."	Taylor 1952:183
?	Paekai	"was the site of a pa"	Taylor 1952:112
?	"on or near the top of Mauka- atua, Taiari district"		Beattie 1915:137
?	Ruapuke Island	"in 1846 the Maori population built two enclosures" In Henrietta Bay Coutts and Jurisich (1972:9) identified a number of ditch and bank systems, one with a house platform inside. These were suggested to have been associated with agriculture, for example windbreaks. However, they could have also been the pa mentioned by Wohler.	Coutts and Jurisich 1972:9
?	Two pa at the neck, Stewart Island	Samson (1982:52) thought they were more likely kiak.	Samson 1982:52 Taylor 1952:158
?	North bank of the Waitaki River at Takiharakeke	Kati mamoe pa	Beattie 1917:84-5 Carrington <i>et al.</i> 2008:77
?	Oue or Tuft Island	Pa of the chief Huruhuru. Described as a village elsewhere (Hall-Jones 1979)	Taylor 1952:152

Table A1.1 (cont.): Reported 1	a that did not meet the methodology	outlined in Chapter Four for	inclusion in the results section
	0,7	1	

Name of 'Pa'	Location	Other Information	Reference
?	Mavora (indicated as somewhere near Sand Hill Point)	"fortified village An ancient site with fortifications for protection" (Garven <i>et al.</i> 1997:59).	Garven <i>et al.</i> 1997:59,96

### 2

#### Appendix Two

Identified Pa Sites in Murihiku -

Sites identified as pa by the research methodology outlined in Chapter Four, and critically reviewed in Chapter Five

- 1. Te Waiateruati
- 2. Otipua
- 3. Camp Hill
- 4. Te Kapa
- 5. Huru Huru's Pa
- 6. Cape Wanbrow
- 7. Te Raka a Hine atea pa
- 8. Cornish Head
- 9. Pa a Te Wera
- 10. Brinns Point
- 11. Omimi
- 12. Mapoutahi
- 13. Stream outlet at Long Beach
- 14. Whareakeake
- 15. Teraepuha
- 16. Otaheiti
- 17. Pukekura
- 18. Tarewai Point
- 19. Pa o Ngatikuri
- 20. Aurakitaurira
- 21. Ethnohistoric Traditions of the Taieri Plains
- 22. Pa a Tu Pare Taniwha
- 23. Whakapaupuka
- 24. Omoua Pa
- 25. Te Anau
- 26. Anchor Island
- 27. Pa a Te Whara
- 28. Te Kiri o Tunoho
- 29. Otauira Pa
- 30. Parangiaio
- 31. Putatara
- 32. Freshwater River

## 1. Te Waiateruati (K38/12)

#### Site type indicated by NZAA Site Record: Pa

#### Location:

Te Waiateruati is located on the banks of Orakipaua Creek, a tributary of Milford Lagoon.

#### Occupation Period:

The pa was written about and sketched in the 1840s by numerous visiting Europeans. The fortifications were established or renovated c.1831 in anticipation of an attack from Te Rauparaha that never eventuated (Beattie 1919a:48; NZAA Site Recording Scheme record K38/12; Taylor 1952:163-4).

#### Background:

This site is reported to have been the headquarters of Ngai Tahu from the mid 17th century. It is reported that Te Rauparaha did not continue his invasion south when he realised Te Waiateruati was fortified and the occupants ready to fight (Beattie 1919a:48; NZAA Site Record K38/12; Taylor 1952:163-4). A number of Europeans visited this site, including Shortland, Mantell and Bishop Selwyn in the 1840s and left accounts and sketches of the site (Hall-Jones 1956:49; Mantell 1886; NZAA Site Record K38/12; Taylor 1952:163-4). The site is believed to have been permanently occupied, but the residents themselves were mobile (Anderson 1980; Challis 1995:49; Leach 1969: 48). The site was finally abandoned in the late 19th century (NZAA Site Record K38/12; Taylor 1952:163-4).

#### Basis of Identification as a Pa:

The site is thought to have been a musket pa based on European accounts, archaeologically visible fortified features and natural features interpreted as having had a defensive function. It is recorded as a "Ngai-tahu early musket period pa" (NZAA Site Record K38/12).

- European accounts

Europeans visited the pa in the early to mid 1800s and described the site as a pa, including the fortifications (Taylor 1952:163-4).

#### - Palisades

"Wai a te rua ti was a strong palisaded pa with natural defences" (Taylor 1952:163).

Sketches of the site show these palisades. Mantell's 1840s sketches show the palisades to be of different heights. However, it may be that he has stylised them to show the interior, as in another sketch they appear to be as high as the buildings (see Figure A2.1). When Shortland (1851:229-230) visited the pa he placed his tent in the courtyard "that I might have a fence to protect me from pigs". The residents therefore may have used the palisades as fences after there was no threat from a northern invasion.



Figure A2.1: Sketch of Waiateruati by Mantell in 1848 (National Library Reference Number E-334)

#### Entrances

The gateways of the pa are recorded as being called Hurapa, Te Huataki and Te Kaue (Taylor 1952:164)

Archaeologically visible fortified features (see Figure A2.2)

The internal area of the pa has not been ploughed and the fortifications are still visible including:

#### Banks

Bank surrounding the pa are still visible on the surface.



Figure A2.2: Sketch map and sketches of Te Waiateruati (NZAA Site Record K38/12)

#### Ditches

Ditches on the inside of the banks are suggested to be possible firing trenches (NZAA Site Record K38/12).

- Natural features interpreted as having a defensive function

The site is suggested to have been naturally defendable (Taylor 1952:163-4). Banks exist on the sides of the pa facing away from the creek.

## 2.Otipua (no site number)

#### Location:

This site is located on the northern most branch of Otipua/ Saltwater Creek, "Immediately north of the Landsborough Road, a few chains west of its junction with Coonoor Road" (Hall-Jones 1956:50; see Figure A2.3). The site is reported to be located where the river loops back on itself.



Figure A2.3: Likely location of Otipua 'pa' of indicated by black circle (image courtesy of Phillip Howe, South Canterbury Museum 2010)

Occupation Period:

Unknown.

#### Background:

Hall-Jones (1956:50) reported that an old survey plan in Christchurch has the words "here are the ruined remains of a pa" and that a survey of the area in 1860 by Hewlings and Jollie gives its name as "Otipua pa ha". Hall-Jones was of the opinion that the location is not the site of a fortified pa. He suggested the use of the words "pa ha" referred to an eel-weir.

There is a tradition of a pa in the Otipua area, but if this is related to this site it is not supported by further traditional evidence. Taoka, the chief who established Te Raka a Hine atea pa, among other pa, is reported to have built a pa at Otaoka near Timaru (Anderson 1998:47; Beattie 1916a:15). However, the Taiaroa map shows this site on the coast south of Timaru, and Taylor (1952:95) was of the opinion that this pa was located about where Saint Andrews is now. No archaeological sites that fit this description in the area have been located to date.

#### Basis of Identification as a Pa:

The site was suggested to have been a pa based on early European reports

#### - European Reports

No archaeological remains have been found and the report that the location is a pa has been rejected as a misinterpretation of the meaning of the word pa (Hall-Jones 1956:50).

## 3.Camp Hill (E40/13)

Site type indicated by NZAA Site Record: Fortified terraced pa

#### Location:

Camp Hill is located approximately 10 km north of Lake Wakatipu in the Rees Valley. The NZAA Site Record (E40/13) locates the Camp Hill pa site on the western side of the hill. However, a review of the original description of the site, and a field visit located the site on the south eastern side of the hill (see Figure A2.5 and Figure A2.4). A house and road have recently been constructed in this portion of the site (field visit 2010).

The area is now primarily farmland however, directly to the west of the site is a newly planted beech forest (pers. comm. Jill Neame 2010). The Glenorchy region has been mine for scheelite in the past, and the south western side of Camp Hill was mined early in the twentieth century (pers. comm. Jill Neame 2010).



Figure A2.4: Looking south over reported terraces at Camp Hill

#### Occupation Period:

Simmons (NZAA Site Record E40/13) recorded what he believed were a number of terraces, ovens, pit features and a ditch and bank at this site. The recently cut road, already described above, through the site has exposed charcoal lenses. However, no cultural material was identifiable in these. Simmons (1967b:15) thought the site may have been a response to the Ati Awa (Te Puoho's) threat to invade in the 1830s.

There is no cultural material contextually linked to this site, so further research is required to confirm the authenticity and time of occupation for Camp Hill as an archaeological site.

#### Background:

The Haines Collection (held at the Otago Museum) contains 17 pieces with their find location labelled as Camp Hill, including eight stone adzes and chisels as well as perforated oyster shells. Simmons first recorded the site as a pa in 1967 and included a sketch map and results of a small excavation of an oven, which revealed charcoal. No cultural material was excavated, so the oven was concluded to be a natural depression (NZAA Site Record E40/13; Simmons 1967b:15).



Figure A2.5: Simmons's sketch map of Camp Hill pa site (NZAA Site Record E40/13)

It has been suggested that this site was a scheelite miners' camp from the late 1800s (from a family letter, pers. comm. Hamel, 2009). The location of the nearby scheelite mining could

support this, although this mine was not opened until the 1900s (pers. comm. Jill Neame, land owner 2010) so may not be connected.

Basis of Identification as a Pa:

This site was suggested to have been a pa based on the reported built fortifications.

- Ditch and Bank

The ditch and bank features of this site are reported to have been formed from a stream bed (NZAA Site Record E40/13). This was evident at the time of the field visit, as water was flowing through this feature. The 'ditch' needs to further investigation to determine its construction as it could be, and is likely natural due to its similarity to other water features on the hill.



Figure A2.6: Reported ditches at Camp Hill from the south (field visit 2010)

- "defensive ditches"

Simmons (NZAA Site Record E40/13) recorded a feature he labelled 'defensive ditches' on his plan of the site (see Figure A2.6). These ditches resemble slumps in the land that appear on other parts of Camp Hill, and without further investigation in the form of excavation could not be considered cultural.

Furthermore, if the site was a historic pa, muskets could be used on the site from above, further up the hill. This makes it difficult to imagine that the site could have been located in order to avoid musket fire.

## 4. Te Kapa Pa/Te Rapa Pa (J41/62)

#### Site type indicated by NZAA Site Record: Pa

#### Location:

This site is located on the northern side of the Waitaki River, and about 10 km inland from the river mouth. The site is located on an old river terrace, which is now under pasture.

#### Occupation Period:

Historic (see below).

#### Background:

The site itself is now difficult to locate, and there are no signs of earthworks or occupation. A Maori cemetery is now located there (NZAA Site Record J41/62). This site is also known as Tauhinu (NZAA Site Record K38/12; Taylor 1952:95).

#### Basis of Identification as a Pa:

European accounts suggest that this site was a pa.

- European accounts

The site is labelled as a pa on a map by Alfred Wills drawn in 1848 (Lands and Survey Department, Christchurch, reproduced in Brailsford 1981:234). Brailsford (1981:234) suggested that the word 'pa' may be used to refer to an unfortified settlement, however, Willis does seem to use the word pa to refer to something different, as he does not use it for all settlement sites.

Mantell (1886; relevant abstracts in NZAA Site Record K38/12) visited this settlement and wrote: "23 October [1848], Monday- Waikawa to Tauhinu ... in the evening reached two miserable huts, which with a bare wata, two or three cropless cultivations and a small burial fence, constituted the settlement of Tauhinu and residence of Te Kapa."

It is unknown if this settlement had fortifications. Further investigations could focus on locating and searching for possible enclosing features.

# 5.Huru Huru's Pa/Te Punaomaru (J41/60)

#### Site type indicated by NZAA Site Record: HABITATION AREA

#### Location:

This site is located on the south bank of the Waitaki River, approximately 22 km from the river mouth (Brailsford 1981:235).

Occupation Period:

Historic (see below).

#### Background:

This site was reported as the occupation site of Huruhuru and was called Te Punaomaru (Anderson 1998:158).

#### Basis of Identification as a Pa:

European accounts suggest this site was a pa.

- European accounts

This site was recorded as a pa by Alfred Wills in 1848. He wrote on his map of the area "Huru Huru's Pa" and identified five houses and gardens (Anderson 1998:158). Alternatively, it has been suggested that the site was a village (NZAA Site Record J41/60) or settlement (Anderson 1998:158). The use of the word 'pa' is therefore possibly used to refer to an undefended settlement.

Mantell visited this site in 1848, and sketched a house and fence (see Figure 5.4; Brailsford 1981:235). His sketch included a fence-like structure around the site. It appears to be approximately one meter high, based on the figure in front of it. Whether this is accurate or not is unknown. As this site was occupied during the historic period, European animals such as pigs that may have required fencing. The fence appears to consist of large posts a couple a meters apart and smaller pails in between. There is also a large post incorporated into the fence with seven prongs sticking out the top. Whether this would have been or should be considered a palisade or a fence cannot be determined.

## 6. Cape Wanbrow (J41/75)

#### Site type indicated by NZAA Site Record: Midden and ovens

#### Location:

The site extends for about 300 meters along Bushy Beach, which is eroding from the steep bank onto the soft shore. The top of the bank is about 40 meters from the high tide mark. The NZAA Site Recording Scheme site record (J41/75) indicated terraces 1-2 meters high exist at the site; however, these are difficult to see as the site is eroded (aggravated by heavy rain over the 2010 winter) and is covered in vegetation (field visit 2010).

#### Occupation Period:

Two cultural layers exist at the site: an earlier prehistoric layer based on the presence of moa bone and an upper layer, a contact period site containing bottle glass.

#### Background:

The upper portion of the site has been ploughed and has uncovered adzes and ovens, and midden and charcoal is eroding from the bank at the high tide mark of the site (NZAA Site Record J41/75). Taylor (1952:103) suggested a "Waitaha dwelling at Makotuku-tuku Pa at Cape Wanbrow near Oamaru", however, whether this is a fortification and how this relates to site J41/75 is unknown.

#### Basis of Identification as a Pa:

Hamel (2001:64) suggested that the historic village was in a defendable area based on its:

- Natural Features interpreted as being defendable

The natural defence suggested for this site comes in the form of the steep slope at the front of the site.

The location of this archaeological site with a steep bank on one side could give some natural defence, however, it does not secure the entire site. Excavations would be required to establish if the other three sides were fortified. Furthermore, there are no flat areas near the beach in the vicinity. It may have just been a flat area with beach access.

# 7. Te Raka a Hine atea pa, Katiki Point (J42/20)

#### Site type indicated by NZAA Site Record:

See below- the site has multiple site records and each has a site type. The overarching NZAA Site Record (J42/20) reports the site type as: 'terrace pa'.

#### Location:

Katiki Point is joined to the mainland by a narrow isthmus about ten meters across with cliffs either side (see Figure A2.7). The promontory is about 100 meters by 50 meters at its widest points. There is a small island that can be reached at low tide at the end of the point. The peninsula has steep cliffs around most of it, which limits access. Seals, penguins, hard shore shell fish, such as paua, mussels and kina, as well as fish live on or around the peninsula. The site is not sheltered and is open to the southerlies that move up the Otago Coast (field visit 2010). There are reported to have been two springs on the site (Trotter 1959) although Trotter (1967a:236) only identified one on his map of Katiki Point, and there are currently none visible.



Figure A2.7: Katiki Point (courtesy of Ben Teele 2009)

#### Occupation Period:

Ethnohistoric traditions assert that the site was occupied around 1750 (see ethnohistoric traditions section). This fits with the artefacts found at the Katiki site (Hamel 1986; Trotter 1967a). However, there is evidence of earlier occupation in the area based on the presence of moa bone found at J42/19. Trotter (1967a:248) reported that moa bone had been found at the end of the peninsula, but was of the opinion that it was of secondary use and therefore, not indicative of moa hunting.

Radiocarbon dating indicates that the site was occupied in the late prehistoric period (Smith and James-Lee 2009; Trotter 1967b; see Appendix Three).

#### Background:

This section is split into individual archaeological site information, a summary of Trotter's excavations and an ethnohistoric traditions section. There are ten recorded archaeological sites in the vicinity of Katiki Point.

The stone sources located at and around Katiki have been found not only in the lithic assemblages of Katiki, but also other sites and pa on the east Otago coast including: Pukekura (Leach and Hamel 1978), Mapoutahi (Anderson 1983c) and Huriawa (Easdale and Jacomb 1984b:6; Leach 1969).



Recorded archaeological sites (see Figure A2.8):

Figure A2.8: NZAA Sites located at Katiki (NZAA Archsite)

#### J42/20: Terraced Pa

This site record covers the whole of Katiki (approximately 0.02 km squared), encompassing the other late prehistoric period archaeological sites. These late prehistoric sites are believed to belong to a single period of occupation (Hamel 1986). The pa is traditionally a Ngai Tahu fortification, but has no visible 'defences' (NZAA Site Record J42/20).

A part of the site not recorded under any other site number is the mound on the seaward side of the neck. This knoll is covered in terraces, two of which were excavated by Trotter and interpreted as having the remains of houses (Trotter 1967a).

#### J42/61: House Platforms (?) Pit (?) Midden

It is unknown whether this site is connected to the pa site. The site is c.200 meters long and about 200 meters west of the Katiki Point lighthouse. It consists of three platforms and midden that span an area about 15 meters long (NZAA Site Record J42/61).

#### J42/43: Source-site of porcellanite

An outcrop of porcellanite, a stone type that is found throughout archaeological sites in north Otago. The site did not require quarrying as cobbles are falling out of the cliff (NZAA Site Record J42/43). This porcellanite is found as lithic material on Katiki Point (pers. comm. Phil Latham 2010).

#### J42/66: Midden and Quarry

The midden consists of shell, charcoal and bone. There are large cores of porcellanite on the beach in front of the eroding midden (NZAA Site Record J42/66).

#### J42/19: Occupation

This site is located behind North Beach in Taylors Gully, slightly north of Katiki Point. It contains a platform and stone fireplace that is thought to be of Maori origin. Artefacts from the site have been identified as mainly 'archaic' and some 'classic'. Trotter (NZAA Site Record J42/19) recorded that moa had been dug from this area, and that other artefacts also indicate that it was an early site. While Trotter thought the presence of nephrite suggested there was some late occupation, it is now believed that nephrite was also used, albeit less often, in the early period of New Zealand prehistory (Brown 2010). Midden from the area extends for about 100 meters in patches and includes fish and seal (NZAA Site Record J42/19).

#### J42/79: Ditch and bank fence

#### European garden (NZAA Site Record J42/79).

#### J42/76: Ovens

Two well preserved oven pits, a small terrace and a dimple. One pit is 6.1 meters by 4.0 meters wide and 0.75 meters deep with a well defined oval rim and the other is 4.0 meters by 2.7 meters wide and 0.3 meters deep (NZAA Site Record J42/76).

#### J42/65: Katiki Point Pa Midden (Midden & Ovens)

The terraces and midden are located on the slope immediately north of the causeway. A bulldozed track runs through it and exposes a layer of dark soil and midden 15-25 cm deep. Midden includes hard shore shellfish and barracouta (*Thyrsites atun*) (NZAA Site Recording Scheme Record J42/65). There are at least twelve levels of terracing extending over an area about 100 meters by 80 meters several that extend over the hill for 60 meters to 80 meters (Hamel 1986:6).

Hamel excavated midden from two areas where fencing posts were installed in 1989. The midden was analysed, and fitted the pattern of midden from the prehistoric east Otago coast. The bird species identified also suggested that the area could have previously been forest (NZAA Site Record J42/65).

#### J42/78: Landing Place

This is of European origin and was a landing used up until 1939. While most of the structure has been removed there still remains a cut track, dug bins and some ironwork. Immediately above is a flat area with a raised rim (8.5 meters by 7.6 meters), which is thought to be the foundation of a historic shed (NZAA Site Record J42/20).

#### J42/77: Midden

This midden is located on the northern face of the island, at the end of Katiki Point that is only accessible at low tide. It is eroding out of an area of blackened soil, and contains bird bone, hard shore shellfish and flakes of argillite and chalcedony (NZAA Site Recording Scheme Record J42/77). There are seams of chalcedony (seam agate) in the rocks below this area. This stone appears as lithic material eroding from rabbit holes on Katiki Point (field visit 2010, chalcedony identified by Phil Latham, University of Otago 2010).

#### Trotter's excavations:

The Katiki archaeological sites were heavily fossicked in the early 1900s (Trotter 1967a:235, 1968:96). Trotter excavated at Katiki Point between 1954 and 1956 and again in 1964 (1967a:235). He excavated two house sites and started a third (see Figure A2.9). Artefacts at the site included a wide range of lithics, worked bone, human remains, house related features and midden, suggesting a late prehistoric occupation (Trotter 1967a). The house remains consisted of burnt totara posts and hearths, and were of such solid construction that Trotter thought they were reflective of long-term permanent occupation (Trotter 1967a). Furthermore, midden on the site is widespread, and was up to a meter thick indicating the occupation of the site was not a single event but "year after year" (Hamel 1986:7).



Figure A2.9: Looking east towards the knoll on the peninsula where Trotter excavated houses in the 1950s and 1960s (field visit 2009)

Ethnohistoric Traditions:

The ethnohistoric tradition associated with this site refers to the site as Te Raka a Hine atea. That this is the only period of occupation in the area is not supported by the archaeological sites. Traditions about Te Raka a Hine atea suggest that the site was established during the late prehistoric, during the time of Taoka and Te Wera, thought to be in the mid 17th century (Anderson 1983b:39-41). The recorded battle at Katiki was instigated as revenge against a killing that occurred further north. The attackers proceeded to Moeraki from either Tumuka or Kaiapoi. There were a number of skirmishes between the two sides. Taoka won the battle at Katiki, but his half brother Matauira was killed (Anderson 1998:47; Beattie 1916b:54, 1919a:48, 1920a, 1920b, 1922:140; Roberts 1912:11-13; Stevenson 1947:88-90; Taylor 1952:105; Trotter 1967a:237; White 1887:230). This was part of ongoing skirmishes between various hapu of Ngai Tahu, which included a number of other pa in the area including Pukekura, Mapoutahi and Huriawa (Hamel 1986:5).

#### Basis of Identification as a Pa:

It has been suggested that this site was a pa in ethnohistoric traditions (gate) and European accounts. In addition, natural features have been interpreted as defensive. There have been discussions among archaeologists, who have been interested in the defensive nature of this site.

- Ethnohistoric traditions (gate)

The ethnohistoric traditions of this site assert that there was a battle fought here (see above section). The only mention of any fortifications was a gate called Te kutu o te pa, which stopped the attackers entering the pa (Taylor 1952:106). The location for this gate is not given.



- European accounts (possible earthworks/ditch, see Figure A2.10)

Figure A2.10: The landside of the isthmus- the reported location of the shallow ditch (field visit 2009)

Beattie (1920b:196) claimed that it was said you could still see the earthworks of Katiki pa in 1920, but does not indicate what the earthworks were. Brailsford (1981:226) reported that there was a shallow ditch visible at the small neck of the peninsula in 1918, although this information comes from a personal communication. The 'neck' is currently exposed to the bedrock (see Figure A2.10). If there ever was a ditch in this area, it was either extremely shallow, making it defensively ineffective, built up with banks or there has been considerable erosion. A defensive ditch is thought to need to be over a meter deep (see Chapter Three). This is unlikely as the subsoil on either side appears to be currently only 30 cm deep (field visit 2010).

#### - Natural features interpreted as having a defensive function

Archaeologists (Brailsford 1981:226; Hamel 1986; Trotter 1959) argue that the site is well situated because much of the peninsula is surrounded by "steep cliffs which would afford good protection" (Trotter 1959:13). There are only three areas where access is available onto the cape itself: the neck and two steep areas near the end. The one on the northern side gives access to a beach, and rabbit holes in the area show darkened soil, midden and lithic material. The other access is down the steep rocks on the southern side of the site, in the vicinity of the historic wharf area (J42/78) (field visit 2010).

#### - Archaeological discussions on the fortification of Katiki Point

There is debate amongst archaeologists about the functions of Katiki Point. There are no visible fortifications at the site at present and it is unlikely there was a substantial defensive ditch at the narrow neck (see above section). No subsurface excavations have revealed fortifications such as palisades, however, there has not been any search for them, and no excavations have been conducted in areas where these potentially exist (Trotter 1967a:235). Trotter (1967a) concentrated on terraces and midden areas, looking for signs of houses and habitation. The houses that Trotter (1959:11, 1967a) excavated appeared to have burnt down, which aided in their preservation. If a palisade did exist at Katiki it may have also burnt, so it would not be currently visible but may still be in a state of preservation. The most likely place for this would be on either side of the narrow isthmus, which is considered the most easily defendable place (Hamel 1986:6). As the seaward side of the peninsula is exposed to the bedrock the best place to begin searching would be on the landward side of the isthmus.

If Katiki was defended from the isthmus, this would have resulted in only the peninsula being defended and not the terraced area on the mainland. Brailsford (1981:226) suggested that by supplementing the natural defences of the peninsula with palisades, the area could have been easily secured. An area to examine for these types of fortifications may be the entrance points

to the peninsula, especially the neck or the beach entrance on the northern side of the peninsula. However, on the landward side of the peninsula there is extensive terracing that is not suggested to have been defended (Brailsford 1981:226; Hamel 1986:6). This area (J42/65) has extensive midden, pits and terraces, and it has been suggested that it was an undefended village area (Brailsford 1981:226). This would have resulted in two areas: an unfortified area and a fortified area, both appearing to have been extensively occupied.

It is therefore thought that Katiki Point may not have been occupied specifically for its defensive features. The area is rich in resources, both lithic material and subsistence resources (seals, hard shore shellfish and fish), which may have attracted people to the area more than its natural features that could have been used for defence (Hamel 1986:6). There is evidence of Maori occupation in the area from the early prehistoric, from sites containing moa (J42/19), through to the late prehistoric. The depth of occupation at the Katiki site also suggests a lengthy occupation. The Katiki Point area was used, at least periodically, throughout the prehistoric. Despite the mobility of the occupants, due to their hunter and gather life style, the late prehistoric occupants returned to the Katiki area for some time. If the site had a defensive element, then it was part of a larger context, which included other, non-defensive functions, such as occupation and subsistence procurement.
# 8.Cornish Head (J43/42, I43/16 and I43/17)

# Site type indicated by NZAA Site Record: terraces, midden

#### Location:

Cornish Head is located at the northern end of Waikouaiti Beach. The sites are located on the headland, which is surrounded by cliffs. The coast appears to have been subject to heavy erosion (field visit 2010). It is also in view of Pa a Te Wera, Mapoutahi and Pukekura. The area is notable for its slumping, with many natural appearing ditches.

#### Occupation Period:

There are no traces of cultural material at J43/42, however about 200 meters to the south is an oven and midden eroding out of a platform (I43/17 and I43/16). The midden (I43/16) contains moa, however, this appears to be weathered and therefore, may represent secondary use (in field identification by Phil Latham 2010).

#### Background:

The pit features at J43/42 have been identified on the NZAA Site Records as sheep hollowed terraces. However, closer inspection showed that the pits have rims, and are therefore more likely to be umu ti (Figure A2.11). There also appear to be 'dimples' below these pits.

In 1840, Christie (1929:56), who defined pa as a fortified area, wrote "The sand-covered terrace above the beach at Matanaka Cliff was the site of an old burying ground. From the remains that lie scattered about this spot, it must have been frequently visited or occupied for a lengthened period by a native pah". Whether this refers to the Cornish Head area of the cliffs is unknown.



Figure A2.11: Umu ti and 'dimples' at Matanaka with Huriawa and Pa a Te Wera in the background (photo courtesy of Phil Latham, field visit 2010)

A theory that has been proposed to explain the large number of ovens and dimples is that they are linked to the siege of Pa a Te Wera by Taoka. The besieged are thought to have collected enough food for the siege, and the besiegers further stripped the surrounding countryside for food (Beattie 1916a:17; Taylor 1952:116). This could have resulted in the large number of umu ti being used at one time. This could suggest the whole area was significant at this time. Furthermore, the headland could have been used by Taoka and his forces as a potential stronghold if Te Wera were to launch a counter attack (pers. comm. Phil Latham 2010).

Cowen (1906:214) noted that Toaka "also occupying at times portions of the mainland, including the cultivation grounds at the Taumata-o-Puaka terrace, above the beach at the head of Waikouaiti Bay, Tauraka-o-waka ("The Landing-place of Canoes"), near the present Merton Railway Station." Further research, especially within the naturally defendable areas is required to determine the accuracy of this theory.



Figure A2.12: View from the south of Cornish Head/ Matanaka Head by William Hodgkins c.1880. Note erosion/ cliffs already present at the eastern tip (National Library, Reference Number A-169-001)

# Basis of Identification as a Pa:

It was suggested that the site was defendable based on its location in a naturally defendable area (Hamel 2001:64). This is most likely due to the cliffs almost surrounding the site (see Figure A2.12 and Figure A2.13). This also applies to the sites I43/17 and I43/16 (pers. comm. Phil Latham 2010).



Figure A2.13: View south (left) and east (right) of suggested terraced areas at Cornish Head; both have eroding midden on the visible exposed faces (field visit 2010)

# 9.Pa a Te Wera (I43/1)

Site type indicated by NZAA Site Record: PA/ Fortified, terraced Hill Pa

#### Location:

Pa a Te Wera is located on the Karitane/Huriawa Peninsula.

# Occupation Period:

Ethnohistoric traditions suggest that Pa a Te Wera was established sometime in the middle of the 1700s (Anderson 1998; Beattie 1916a; Cowen 1906; Taylor 1952:114). Pa Katata is associated with an earlier pa of Ngati Mamoe (Taylor 1952:114).

#### Background:

#### Land formation:

The Huriawa Peninsula is a sandstone and mudstone formation, which is particularly prone to slumping. The effects of such earth movements, which have been fully described elsewhere, is that terracettes are formed by backward rotated slump strips, especially on slopes steeper that 10° (MacKay 1961:27-28).

#### Projects at Huriawa:

# Fossicking:

Early fossicking occurred at the site, including when the 'level area' (also known as 'the potato patch') was ploughed early in the 20th century (see Figure A2.14.). It has been reported that fishhooks and adzes were collected from this area (Knight n.d.). However, it is believed the site has not been fossicked for some years, and in general, little damage has been done (Gathercole 2009; MacKay 1961:27).

There have been a number of projects at Huriawa, mainly in the 1950s, during the development of the University of Otago Anthropology Department and the Otago Anthropology Society in the late 1950s and 1960s (NZAA Site Record I43/1). Other projects include:

McKay and Trotter, 1956 (Briden 2007:2)

Knight, 1950s and 1960s (Knight n.d.)

Gathercole, 1960s (Gathercole 2009)

Boughton, McEwen, McAuley and Dobson, 1967 (Gathercole 2009)

Mackay, Mackay, Brailsford and Brailsford 1978 (NZAA Site Record I43/1)

Keen and Jacomb 1983-5 (NZAA Site Record I43/1)

Easdale and Jacomb (1984a, 1984b)

Anderson, Fyfe and Harrison (1978) (Gathercole 2009)

Numerous salvage excavations and recoveries by the University of Otago and DOC (Gathercole 2009).

#### Areas:

Pa a Te Wera has both earthworks and built structures, despite extensive European occupation on the northern side of the entrance to the peninsula. The area was occupied by whalers from 1837 and subsequently by others into the modern era (Gathercole 2009:1). "European occupation has obliterated most traces of ancient occupation in the area, but one may suppose that use was made of the high ground on the isthmus for defence" (Mackay 1961).The following section breaks down the various areas of the site, which is large and complex. Each area is identifiable on Figure A2.14.



Figure A2.14: Sketch plan of Huriawa indicating areas of interest (Bristow 2000:15)

#### Area A: Defended knoll

Area A is considered to have been the most heavily fortified area on Huriawa Peninsula (Briden 2007:2; Easdale and Jacomb 1984a:2, 1984b:1,8). The area consists of five terraces, the topmost of which is a platform and a pit. On the northwest side below the lowest terrace is a bank ending in a small ditch. It is thought that this terraced area was linked to the level area/ potato patch a number of irregular banks (known as Area Ab), which are believed to have been part of a large defensive complex. A steep razor back ridge connects Area A to Area B (Gathercole 2009:1; MacKay 1961:27).

Finds from Area A are considerable, as this is the location of most of the excavations that have occurred on this site. Gathercole (2009:3) noted that during the 1960s excavations, finds included:

- Stone flakes: particularly chalcedony, but also 30 pieces of obsidian;
- Fauna: notably dog, but also rat, seal, bird and moa;
- Charcoal;
- Shell;
- Red ochre; and

- Artefacts: patu hilt, polished adze fragments, nephrite adze poll fragments, chisels, adzes, fishhooks, and a bone needle.

#### Te Kutu (Ngutu) a Toretore

According to Cowen (1906) the track into the main pa follows the same route that the road now does. The gate called Te Kutu (Ngutu) a Toretore (*The lips of Toretore*) (Taylor 1952:117), was located somewhere below where Dr Truby Kings residence stood. "Above, the broad parapeted walls were in places surmounted by stout palisading in successive rows; within were the raupo-thatched huts of the defenders, scattered over a wide area, with watchhouses overlooking the more vulnerable points" (Cowen 1906:88).

#### - Terraces

A number of ditch features with postholes inside have been interpreted as representing up to two house structures located on the terraces of Area A (Gathercole 2009:1). Excavations on 'Terrace 4' revealed a drain approximately seven meters by four meters on three sides of a rectangle, with postholes within this rectangle. The shallow ditch may have been a drain for a house (Gathercole 2009:1). Broughton *et al.* (1967), excavated a shallow ditch that was also tentatively interpreted as a drain at Area A (Broughton *et al.* 1967: 29 in Gathercole 2009). A posthole found in ditch fill on 'Terrace 2' suggested more than one occupation period or a rebuild on the terraces on Area A (Gathercole 2009:1). The features interpreted as houses were found under a cultural deposit rich in chalcedony flakes and other stone debris (Gathercole 2009:1). A pit is located on the crest of the hill (MacKay 1961:27).

#### Northwest portion of Area A

European settlement and the construction of a road (Sulisker Street) have destroyed most of the north western part of this area. In 1968 the road was widened destroying part of the northwest wall (Knight 1967 in NZAA Site Record I43/1; unknown author, letter to Foss

Leach included in NZAA Site Record I43/1 1968). In this road cutting, midden and postholes were visible (Easdale and Jacomb 1984a:9).

The current brushwood fence adjacent to Area A was built in 2007 and, during construction of the postholes, cultural material was identified. Three layers were identified: L1: 0.1 mbs brown soil with clay components, L2: 0.1-0.32 mbs same as L1, with some L3 and cultural material, L3: 0.32 - >1 mbs, yellow hard packed clay. Cultural material consisted of midden: shellfish (80 percent rocky shore), fishbone (70 percent barracouta), land snail, mammal (dog and unknown) and bird bone (only tui was identifiable), and artefacts: five flakes (four chert, one either chert or chalcedony) and a partial bone fishhook (Briden 2007:5). This was consistent with other cultural material found in Area A (Briden 2007:6; Easdale and Jacomb 1984a:10-12; Leach 1969:53-57).

#### - Built fortifications: Defensive wall, ditch, and palisade

Trotter and Mackay excavated this area of Area A in 1956 (Briden 2007:2). The purpose of the excavation was to distinguish the ditch and bank feature of Area A, and determine if it was cultural or natural. Gathercole and his teams' excavations (12 Jan - 2 February, 12 - 16 April 1963, and 14 - 20 February 1966) was a continuation of the work done by Trotter and Mackay (Gathercole 2009).

Area 'A' consists of a number of the above mentioned terraces, a bank/ wall and in places, a shallow ditch, which runs along the bottom of these terraces. Excavations in 1956 (Mackay 1961) revealed a cross-section of this wall. They concluded that the wall was constructed on a natural terrace. Stratigraphy suggested that it was originally built with material removed from creating terraces further up, and then the depositing of midden. There also appears to be naturally accumulated material on top and in the slump behind the wall giving it its current appearance. The wall would have been approximately four foot (1.2 meters) in height.

Two rows of postholes were identified, some still containing wood. The interpretation of these postholes was that they represented temporal change in the alignment of the palisade (Easdale and Jacomb 1984a:2, 1984b:1,8).

Traditionally, palisading protected the northern side of the peninsula, at its neck, to protect from canoes (NZAA Site Record I43/1). Cowen (1906) recorded successive rows of palisades. Postholes, interpreted as palisading, were excavated running along the inside of the wall for ten meters, but not excavated beyond that (Knight n.d.: 31.1.1963).

Destruction of the bank by a road cutting in 1967 revealed a continuation of the bank earthworks and two more postholes similar to the palisade postholes, suggesting that they continued along the ridge (NZAA Site Record I43/1).

Excavation of the wall revealed the following sequence (Knight n.d.: 31.1.1963):

1. Hillside occupation, if defended on a higher or lower terrace than it is currently.

2. Three meter high wall created by throwing material from a terrace, thereby creating a ditch at the bottom of the wall.

- 3. Trench dug behind wall, trench fill thrown on top of wall.
- 4. Palisade erected in trench, filled using material from above, not from the wall.
- 5. Minor wall repairs such as clearing both sides, material added to top of wall.
- 6. Occupation during which cultural material deposited on and around wall and palisades.
- 7. Wall added to using clay from ditch at the bottom of the wall.

#### Postholes:

Knight (n.d.) labelled the postholes he identified alphabetically. Posthole Q was originally thought to have been a corner. However, as it had the same proportions and alignment as posthole H, it appears to have been an extra. Knight (n.d.) thought that it was a large hole and may have represented "part of a gate or special structure". He believed that if the pit (ahi komau) which was near the post, had special significance, then hole B may have contained a post used for a special palisade structure or the placement of a carved image.

- Ahi komau

A ahi komau is a type of pit built into the ground to keep the enclosed embers alive for a long period of time, for example, during a siege or for ritual purpose (Best 1924:70; Briden 2007:2; Gathercole 2009:2; Knight 1964:124). During the 1960s excavation an ahi komau was discovered. This ahi komau also indicated periods of modifications in Area A, as the pit had been filled in and defensive works built on top. These defences had been buried by later modifications (Knight 1964).

#### Area Ab: Ditch and paving

There is some discussion regarding an apparently straight ditch that runs from the south side of area A to the sea at the east of the site. Not well defined, the ditch may be a natural pressure ridge (Mackay 1961). "At the point where the ridge running north east from Area 'A' intersects with the east facing cliff is a short ditch with a causeway alongside. A trench excavated through the feature has established that it is an artificial structure (H Knight pers. comm.), presumably part of the defences for the flat area lying between Area 'A' and the cliffs along the southern margin of the headlands" (Easdale and Jacomb 1984b; NZAA Site Record I43/1). Calls for further excavation of this area have been made (Knight n.d.).

#### Level Area/ The Potato Patch:

A relatively flat area that was fossicked when ploughed. Reportedly fishhooks and adzes were found (Knight n.d.: 31.1.1963).

It is thought that Area A and the Potato Patch are connected by a series of irregular banks, and they are both included in a "large defensive complex" (Gathercole 2009:1). Midden is found eroding out of the cliffs of this area (Gathercole 2009:1). Knight (n.d.: 4.3.1963) recorded a small ditch line on the south west corner of the cliff of the Potato Patch, and there also are records of a small midden scatter in this area (Easdale and Jacomb 1984b:2).

In the 1980s a fluxgate gradiometer was used on the flat area east of Area A and in the drainage area where excavation occurred (Easdale and Jacomb 1984b). Activity was confirmed on terraces but only is localised parts of the flat area.

#### Slumping area south of the Level Area / Potato Patch:

This area has natural slumping (Easdale and Jacomb 1984b:3). In 1978, Anderson, Fyfe and Harrison excavation a burial that had half eroded out of the cliff from this area, 55 cm below the current ground surface. The burial was at least half exposed indicating some erosion in this general area (NZAA Site Record I43/1).

Drainage work was undertaken in this area, and cultural material was identified (Easdale and Jacomb 1984b). A "path was encountered that was thought to have been used during the prehistoric to access the beach (Easdale and Jacomb 1984b:5). This would have channelled movement of people between the scarps and therefore, could have been defensive in nature.

This area is sheltered and close to Area A with a number of terraces. However, not all of the 'terraces' were cultural, with one excavated 'terrace' appearing to be a natural formation (Easdale and Jacomb 1984b:5). The large terrace, now cut by a fence, was thought to have been used for cooking and stone working (Easdale and Jacomb 1984b:7). It was thought that all the artefacts found were chert, likely from Moeraki (Easdale and Jacomb 1984b:6). Many of the flakes retained cortex, which has been interpreted as people bringing small boulders to the site and breaking them up as required (Easdale and Jacomb 1984b:6). Other cultural material included pieces of red ochre, a broken bird bone artefact and midden consisting of

hard and soft shore shell, fish (barracouta 60 percent, red cod 30 percent), dog, rat, sea, bush bird and duck (Easdale and Jacomb 1984b:7; see Chapter Five).

# Between Area A and the Large Ditch and Causeway

The modern track that runs along this ridge follows sheep tracks that were widened revealing no cultural material (Bristow 2000:1). It appears that there is a razor back ridge that connects these two areas, with a ditch and causeway at the end.

# Large Ditch and Causeway

Knight excavated a trench through this ditch and determined it to be cultural (Easdale and Jacomb 1984a:2, Figure A2.15)



Figure A2.15: Large ditch and causeway (foreground) excavated by Knight (field visit 2010)

# Former Whaling Station

This was formally located on the north western margin of the peninsula (Bristow 2000:1). No cultural material was identified when the track that runs through this area was "cleaned down" in 2000 (Bristow 2000:1).

#### Area B: 'the village' and Trig Point G

Midden encountered for about 10 meters along the track that runs through the western portion of Area B (Bristow 2000:1). "This consisted mainly of shell (pipi and cockle with some mussel), occasional fish bones and a few hangi stones in a grey charcoal stained soil" (Bristow 2000:1). All other gravel tracks were placed onto the surface with minimal disturbance to the area.

Traditions record the current location of the trig station as the location of the Teahu (ceremonial place). This was where the carved image of the god Kahukura was kept. Kahukura was the deity or tribal guardian of Ngai Tahu and was the god of war (Cowen 1906).

The terraces in this area have been investigated by excavation, but not well documented, and it is unknown to what degree the slumping is natural versus deliberate cultural modification. They are smaller in size than those in Area A (MacKay 1961:27).

Investigated in the early 1960s: "Around the hilltop and extending down the two ridges to the north are numerous terraces made to accommodate house and storage structures, and as level areas for food preparation and other activities (Easdale and Jacomb 1984a:1-2).

#### Springs

Te Puna-wai a Te Wera (Te Wera's Well)

Unusual for a South Island pa, Pa a Te Wera is believed to have had a covered way or ditch to this spring that allowed the residence to collect water when under siege (Cowen 1906:88; Gathercole 2009: 1; MacKay 1961:26). Reported to have been located halfway along the northern side of the peninsula, this spring dried up after an 'earth movement' in 1943 (MacKay 1961:26).

#### Second spring

This seeps outs of the swampy ground on the southern side of the peninsula at the end of Puketeraki Beach (MacKay 1961:26).

#### Te Awa Mokihi/ Butterfly Bay

This is a small rocky cove reported to have been the place the occupants of the pa could launch their canoes from in all but an easterly gale. This allowed access to fishing grounds. There are terraces above this cove. Midden, "the most extensive occupation deposits", are present in this area and eroding out of the bank above the cove (MacKay 1961:27).

#### Ethnohistoric Traditions

#### Pa Katata

Pa Katata is the name associated with the very eastern point of Huriawa. It is said that it is that name of the pa once established by Ngati Mamoe on Huriawa Peninsula (Taylor 1952:114).

#### Pa a Te Wera

The most well cited tradition of Huriawa is that associated with Pa a Te Wera and the feud that existed between Taoka and Te Wera. The role of Huriawa in this tradition needs to be placed within context, which involved many of the other pa sites in Murihiku.

Cowen (1906:88) claimed his was the first writing down of the story and he acquired it from local kaumatua. A summary is as follows:

Ngai Tahu decided to campaign against the Ngati Mamoe using two fronts- an inland and a coastal push. The coastal party was led by Taoka and Te Wera, his cousin or uncle or some other close relative. Te Wera was visiting Purakanui with some of his family and companions. At the same time, a chief from Pukekura, Moki, sent a warrior to Purakanui to revenge the death of his son. This roving war party from Pukekura came in the middle of the night and threw a spear into the whare where Te Wera was staying. While Te Wera managed to escape, his companions were killed. Te Wera, in revenge, went and collected scalps near Pukekura and held them up to the people of that pa.

Te Wera asked Toaka to help him make peace with Moki, but Toaka, while he said he would, did not. Te Wera tried to make peace himself, however a fight ensured. Te Wera went north to Timaru and killed Taokas son in retaliation.

Taoka besieged Huriawa where Te Wera was fully prepared and had reportedly stocked supplies for a year for his followers, including having stripped the surrounding landscape of vegetable foods.

At one point during the siege the kahukura was stolen by two of Taoka's men. The kahukura, a wooden image of the god, was kept where the current trig station is. The two men snuck in at low tide through one of the blow holes and stole the carving. Takoa's men were triumphant, but the priests of the pa said many karakia and the kahukura flew back to the pa.

After a long siege, apparently six months, Toaka gave up, reportedly from a lack of food. Sometime later Te Wera quit the pa and went to the island at the mouth of the Taieri, then to Stewart Island and finally to Matariki Island. One of his allies, however, did not reach Taieri and stopped at Mapoutahi, where they in turn were attacked by Toaka and the pa was taken (Cowen 1906; Beattie 1916a:16-17; Taylor 1952).

# Basis of Identification as a Pa:

The site is identified as a pa based on ethnohistoric traditions, archaeological evidence and natural features interpreted as having had a defensive function.

- Ethnohistoric Traditions

Traditional evidence describes the pa being held by Te Wera and his followers for six months against a siege by his relative Taoka. The pa is reported to have been well prepared for the siege and, after Taoka gave up besieging the pa, it was soon abandoned in favour of settlement by the Waikouaiti River (see above - Easdale and Jacomb 1984a:1).

Cowen (1906:88) noted: "The garrison must have been a very considerable one in order to have so successfully held the large pa. The defences appear to have been of unusual strength for a South Island pa, which seldom display such a formidable array of parapets and terraces as those of the North".

- Palisade

Built structures, in the form of palisades, have been identified in traditional histories, as well as archaeological excavation (Knight n.d.).

- Ditch/ bank/ wall

In regards to earthworks, Pa a Te Wera has had the most extensive excavations of all the Murihiku pa.

Structural evidence of a ten meter section of a defence wall and palisading at 150 meters south/ 250 meters west of Trig G (the trig at the top of Area B) and 291.6 meters from Trig G at 239° 30'. The exact line of the wall is unknown beyond these ten meters, however, Knight (n.d.: 31.1.1963) thought, based on logic, that:

1. "There must have been considerable man power, who built a defence capable of a long siege.

2. This would require access to resources e.g. water access and beach for fishing and shell fish collecting.

3. The area known as the potato patch (called Area D in Brailsford 1981), which has been ploughed was intensely occupied. Locals remember when it was ploughed fishhooks and adzes were exposed. The cliff on the southern side also contains visible midden.

4. Defending this potato patch- i.e. a continuation of the known wall and palisade across the top of the slope on the southern edge of the potato patch, near the current line of trees would fortify the entire headland."

While aerial examinations of the area did not reveal a wall:

It should be noted that certain natural features may be defence line enough without additional wall or palisade; that some areas may be defensible with wall only, others with palisade only. If a certain area is supposed to be defended ground. The weakest defence lines should be those chosen for excavation...[and] A palisade without a wall is more likely in naturally defensible places than a wall without a palisade, and even along the cliff edge one would be most likely to find either a palisade or nothing at all (Knight n.d.: 31.1.1963).

- Natural Features

The headland is naturally defended on the east and south sides by cliffs and steep banks, and the other two sides appear to have had some archaeological fortification in the form of earthworks and built structures (MacKay 1961:27). "Te Pa-a-Te-Wera, on Huriawa Peninsula, occupied a strategically strong position, commanding as it did a very comprehensive view of the sea and shore" (Cowen 1906:88). Furthermore, "With its natural defenses of sea and cliffs, Huriawa Peninsula is ideally suited for use as a fortified pa, while its strategic position gives it commanding views of the coast to the north and south [sic]" (Easdale and Jacomb 1984b:1).

Three strategically defendable areas were identified by Knight (n.d.):

- 1. Truby King Pa- "which would extend across the narrow headland-side of the isthmus and is the area most deeply covered with occupational material"
- 2. Area A- about the potato patch or ploughed area on the southern side.
- 3. The whole headland by a defensive line that extends north of the known wall and palisade to the coast near the 'wreck' along a line distinguishable on aerial photographs.

# 10. Brinns Point (I43/38)

# Site type indicated by NZAA Site Record:

Site I43/38 is recorded as a cemetery. There is also a site (I43/63) recorded as "Midden, Artefact, Oven" located on the northern point of the peninsula.

# Location:

Brinns Point is located about 2 km north of Seacliff on the Otago coast. It is a headland approximately 200 meters wide and 100 meters long.

# Occupation Period:

Presumably prehistoric, midden recorded by the NZAA Site Recording Scheme Record I43/38 does not contain any historic material.

# Background:

The graves of four to six people, both Maori and European, are located on this peninsula (NZAA Site Record I43/38).

# Basis of Identification as a Pa:

The site was thought to be a pa based on the presence of natural features that could have been used for defensive purposes (Hamel 2001:64).

- Natural Features interpreted as being defendable

The site is located on a peninsula with three sides surrounded by water.

# 11. Omimi (I44/11)

Site Type indicated by NZAA Site Record: Occupation, stone working, terraces (?)

# Location:

The Omimi site is located on a small knoll about 30 meters above a boulder beach. It is on the south end of the beach were the Omimi Creek enters the sea.

# Occupation Period:

Early prehistoric based on the presence of moa (Petersen 2004).

# Background:

The site was excavated in the 1970s after it was discovered to have been fossicked (Hamel 1977a, 1977b; NZAA Site Record I44/11). The excavation revealed evidence of occupation including terraces, lithic material and midden.

# Basis of Identification as a Pa:

Hamel (2001) suggested that the Omimi site in a naturally defendable position.

- Natural Defences

The Omimi site is located behind a cliff, which is at present eroding cultural material. On the inland side of the site (the western edge) a swamp currently forms a natural defence. Leach and Hamel (1978:247) suggest that Omimi is the only known east Otago site that is defendable and has non industrial moa bone due to its location "on the end of a coastal spur with steep slopes in three sides and undulation ground on the forth".



Figure A2.16: Ditch, bank and pyramid features at Omimi (field visit 2010)

- Ditch
- On the northern side of the site is a ditch, bank and pyramid feature (see Figure A2.16 and Figure A2.17). However, the unstable tertiary sediments of the area have produced an environment in which slumping and earth movements are common (Hamel 1977b). While the pyramid and bank is considered natural (Dr. C.A. Landis, then Geology Department, University of Otago in Hamel 1977b), Hamel (2006) could not conclude whether the ditch is natural or cultural. Hamel (pers. comm. 2009) suggested that the site was likely to have been located where it was as this is the most suitable flat area in the locality.



Figure A2.17: Site Plan of the Omimi Site (I44/11). Note the ditch on the northern edge of the site (Hamel 2006:20)

# 12. Mapoutahi (I44/17)

# Site type indicated by NZAA Site Record: Pa

#### Location:

Mapoutahi is located at the northern end of Purakanui inlet and is also known as Goat Island. The peninsula overlooks two estuaries, a soft shore and a hard shore (Anderson and Sutton 1973:107). The site is a peninsula with a very narrow isthmus. A 1929 report in the Dunedin Evening Star stated that the isthmus was 3ft 6in (1.07 meters) wide, but it has experienced erosion since then and is now only wide enough for a single person to cross at a time (see Figure A2.18 - field visit 2010; NZAA Site Record I44/17;Skinner 1929).



Figure A2.18: Narrow causeway up to Mapoutahi, the dirt path indicating its width (field visit 2010)

#### Occupation Period:

The records for this site are jumbled and some are missing, traditional accounts assert that the site was occupied and attacked during the Ngai Tahu warfare during the mid 1700s (Anderson and Sutton 1973:107; Bathgate 1904:6; Reed 1947:41; Taylor 1952:120). Anderson (1983:35)

suggested that multiple occupations of the site should not be ruled out. Some material recovered during excavations in 1983 suggested earlier occupation. The fishhooks from the 1983 excavation are more closely related to types suggested to have been made between the 15th and 17th centuries, although these types continue throughout the prehistoric period (Anderson 1983c:23; Brown 2010). Furthermore, moa bone was found that was green when snapped, but it is unknown if this material was originally used on site. European artefacts have been found at the site, however, they are thought to be related to later disturbance (Anderson 1983c:24, 31; Anderson and Sutton 1973).

Four radiocarbon dates come from material recovered during the 1983 salvage excavations (see Appendix Three - Waikato Radiocarbon Dating Laboratory 2012):

NZ6698: 182 +/-45 Charcoal (*Myrsine australis* - dominant; *Carpodetus serratus*, *Pittosporum tenuifolium* - subdominant; *Hebe* sp., unidentified - minor)

NZ6759: 257 +/-50 Charcoal (Melicytus ramiflorus - dominant; Sophora microphylla, Myrsine australis, Leptospermum scoparium, Hebe sp., Coriaria arborea, Podocarpus totara/hallii, unidentified - minor)

NZ6770: 258 +/-50 Charcoal (Leptospermum scoparium, Myrsine australis - codominant; Pittisporum tenuifolium, Carpodetus serratus, Coprosma sp., Hebe sp., unidentified - minor)

NZ6771: 269 +/- 50 Charcoal (*Podocarpus totara/hallii* - dominant; *Myrsine australis* - subdominant; *Coriaria arborea*, unidentified - minor)

#### Background:

#### Traditions:

The main ethnohistoric tradition recounted by early Europeans is associated with the taking of the pa and the killing of its occupants. Taoka, who had a kiaka near Timaru, visited his cousin Te Wera at Pa a Te Wera. They both went to the pa at Purakanui held by Patiku (Bathgate 1904:7) or Pahiaukea (Taylor 1952:120) and after arguing, Te Wera killed Taoka's son. Taoka gathered his warriors and unsuccessfully laid siege to Pa a Te Wera, after which Te Wera went to Stewart Island, but Taoka went on to attack Mapoutahi pa. It is reported he sent his scout to check if the pa was guarded, but upon hearing that it was, he went to check himself. The guards were dummies, and Taoka and his warriors attacked the pa and killed most of the 250 people inside (Anderson and Sutton 1973:108; Bathgate 1904:7; Beattie 1922:141; Stevens 1976; Taylor 1952:120). Skinner (1929:3) reported that the bodies were placed in the trenches and

burnt, and that bones were still visible at that time (1929). This is reported to be the reason for the names of the area, Purakanui, 'a great heap' and Mata awhe awhe (the name of the peninsula Mapoutahi is located on), 'dead gathered in a heap' (Anderson and Sutton 1973:108; Bathgate 1904:7; Taylor 1952:120).

It is suggested that Mapoutahi and Purakanui were declared tapu areas, which resulted in no occupation occurring there after the 1750s siege. A Tohunga eventually lifted this tapu in the 1820s and Maori returned to live at Purakanui (Durry and Paterson 1998:36).

#### **Excavations:**

The site has been fossicked throughout the historic period and there is a local story that the Otago Museum excavated at the site in the 1930s, but no information regarding this is available (Anderson and Sutton 1973:108; NZAA Site Record I44/17). Three other excavations have been carried out at Mapoutahi and each will be briefly explained below with information relevant to defence being detailed.

Knight excavated six square meters in the location of the huts in 1961 and found a paepae (rectangular stone fireplace), some lithic material and midden consisting of seal, fish, dog and shellfish, most of which was cockle (Anderson and Sutton 1973:108; Knight n.d).

The 1966 excavation, led by Groube, was written up by Anderson and Sutton in 1973; however, neither of them attended the excavation, and the information presented was confusing and questionable. It is believed the stratigraphy of the site is complex, and during the 1966 excavations there was uncertainty in the field. The stratigraphy was not well recorded therefore, although some European material was recovered, it can only suggest there were visits to the site in the historic period (Anderson and Sutton 1973).

The 1966 excavations have been used to discredit early European claims about the site. In 1884 Mantell recorded that serpentine was found, but this is believed to be misguided as it has not been found in the area since (NZAA Site Record I44/17). Bathgate (1904) recorded that there were structures still visible, and divisions of cooking and flaking were discernible. However, records of excavations by BF Leach revealed this to be unsubstantiated (NZAA Site Record 144/17).

In 1983 a 38 meter wide slip occurred on the western side of the peninsula which removed one to two meters of ground. Subsequently, salvage excavations were undertaken in the three most disturbed areas (Anderson 1983c).

Material recovered from the site suggested at least one summer and one winter season worth of occupation. Fishing focused on barracouta and cod; birding was from local colonial nesting birds, and shellfish remains were primarily mussel. Mammals included seal and dog (see Chapter Five - Anderson 1983c). Faunal evidence suggested local exploitation, at least during the summer. This also substantiates the material and interpretations of the 1966 excavations (Anderson and Sutton 1973).

Some stone material was sourced from local areas, specifically between Mapoutahi and Doctors Point (volcanic stone), while other material came from a greater distance including from Moeraki (chert), Marlborough (grey stone) and the eastern interior of North Otago (silcrete). Obsidian was suggested, based on X–ray Fluorenscence analysis, to be from Mayor Island, Huruiki or Great Barrier Island and Northland (Anderson 1983c:17). X-Ray Fluorenscence (XRF) confirmed it to be from Taupo (Phil Latham, University of Otago).

The presence of needles and the other domestic materials such as fishhooks suggest that the site was a settlement of families, and was occupied for a lengthy period of time. Furthermore, the long distance procurement of materials supports a lengthy occupation (Anderson 1983c).

#### Basis of Identification as Pa:

It has been suggested that the site was defendable based on the presence of natural features interpreted as having a defensive function, ethnohistoric traditions and archaeologically visible features including palisades, ditches and banks.

- Natural features interpreted as having a defensive function

Natural features that could have be used for defensive purposes include the location of the site on a peninsula with only a small neck of land connecting it to the mainland, as well as the high cliffs that surrounds most of the peninsula.

The headland has natural defences, in the form of steep banks and cliffs falling to the surrounding sea on three sides. The traditional evidence supports the use of natural fortifications. In the tradition of the sacking of the pa, some residents escaped down the cliff on vines used for birding (Taylor 1952:120).

#### Ethnohistoric traditions

Ethnohistoric traditions recount that Mapoutahi was attacked by a south Canterbury chief after chiefs on the eastern Otago coast offended him, and he failed in a bid to take Pa a Te Wera, which is located just north of Mapoutahi. The ethnohistoric accounts, such as those by Bathgate (1904:7) and Taylor (1952:120), suggest that the pa was strongly fortified, and the attackers scaled palisades to successfully take the pa.

#### - Archaeologically visible evidence

#### Palisades

Traditions (see above) suggest Mapoutahi had palisades. The 1966 and 1984 excavations revealed postholes interpreted as palisades in two areas.

The 1966 excavation opened an area, shown in the 1929 map to have a ditch crossing it, near the high point of the peninsula (see Figure A2.19). B Leach recalled that some of the area was excavated badly by inexperienced field hands. H Leach's square revealed a line of double postholes and a raised area, postholes were recorded in the square to the east, but nothing was recorded in the west. Either some change occurred between the squares or the recording was inadequate. B Leach noted the area had hangi stones mixed in with European material which could suggest some disturbance (Anderson and Sutton 1973:111; NZAA Site Record I44/17).

The excavation of an area labelled Area A in 1983 consisted of a unit about 16 m<sup>2</sup> and revealed 33 postholes, interpreted as a double palisade. Stake and small postholes were 5-15 cm deep and large postholes were 30-45 cm deep (Anderson 1983c:8-9). Large posts were irregularly set about two meters apart with small posts and stakes between. At the south end of the palisade, postholes were found that indicated a later palisade. It crossed at about a 45 degree angle to the earlier palisade. Anderson (1983:33) argued that this would have protected the deep ditch, which is located a few meters south of the excavations and is thought to have been the entrance way to the pa. Between the rows of postholes midden was present, but there was none on either side. Anderson (1983:34) suggested there may have been some defensive value in putting the cooking rubbish between the palisades, as these may have fallen down the hill, presumably making access more difficult.

#### Ditch and Banks Defences

Mapoutahi has a number of earthwork features that have been interpreted as fortifications. Two detailed maps of the site illustrate the presence of ditches and banks, reported to have partially destroyed by railway workers (Figure A2.19 and Figure A2.20).



Figure A2.19: 1929 map of Mapoutahi (Steele and Swanson 1929 in NZAA Site Record I44/17)

One ditch runs along the western side of the peninsula, and a second ditch runs along the land side. These two ditches are located in the areas with the fewest natural features that could have been used as defences. A third ditch is suggested to have run across the neck of the peninsula, however data from the 1983 excavations suggests that some of this 'ditch' may be oven rake out (Anderson 1983c). A 1954 photo (see Figure A2.20) shows the ditches better than today due to the vegetation now present on the peninsula.



Figure A2.20: Mapoutahi in 1954 with less vegetation than the present and the western ditch clearly visible (Pybus 1954:44)

In 1929 a map of the site was drawn showing "well defined remanets of Maori-made trenches, parapets, and other fortifications" (Skinner 1929:3 - see Figure A2.19). The survey for the map was carried out with "extreme accuracy" (Skinner 1929:3). The meeting of the anthropology branch of the Otago Institute, in which this map was discussed, also moved to request that the Railways Department, whose gangers were living on the pa, move to prevent further damage of the trenches, embankments and hut sites. The railway gangs are reported to have destroyed trenches and embankments to plant potatoes (Skinner 1929: 3).

The 1929 drawing shows a ditch on the south east side, however the 1983 excavations showed that these were depressions from over rake outs and it is thought there was no ditch, only a double palisade (Anderson 1983c:34).

The 1966 project excavated across the western ditch (see Figure A2.19), however, no explanation has been provided for the complex stratigraphy (Anderson and Sutton 1973: 109-111). A trench was also reported to run along the far eastern outcrop of the headland (Area A, 1966 excavation) and has been interpreted as a possible secondary defence. The excavation in 1966 opened this area and found only a raised section in the east and postholes in the west, running alongside it (Anderson and Sutton 1973: 111).

# 13. Stream Outlet at Long Beach

# Site type indicated by NZAA Site Record:

This site has no site record. It does not refer to the archaeological site at Long Beach (I44/23).

# Location:

Hamel (2001:66) reported that there are local accounts (pers. comm. B. Waller in Hamel 2001:66) huts were once located at the outlet of the stream amongst a patch of manuka. However, there are currently two stream outlets so the exact location is unknown.

# Occupation Period:

Hamel (2001:66) acknowledges that this could be the site of an early 19th century settlement.

# Background:

There is currently no archaeological evidence of this site. The foreshore from Kaikai Beach to Murdering Beach has seen extensive build-up of sand in recent times, and this may have created the recent fore dune, but covered up formally swampy areas. Further investigations in the form of a palaeographic study have been called for by Hamel (2001:66).

# Basis of Identification as a Pa:

It was suggested that the site was defendable based on its location in an area with natural features that could be interpreted as having had a defensive function.

# - Natural Features interpreted as being defendable

The reported position of the huts is in an area that could have formally been swampy. Hamel (2001:66) suggests that the area where the huts are reported to have been located would be in a similar position as the early 19<sup>th</sup> century site at Murdering Beach, Whareakeake. This would make a "suitable" place for small, palisaded swamp pa (Hamel 2001:66).

# 14. Whareakeake/ Murdering Beach (J44/20)

# Site type indicated by NZAA Site Record: Occupation

#### Location:

The later site is located in a paddock by the creek at Murdering Beach.

#### Occupation Period:

Late prehistoric/ protohistoric (see Background and Appendix Three).

#### Background:

Murdering Beach is believed to have had two periods of occupation; early and late, the latter existing into the historic period. The village, and presumably the associated palisade, burnt down in the protohistoric (Bell 1956). Fossicking and excavation have revealed a rich site with a wide range of artefact types, including historic material (Bell 1956; Taylor 1952). The site is thought to have been burnt down by sealers in 1817, although this has not been confirmed (Bell 1956; Church 2008:113; Lockerbie 1959:91; McNab 1907:162-3; 1909:225-230; Taylor 1952:121; for an alternative view see Tarewai Point in this Appendix). Durry and Paterson (1998:26) claimed that after the burning of the site, a tapu was declared over the area and not lifted until the 1860s by a Tohunga from the North Island.

#### Basis of Identification as a Pa:

It was suggested the site was fortified based on the presence of a palisade, and its location in an area where natural features could be used for defence (Hamel 2001:65). A letter to Dr Hocken from Green also states: "Some 80 yrs ago there was a very large pa on Murdering Beach" (23 Oct 1980 in Church 2008:113) but gives no reasoning for the suggestion of the area as a pa.

- Palisade

Excavations in 1956 revealed a palisade along the south east portion of the site. Due to time constraints, only 104 feet (31.7 meters) of palisading was excavated, and it was believed to be associated with the upper layer. In relation to other features (an internal fence and other postholes), it was estimated that the palisade may have enclosed an area 60 - 100 meters in diameter (Bell 1956, Hamel 2001:65; Skinner 1959: 224, Lockerbie 1959:92).

- Natural features that could have been used for defensive purposes

Although the excavators (Bell 1956) believed this site to be a village enclosed within a palisade, Hamel (2001:65) observed that the movement of sand in an area over the last hundred years could have covered swampy ground surrounding it and therefore, infers that this site may formally have been a small swamp pa. However, Hamel also identified the site as an open bay settlement similar to other sites in the area such as Long Beach (I44/23) and Purakanui (I44/21).

# 15. Teraepuha/ Pulling Point (I44/75)

# Site type indicated by NZAA Site Record:

Does not have its own NZAA Site Record. Information is included in NZAA Site Record I44/75, which is a midden.

# Location:

Pulling Point is a peninsula, approximately 140 meters across and 300 meters long, on the northern side of the Otago Harbour. The highest point of the peninsula (see Figure A2.21) has a clear view of the harbour and harbour entrance, with access to the harbour easily available. Currently used as farmland, it is not thought to have been ploughed (pers. comm. William Brown, landowner 2010).

# Occupation Period:

Reference to this site as a pa is from maps produced in 1844 (Tuckett) and 1845 (Barnicoat and Davidson - see Figure A2.22 - NZAA Site Record I44/137). The site was deserted by the 1840s (NZAA Site Record I44/137). The midden recorded as I44/75 contains pottery, but this has not been linked to the reported pa. However, it is thought this site may have been occupied in the protohistoric (see below).



Figure A2.21: High area of Pulling Point (field visit 2010)



Figure A2.22: The Barnicoat and Davison map (1845), showing (circles added) Acheron Head on the left and Pulling Point on the right (modified from NZAA Site Record I44/137)

#### Background:

The reported pa on Pulling Point, or Teraepuha (Steven 1976; Taylor 1952:139) is said to have been the pa of the Ngai Tahu chief Taiaroa (NZAA Site Record I44/75). Taiaroa is reported to have been living to the west, at Acheron Head, in 1842.

A visit to this site revealed a number of possible features (June 2010). Visually, the landscape appears to be terraced, although this occurs over the entire peninsula, so it is unlikely all of these terraces are cultural. While the peninsula currently has some trees located around the bottom, there used to be trees in the area (pers. comm. William Brown, landowner 2010). Whether the terraces are therefore the result of these trees, or are due to erosion, or are natural is unclear. There are some terrace features near the highest part of Pulling Point (see Figure A2.21) that seem to extend in an orderly fashion and therefore, could be a place to test for cultural terraces. One feature was also identified that may be an umu ti or tree throw; however, this would require subsurface testing for confirmation.

#### Basis of Identification as a Pa:

It has been suggested that the site was a pa based on its natural features being interpreted as having a defensive function (Hamel 2001:64) and the reporting of the site as a pa by early Europeans.

- Natural Features interpreted as being defendable

The location of the site on a peninsula results in three sides being surrounded by water.

- Early European suggestion of the site to be a pa

Tuckett (1844) and Barnicoat (1845) maps both label a 'pah' at Pulling Point (NZAA Site Record I44/137). Whether they are referring to an enclosed site, or a village, in line with the use of the term pa at the time, is unknown.

# 16. Otaheiti/ Acheron Head (I44/137-141)

# Site type indicated by NZAA Site Record:

Acheron Head is recorded through four NZAA Site Records: midden (I44/137), midden/ oven (I44/138), Dwelling Historic, (I44/139) and Dwelling (I44/141).

# Location:

Acheron Head is a peninsula approximately 50 meters across and 100 meters long on the northern side of the Otago Harbour, one peninsula west of Pulling Point. The highest point of the peninsula has a clear view of the harbour and harbour entrance, with access to the harbour easily available (see Figure A2.23).



Figure A2.23: Acheron Head from Pulling Point, which is located to the north-east (field visit 2010)

# Occupation Period:

Early to mid 19th century (see Background section below).

# Background:

There are four sites identified on Acheron Head (see Figure A2.24):

- Midden (I44/137): The midden covers 8 x 4 meters, is 8-10 cm below the surface and comprises of shellfish, charcoal and burnt stone;

- Midden/oven (I44/138): Three areas of black soil and shell midden;

- Dwelling Historic (I44/139): Labelled "? Otaheiti". This dwelling is 10 - 15 cm below the surface and rests on placed beach boulders. Anderson (1981 in NZAA Site Record I44/139) assessed the material culture as being early to mid 19th century; and - Dwelling (Historic) (I44/140): A formed terrace 11 x 7 meters, 10 cm below the surface is European material culture mainly of 19th century origins.

Early European accounts give this peninsula as the residence of Taiaroa and as being called Otaheiti (Anderson 1998:167; Shortland 1851:22; Stevens 1976; Taylor 1952:134). Taiaroa is reported to have been dwelling "in a house of European pattern, and had 700 warriors to obey his call" (Wakefield in Taylor 1952:134). The peninsula has been modified by a road and house, and there is currently no cultural material visible (field visit 2010).



Figure A2.24: Location of sites on Acheron Head (NZAA Site Record I44/137)

#### Basis of Identification as a Pa:

It has been suggested that Acheron Head was a pa based on its natural features being interpreted as having a defensive function (Hamel 2001:64), and the reporting of the site as a pa by early European writers.

- Natural Features interpreted as being enclosing

The location of the site on a peninsula results in three sides being surrounded by water. Furthermore, these three sides incline steeply.

- Early European suggestion of the site as a pa

Acheron Head is labelled as a 'deserted pah' on Barnicoat and Davidson's 1845 map (NZAA Site Record I44/137). As the Background section indicated, this is reported to have been a residence of Taiaroa, however, no built fortifications have been identified (Anderson 1998:167; field visit 2010).

# 17. Pukekura, Taiaroa Head (J44/4)

# Site type indicated by NZAA Site Record:

Although there are a number of archaeological sites associated with Taiaroa Head (see below), the archaeological site (J44/4) that covers the pa indicates the site type as: <u>Pa</u> site.

# Location:

The site is reported to have been located at the northern end of the Otago peninsula. The peninsula is about 400 meters long and 300 meters wide at the most. The isthmus is just over 200 meters long. The pa is thought to have been fortified at the isthmus and therefore, the whole peninsula could be considered to be part of the defendable area.

# Occupation Period:

Published ethnohistoric traditions suggest that the site was first established as a pa around 1650 by the Ngai Tahu chief Waitai. From the traditional evidence it appears that the pa was occupied for at least a hundred years and belonged to Ngai Tahu (Anderson 1998:41; Leach and Hamel 1978:240; Stack 1877). It is unknown exactly when the pa was abandoned, although the general view is that it was for the most part a deserted village during the first half of the nineteenth century (Knight 1979:22). For archaeological dating see Appendix Three.

# Background:

Taiaroa Head has been badly disturbed to create Fort Taiaroa; a European collection of fortifications as well as a lighthouse, associated buildings and residences as indicated in Figure A2.25 (Leach and Hamel 1978:239; Hamel 2005). Taiaroa Head was the site of European fortification for the Russian Scare (1880s), World War One and World War Two (Cooke 2000:116-119). This makes any identification and locating of prehistoric defences difficult, if they still exist (Hamel 2005; Leach and Hamel 1978). It is therefore unknown exactly where the pa may have been located. It is presumed to have been located on the brow of the ridge, the location of midden (J44/77). Leach and Hamel (1978:243) infer that sites on the east Otago coast should have relatively consistent material cultures and settlement pattern due to the amount of interconnection between them, as told by the oral traditions.



Figure A2.25: Map of Taiaroa Heads (Hamel 1994:6)

Archaeological Sites:

J44/4: <u>Pa</u> site

Records a rampart- see section on identification of the site as a Pa.

J44/158: Foundations

No further information available

J44/77: Midden

What appears to be prehistoric midden was exposed for about 2.5 meters when a terrace was cut into the area in 1972. The 30 cm layer contained fish bone (84 percent barracouta), bird bone, mammal bone (dog, seal and human), charcoal, and a few artefacts (worked bone and two flakes) (see Chapter Five for more detail - Leach and Hamel 1978; NZAA Site Record Form I44/77). Charcoal from this site was radiocarbon dated to 300 +/-60 (95 percent calibration) BP (see Chapter Five for more detail - Leach and Hamel 1978:243). There has been some concern over the piece of charcoal used as it was from an unknown species.
Allingham (pers. comm. to Hamel in Hamel 2005:7) also excavated material from a terrace created for albatross nests in 2005 when erosion disabled midden material.

J44/151: Fortifications

This site records the various European fortifications that have been the result of wartime scares from 1885-WWI and WWII (Cooke 2000: 116-119; Hamel 1994; NZAA Site Record J44/151).

J44/71: Tramway

No further information available.

J44/139: Midden

Site lies on the edge of the cliff, 50 meters east of the end of the parapet wall. The NZAA Site Record Form (J44/139) notes that a piece of moa bone was identified from the site, but gives no other information.

J44/154: Oven/Midden

A power cable and effluent system trench was dug in this area in 1995 (also mentioned in Hamel 2005:1-7). It cut through an oven and midden consisting of dense fish bone (NZAA Site Record J44/154).

J44/152: Midden (destroyed)

This site contained midden, which was removed during building work at the visitor centre in 1992.

J44/148: Seawall/wharf system

Of European origin.

#### **Ethnohistoric Traditions**

It is thought that the site was an important base for Ngai Tahu for at least 100 years (Leach and Hamel 1978:240-2). It is thought that Ngai Tahu occupied Taiaroa Heads, and the oral traditions record continued conflicts with the Ngati Mamoe who resided on the Otago Peninsula and also at Rangipipikoa, a reported Ngati Mamoe pa across from Pukekura, although at times there was peace between the two pa (Taylor 1952:131). Specific people who are recorded in the oral traditions of Pukekura are also linked to other pa, for example Taoka

is linked not only with Pukekura, but also Katiki, Huriawa and Mapoutahi (see Huriawa and the other various associated pa for the tradition and how Pukekura was involved - Leach and Hamel 1978:242-3; Pybus 1954:1). The most recounted tradition directly involving Pukekura would be that of Tarewai. The Tarewai story has not been placed into chronology, although it is known to have been some time in the prehistoric, and debate continues (Anderson 1998:52-54).

A very brief summary of the traditions recounts that the Ngai Tahu at Pukekura became jealous of the good fishing at Papanui and so it transpired that a number of attacks and counter attacks occurred between the people of Pukekura Pa and Papanui Pa. Tarewai, a Ngai Tahu chief was caught by the Ngati Mamoe, but escaped and snuck back into Pukekura Pa, while the Ngati Mamoe were distracted within their own pa, Rangi pipi kao (Anderson 1998; Pybus 1954:33-38; Taylor 1952:132-133,138).

#### Early European Descriptions

The Otago harbour was known to Europeans by 1808 or 1809 (Church 2008). It is reported that the Maori population at Otago Head in the 1830s was 200. However, European disease decimated the population (see Tarewai Point below for a further example), and by 1848 there were only 110 people at Otakou (Taylor 1952:131).

#### Basis of Identification as a Pa:

It was suggested that Taiaroa Heads was a pa based on ethnohistoric traditions, European accounts, a possible ditch, and natural features interpreted as having had a defensive function.

- Ethnohistoric traditions

Traditions such as those given above indicate the site was a pa.

- European accounts

Early European accounts suggest that Pukekura was known as a defence. Dubouzet, on the *Astrolabe*, in 1840, was "contemptuous of the chief's fort, which he says is no fort at all being on a plateau affording no military advantage. This could have been Taiaroa" (Knight 1979:20). While not a favourable observation, it does suggest that the site is known as a fort.

Possible Ditch

The only suggested identifiable Maori defence at Pukekura is the possible original ditch and bank across the neck of the headland at the end of Harrington Point Road. A stone parapet, built in 1888, is thought to have run along the location of the original ditch and bank (Hamel 2005:1; Knight 1979:28; NZAA Site Record J44/4). A number of excavations have been carried out at Pukekura (see above), primarily salvage operations, and one such excavation crossed this stone parapet (see Figure A2.26). "Extension of the trenches between the septic tank showed that when the blackened sand was formed, the ground surface followed the line of the present ground surface dipping down from the road edge towards the parapet, lending credence to the belief that a Maori ditch and bank parapet existed on the site of the present stone wall parapet of the European fortification" (Hamel 2005 in NZAA Site Record J44/4). Hence, it was concluded that "the stone parapet is probably the location of the original ditch and bank" (Hamel 2005:1).



Figure A2.26: Cross section of the parapet (Hamel 1994: Figure 7a)

Gathercole visited Taiaroa Head in 1959-60 and noted the following:

Presumed <u>Pa</u> site. TAIAROA HEAD. Single rampart, and ditch running SW/NE. Traces of rampart to E of road 100 yds before entrance to lighthouse, Extends to E. and then ENE to cliff edge for 175 yds. To W of road slight trace before steep dip in contour to Pilot Beach. But line disturbed by military works. Max height: 12ft. Max breadth: 30 ft. Probably scarped in front, but slight traces of ditch in centre portion. No sign of defensive features within this rampart (NZAA Sire Record form J44/4).

However, he went on to state that the identified rampart was dubious and needed excavations.

#### - Natural

The site is located on the end of the Taiaroa peninsula and contains natural defences, which include step banks and cliffs to the sea surrounding the area on three sides. Archaeologists have recognised these natural features that could have been used for defence for some time. For example, Gathercole noted in 1959/1960 (NZAA Site Record J44/4) that: "The line of defences would seal [sic] site on landward side. On seaward side, cliffs are very precipitous, and form natural defence".

Leach and Hamel (1978:247) went so far as to identify a naturally defendable area within the wider peninsula: "the ground immediately above the Taiaroa Head midden is protected by steep slopes on all sides, the ground on three sides leading down to cliffs above the sea."

Like Gathercole (NZAA Site Record J44/4) noted, this site is the "presumed pa", and while traditions certainly suggest it was an enclosed area, further investigations are required. While the current theory suggests the ditch and bank was/is located where the current wall, built in 1888, is and some excavation supports this, more research could be carried out to confirm this and investigate the nature of said fortifications.

# 18. Tarewai Point (J44/3)

### Site type indicated by NZAA Site Record: House Sites

#### Location:

Tarewai Point is located on the spur at the southern end of Pilots' Beach, near the end of the southern side of the Otago Harbour. It is within a few hundred meters of Taiaroa Head. The site itself is not currently visible (NZAA Site Record J44/3).

#### Occupation Period:

The site was excavated by Teviotdale and the material culture indicates that the site was 'classic' in nature (extracts from Teviodale's personal diary, relevant copies of entries in NZAA Site Record J44/3).

#### Background:

Excavations carried out by Teviotdale revealed a rich site with evidence of structures (interpreted as huts). The site has been heavily modified due to road and military associated building activities (NZAA Site Record J44/3).

There is a record of a Ngati Mamoe pa in the area on the bank facing Pukekura (see Pukekura above). However, as the location of this pa is undetermined, it is not known if the Tarewai Point site has any connection to it. The pa was taken when Ngai Tahu managed to break open its gate (Anderson 1998:55).

On the northern slopes of Waieri Hill there were 50 huts noted in 1840. Knight believed this to be the village of Rangi-pipi-koa (Dubouzet on the Astrolabe 1840 in Knight 1979:20). Stoke and Richard's chart of 1850 shows two huts on the site of Teviotdale's excavations. He reported finding clay pipes (Knight 1979:20). "... it is assumed that the village known as Rangi-pipi-koa at the Heads occupied only the area Teviotdale dug in the 1930s, whereas in fact it extends over a very considerable sand-blown area of the north-east slope of Waieri Hill" (Knight 1979:13).

Knight (1979:22) intimates the town burnt by Kelly in 1817 was not at Murdering Beach but that the burnt stumps excavated by Teviotdale, who thought they may have been part a pyre for victims of disease, were in fact the result of Kelly burning the town.

#### Basis of Identification as a Pa:

Tarewai Point is believed to be a defendable site based on its location with natural features that could be used to create a defendable area, and archaeologists inference (Hamel 2001).

#### - Natural Features interpreted as being defendable

Tarewai Point is located on a spur in an area where these natural features could be used for defence. Steep banks fall to the sea on three sides of the spur. No other evidence of fortifications has been recorded, either visible on the surface or during excavations.

- Archaeologist suggestion:

Leach and Hamel (1978:247) proposed that this site may have been within the main fortifications of Pukekura. Tarewai Point is known to have been occupied in the early historic period but it is unknown if it was occupied during the prehistoric period. It is understood that Pukekura was primarily occupied in the prehistoric period. Also, it is thought that the main ditch was located at Pilots Beach, and therefore would not have included Tarewai Point in its defences (see Pukekura above).

# 19. Pa o Ngatikuri

# Site type indicated by NZAA Site Record:

This pa site is not a recorded site. It is mentioned in NZAA Site Record I44/106, which is a midden and burial site.

# Location:

Three places have been suggested for the location of this pa:

1. The top of a cliff which is about 50 meters high on the southern side of Papanui Inlet directly west of 144/106. The northern and eastern edges of the area are cliffs, while the other western side drops steeply (see Figure A2.27). Access is via the southern end (pers. comm. Phil Latham 2010).



Figure A2.27: High area on south side of Papanui Inlet. Left: view of the high area from the west. Right: View from the high point to the north toward Taiaroa Head

2. Stevens (1976:27) located the site further to the west on the large headland above the NZAA Site J44/104 (see Figure A2.28 and Figure A2.29).



Figure A2.28: Map of the Papanui Inlet and Papanui Beach, Otago Peninsula. Red arrow indicates "Pa o Ngatikuri" and blue arrow indicates "Orangiwairua" (arrows added, Stevens 1976:27)



Figure A2.29: Headland from the east where Steven (1976:27) identified '?Pa o Ngatikuri'

3. The occupation in the area is located at J44/6, which is a mound and could have been defendable (see Figure A2.30).



Figure A2.30: The small hill in the forground is the location of J44/6; it is covered in midden and lithic material

### Occupation Period:

Unknown, possibly prehistoric based on associated traditions.

### Background:

There is no visible cultural material at the reported location of the site. The NZAA Site Record that records the pa, I44/106, accounts for an area of midden and the place where a number of skeletons were excavated in the 1930s (MacArthur 1951). The occupation area continues into NZAA Site Recording Scheme record I44/6. I44/6 records a promontory and what was thought

to be a natural causeway with a stream running along the eastern side. There is cultural material, primarily midden, eroding out of the entire promontory, especially visible in areas with rabbit burrowing and sheep tracks (field visit 2010). It is therefore assumed that the area has been heavily occupied in the past (MacArthur 1951:47).

#### Basis of Identification as a Pa:

The site may have been a pa based on the recording of ethnohistoric traditions:

- Traditions of the site as a pa:

• Stevens (1976:27) located a place called Pa o Ngati kuri in this area; however no explanation beyond this is given other than the site being a pa of the Ngati kuri hapu;

• MacArthur (1951:47) wrote: "The site of our digging lies about half a mile seaward of an area reputed to have been a strongly fortified Maori *pa*. Though no earthworks can be detected, numerous artifacts from the area in Otago collections indicate that it was once fairly densely populated." The NZAA Site Record I44/106 also notes this but neither gives any information beyond this; and

• Natural features that could have been used for a defensive purpose.

All three locations are surrounded on three sides by cliffs or banks and have panoramic views of the surrounding landscape (field visit 2010).

# 20. Aurakitaurira/ Papanui Beach

# Site type indicated by NZAA Site Record:

This site has no site record, however the area indicated as the pa location has a site labelled 'fishing site of several phases' (I44/1). Other sites in the area include umu ti (I44/36), cultural layer/ fire pit (I44/115), and midden (I44/116 and I44/117).

### Location:

Little Papanui Beach is located on the eastern side of the Otago Peninsula, a few kilometres north of the Cape Saunders lighthouse. The main site in this area (I44/1) is located on both banks of the mouth of the Taurira Stream (Skinner 1960:187).

### Occupation Period:

The traditions that allude to this pa site refer to fighting between Ngai Tahu and Ngati Mamoe, suggesting a late prehistoric period of occupation. The site at I44/1 has moa remains in its lowest layers, but upper layers are indicative of it being later prehistoric.

### Background:

Much of the archaeological site I44/1 had been destroyed by the 1930s due to erosion, fossicking and excavations (NZAA Site Record I44/1). Skinner (in 1929-30, published 1960), Teviotdale (1931, unpublished in his journal of that year) and Groube (1965, unpublished) have excavated at this site (NZAA Site Record I44/1). The site is considered to be a seasonal fishing camp, and Skinner (1960:188) specifically states that there was no palisade found as there was at Murdering Beach.

### Basis of Identification as a Pa:

The site was identified as a pa based on the ethnohistoric traditions and place names.

- Ethnohistoric traditions and place names:

There are numerous records of a pa at Little Papanui. The pa is reported to have been involved in the tradition about the chief Tarewai (see Pukekura Pa above).

Pybus (1954:37-8) wrote that the Papanui pa was located "about half a mile from the Cape Saunders lighthouse of modern days", but does not outline whether he is refereeing to Papanui Inlet or Papanui Beach. Taylor notes that the pa at Little Papanui beach is the I44/1 site:

At little Papanui Beach, near Cape Saunders, was situated a Maori pa which figures in the story of Tarewai... The old pa at Papanui stood where the Orangi-wairua stream enters the sea, the place being called Au-raki-tau rira. Not only the pa-site but the burial-grounds nearby have been for nearly a half-century well dug over by curio collectors (1952:138).

Stevens (1976) located Orangiwairua Stream (see Figure A2.28) where Skinner located the Taurira Stream (the site record gives the name of the creek as Putoki) hence, the linking of the I44/1 site to the 'Papanui pa' site.

The inclusion of site I44/1 is made due to the linking of names and the ethnohistoric tradition of a pa in the location. Excavations have not revealed any fortifications, and the site is not in an area where natural features could be used for defensive purposes. Therefore, five options are possible:

1. The tradition is referring to a site that was unfortified and I44/1 is that site, so is a result of the authors using the word pa to refer to an undefended site;

2. The tradition is referring to a site that was unfortified and I44/1 is not that site;

3. The tradition is referring to a site that was fortified and I44/1 is not that site. Either the names have been mixed;

4. The tradition is referring to a site that was a pa and I44/1 is that site, fortifications are either no longer present, have not been found or were not required in referring to the site as a pa; and/ or

5. The tradition is not accurate or correct in its identification of a pa.

# Ethnohistoric Traditions of the Taieri Plains

Four pa are located on or around the Taieri River and are linked by tradition. The ethnohistoric tradition describes how the Ngati Mamoe of the Taieri Plains were all killed. In summary (see Joseph 1899 for the fullest account), the traditions recall that Tukiauau's (who had a pa on Ram Island called Whakapaupuka) son had a lover, who died as she tried to jump into his canoe. The girl's father, also Ngati Mamoe, who resided at Omoua Pa (at Henley Hill) and his neighbours from Motu para Pa (at the Taieri River Mouth), took revenge on the Ngati Mamoe at Putatara Pa (see section on Putatara Pa below) and they in turn gained an alliance with a northern tribe, Ngati Kahununu, to carry out their revenge. Ngati Kahununu came south from the North Island and occupied the pa at 'The Elbow' (Amoka), Pa a tu pari taniwha. They then invited the people from Omoua Pa for a feast and slaughtered them before taking Omoua Pa (Anderson 1998:43; Beattie 1916a:9,11; Joseph 1899; Roberts 1912:35; Taylor 1952:180-81). Roberts (1912:35) also links the story into the ovens observed by Europeans on Henley Hill, as indicating the feast of the defeated people that occurred after the fight. There is no inclusion of any Europeans in these traditions and it is therefore inferred that the tradition is prehistoric in nature. It may show these events begun in the 1720s (Bray et al. 1998:28; Parer and Hislop 1980:38-9) although Anderson (1983:38) stated they started around 1710.

### Additional traditional pa on Taieri Plains as described in the above tradition:

#### Motupara Pa

#### Site type indicated by NZAA Site Record:

This pa has not been confirmed by any specific site.

#### Location:

Motupara Pa is reported to be located "near where the river swept past the cliffs before it made its angry waves boil with fury where the ocean swell and river current met" (Joseph 1899:50). The description of the pa is related to Tukiauau trying to find a site for his pa, which he eventually built at Ram Island. He was located on the west bank of the Taieri River when he visited Motupara pa and seems to have not crossed the river, perhaps implying Motupara Pa was also located on the west/ south bank. The only site in this area that fits this description is the NZAA Site I45/30 (a settlement and midden site), although there is currently nothing connecting the two. The site is currently under thick gorse.

Parer and Hislop (1980:5) wrote "various accounts also refer to an earlier pa on the southern side, where artefacts have been occasionally found behind the store and middens at the lagoon on the ocean beach".

#### Occupation Period:

Prehistoric based on ethnohistoric traditions.

#### Background:

There is no known site for this traditional pa. The archaeological site I45/30 is reported to have at least eight possible house, terraces and midden consisting of shell and fish bone (NZAA Site Record I45/30).

#### Basis of Identification as a Pa:

It has been suggested that Motupara Pa is a pa based on ethnohistoric traditions. There are no traditions describing any fortifications. Although speculation that there may be some link, site I45/30 also has no recorded fortifications.

- Ethnohistoric traditions as given above.

# 21. Pa a Tu Pare Taniwha (I44/11)

Site type indicated by NZAA Site Record:

Traditional Pa site

#### Location:

Pa a Tu Pare Taniwha is located on a natural mound called The Elbow, by the Taieri River. The pa is located on a bend of the Taieri River at Otokia (the damp place) (NZAA Site Record I44/11). It used to be located in a swampy area, and so was surrounded by swamp on three sides and the river on the fourth until Europeans drained the area (Joseph 1899:51).



Figure A2.31: Amoka, reported location of Pa a Tu Pare Taniwha, after it was ploughed in 2001 (courtesy Brian Allingham 2011)

### Occupation Period:

Prehistoric based on ethnohistoric traditions.

### Background:

The site has no known archaeological material associated with it (NZAA Site Record I44/11). The chief Tapari taniwha/Te Pare Taniwha of Ngati Kahununu reportedly established the pa when he brought 240 warriors from the North Island as part of a revenge plot against the Omoua Pa (see above ethnohistoric traditions about the Taieri Plains).

#### Basis of Identification as a Pa:

The site was suggested to have been a pa based on its location in an area with natural features that could be defended, as well as traditional evidence. The traditional evidence notes the presence of a double palisade.

- Ethnohistoric Traditions

See above traditions on Taieri Plains.

- Natural Features interpreted as being defendable

The following ethnohistoric tradition suggests that the location for the pa was chosen for natural features that would help defend the site:

... he [Tapari taniwha] spied an ideal spot for a stronghold- a high mound of considerable extent, with the river on one side and a chain of deep lagoons almost around it, which could easily be fortified, so that it would be pretty well nigh impregnable. They therefore resolved to build a pa there (Joseph 1899:51).

- Double Palisade (from ethnohistoric traditions)

Ethnohistoric traditions suggest a double palisade was built at the pa, however, there are no surface remains of this left despite Taylor (1952:181) claiming the ramparts could still be defined. The suggestion of a double palisade comes from the following ethnohistoric tradition:

With great labour they dragged trees from the noble forest that grew on the Otakia hillside, and built a very strong pa, securely guarded by a double palisade. The space between was used for a meeting place and for the men on guard, while the whares were within the central enclosure (Joseph 1899:51).

Late in this research, this site was further investigated through geophysics and test excavations (Potts and McCoy 2011). See Chapter Five for further details.

# 22. Whakapaupuka (Ram Island) (H45/5)

Site type indicated by NZAA Site Record:

Traditional pa site and find spot- canoe carving.

### Location:

Ram Island (see Figure A2.32) located between Lake Waihola and Lake Waipori.



Figure A2.32: Ram Island from the west (courtesy of Ben Teele, field visit 2011)

### Occupation Period:

Prehistoric based on ethnohistoric traditions.

### Background:

Ram Island is known by a number of Maori names: Whakapaupuka, Waihorapuka/ Waihorapuke, Whakaraupuka and Wakaraupo (Beattie 1944:39; NZAA Site Record H45/5; Roberts 1913:35; Taylor 1952:180). It is the traditional location of the pa of Tukiauau, a Ngati Mamoe, who came south from Marlborough after killing a Ngati Tahu chief (Joseph 1899; Sutherland 1962:8; Taylor 1952:180). Roberts (1913:35) recorded that in 1899 there was no sign of the pa on the island. In 1978 there were a number of cultural lenses consisting of visible midden (NZAA Site Record H45/5). This and a silcrete flake were identified in a field visit in 2011.

#### Basis of Identification as a Pa:

It has been suggested that the site was a pa based on its location in an area with natural features that could be defended as well as traditional evidence.

# - Ethnohistoric traditions (see Taieri Plain traditions above)

The pa was reportedly established by Tukiauau who certainly had knowledge of pa building and had motivation to keep himself safe from more northern hapu (Anderson 1998:35; Joseph 1899).

### - Natural Features interpreted as being defendable

The location of this pa is traditionally believed to have been on an island in the middle of a swamp, which offered a measure of natural defence (Joseph 1899).

# 23. Omoua Pa (Henley Hill) (I45/25)

Site type indicated by NZAA Site Record:

Traditional pa site.

Location:

The location of the pa is reported to be on a flat spur running in a north easterly direction from the top of Henley Hill to some small cliffs (see Figure A2.33). There are steep slopes and cliffs on three sides (NZAA Site Record I45/25).



Figure A2.33: Henley Hill from the east (courtesy Ben Teele, field visit 2010)

Occupation Period:

Prehistoric, based on ethnohistoric traditions.

#### Background:

The pa has been variously called Omoua, Te Moua, Pa a te Moua, Moua (NZAA Site Record I45/25) or Puke te moua (Darby 2002). There are currently no archaeological remains visible at the site. Early Europeans recorded the presence of ovens on the hill, supposedly indicating the area where the people of the Omoua pa were cooked after the pa was taken by Ngati Kahununu from Pa a Tu Pare Taniwha (I44/11). No sign or records of these ovens are currently known on Henley Hill (see Figure A2.34). The hill may have also been reused as a defence against fear of attack by Te Rauparaha in the 1830s (pers. comm. Steve Bryant 2011).



Figure A2.34: 360 degree panoramic view from the top of Henley Hill (courtesy Ben Teele, field visit 2010)

### Basis of Identification as a Pa:

The site was identified as a pa based on its location in an area with natural features that could be defended as well as traditional evidence. The traditional evidence suggests the presence of a palisade and possibly a ditch that these palisades were built into.

- Ethnohistoric traditions (see above section on Taieri Plains ethnohistoric traditions)
- Natural Features interpreted as being defendable

Ethnohistoric tradition implies that the pa was located on top of a precipice that was too high to scale (see below). NZAA site I45/25 is located in such a position.

- Palisade in a large ditch (from ethnohistoric traditions)

The following part of the ethnohistoric tradition of this site suggests a precipice, and palisade in a trench were used to fortify Omoua pa:

A precipice, which no man could scale guarded the pa in front, and the palisading behind was high and strong. The great totara and matai trees that grew on the slope above the pa had been cut down, dragged by hundreds of men, and upended side by side in the deep trench dug to receive them. The forest had all been cut down for some distance behind and below the pa so the watches could see the river and any approach by which an enemy would come (Joseph 1889:51).

There are no remains of a palisade at the site. The NZAA Site Record (I45/25) states: "Defences said to have been visible on the gentle slope leading to the top of Henley Hill but these have been bulldozed flat". The location of these was thought to have been the current location of the water tank (see Figure A2.35).



Figure A2.35: Water tank where a reported ditch was bulldozed (courtesy Ben Teele, field visit 2010)

# 24. Upukeroro River Mouth, Te Anau (D43/2)

Site type indicated by NZAA Site Record: Maori Village Site

#### Location:

On the shores of Lake Te Anau, on the western side of the Upukeroro River, less than a kilometer north of the township of Te Anau. White (1893) described the area as rolling downs.

### Occupation Period:

Historic based on report of European artefacts.

#### Background:

In 1893 Taylor White described the remains of a 'pa' on the shores of Lake Te Anau. However, there is no indication of this site having any fortifications. White (1893) described the remains of the 'pa' as consisting of burnt posts, the roofing of a whare and some material culture made from European materials.

This site could have been part of or the location of the site D43/1 (NZAA Site Record D43/2). This site was recorded based on hearsay, which recalled that the area had been heavily fossicked and ploughed in about 1900 (NZAA Site Record D43/1). Coutts (1968) suggested that there used to be ovens in the area, but they have all been almost completely destroyed, and none of them appear to warrant further investigations.

#### Basis of Identification as a Pa:

The site was identified as a pa based on an early European account:

- European account

As described above, White (1983) identified the site as a pa. The details of this account and the lack of fortification evidence, would suggest the site is not a fortified area and therefore is not a pa, but a village or occupation area, as described in the NZAA Site Record D43/2. This is most likely a reflection of the use of the word pa in early European times as interchangeable between non-fortified villages and fortified areas (see Chapter Three and Four - Davidson 1984). This confusion is further reflected in the interchangeable use of the terms village and pa when authors have referred to this site (Hall-Jones 1968).

# 25. Anchor Island

# Site type indicated by NZAA Site Record:

This pa is mentioned in the NZAA Site Recording Scheme record A44/10, which is for the site type ovens.

# Location:

The pa is reported to have been located on the arm that creates Luncheon Cove, formally Sealers Cove (Coutts 1969). The arm is approximately 200 meters in length and 50 meters wide.

### Occupation Period:

Unknown

### Background:

The archaeological sites at Luncheon Cove are the remains of early European presence in the area and include hut sites, terraces and ship building areas (NZAA Site Record A44/3-4, 23, 27-29). Henry (1895 in NZAA Site Record A44/10) claimed that there was a lot of evidence of occupation by Maori on the peninsula; however, none is now visible.

### Basis of Identification as a Pa:

The only suggestion that there was a pa site on Anchor Island comes from a European account.

- European Account

R Henry was the curator of Resolution and adjacent Islands between 1884 and 1904. He wrote to Melland (1895 in NZAA Site Record A44/10) of a pa and village on the peninsula forming Sealers Cove. He does not give any evidence, just writes about digging Maori ovens and the presence of huts in the area. However, he also writes "I think it was not a permanent pa but a sealing camp". This may indicate that the site was not fortified, and he may have used the word 'pa' to mean an occupation, rather than a fortification, although he also uses the word village. Therefore the use of the term pa is problematic.

# 26. Pa a Te Whara, Matuaira Island/Spit Island, Preservation Inlet

# Site type indicated by NZAA Site Record:

There is no NZAA Site Record specifically for this site, however, NZAA Site Records B45/40 (cave with occupation) and B45/41 (look out for whaling station) contain information about the pa. With the records for B45/41 are records of an old NZAA Site Recording Scheme record for a pa. These have been removed as an individual record due to lack of evidence.

### Location:

Spit Island is located at Preservation Inlet in Fiordland. It is connected to the mainland by a sandy isthmus accessible at low tide (NZAA Site Recording Scheme record B45/41).

### Occupation Period:

Prehistoric based on traditional records, suggested to have been occupied and attacked sometime between the 1660s and the 1780s (see traditional accounts below). The island is approximately 400 meters by 100 meters at low tide.

### Background:

Two archaeological sites are recorded on Spit Island. Both (NZAA Site Record B45/40-41) mention the traditional pa, and both state that no evidence is currently present.

B45/40: This site is the only recorded Maori occupation on the Spit Island and is a rock shelter site with midden. However, it is reported that ovens and midden used to be visible on a sand spit connecting the island to the mainland (NZAA Site Record B45/40). Roberts (1913:101) suggested that Maori used caves when on the island but that there was also a pa/"fortified village".

B45/41: Postholes, interpreted as a lookout of historic origin for sealing (NZAA Site Record B45/41).

### Basis of Identification as a Pa:

Spit Island was identified as a pa based on ethnohistoric traditions.

- Ethnohistoric traditions

There is a Maori tradition that there was a pa on this island, however the location is unknown (Anderson 1998:53-5; Beattie 1922; Buddle 1912:178; Carrington et al. 2008:155-6; Hall-Jones 1945:101; Roberts 1913:101; Taylor 1952:149-50). The traditions identify the pa as the last fort of the Ngati Mamoe (Beattie 1922). It was called Pa Te Whara, meaning 'mat on which only a chief can sit' (Hall-Jones 1968:23). There are a number of slightly differing accounts of the battle there between Ngati Mamoe and Ngai Tahu, occurring anywhere between the 1660s and the 1780s (Beattie 1944:102-104; Buddle 1912:178; Taylor 1952:149-50). Members of the Ngati Mamoe iwi killed some Ngai Tahu members at Otago Heads (suggested to part of the Tarewai incident- see Pukekura), fled to Preservation inlet and established a pa. The Ngai Tahu people came to visit, but were captured by the pa occupants (Hall-Jones 1945:67). Either the other half of the visitors arrived or upon hearing of the attack, the Ngai Tahu of Otakou or Pukekura (Otago Harbour or Otago Heads), lured the occupants of the pa out into an ambush and burnt it. However, the Ngai Tahu canoes where taken by occupants of the pa, who were out fishing, stranding the Ngai Tahu people (Anderson 1998:53-5; Beattie 1922; Buddle 1912:178; Carrington et al. 2008:155-6; Hall-Jones 1945:101; Roberts 1913:101; Taylor 1952:149-50). This tradition is linked to Captain Cook by the claim that these stranded people were those seen by him in 1773 (Taylor 1952:149-50). Beattie's (1922:104) version claimed it was the surviving Ngai Mamoe Cook saw.

Roberts (1913:100) asserted that when Europeans first visited the beach, there were human bones on it that were eventually taken away with the whale bones for making bone dust.

- Natural features interpreted as having a defensive function.

The pa site is reputed to have been on the island which could afford some element of natural fortification.

# 27. Te Kiri o Tunoho/ Matariki Island (D46/64)

# Site type indicated by NZAA Site Record:

NZAA Site Record D46/64 identifies the site as a Pa. NZAA Site Records for the various other sites at Cosy Nook (D46/65-69,81-82) also identify it as such and should be considered in the interpretation of the pa, as they are thought to be the area of residence for the establishers and occupiers of the pa.

# Location:

Approximately 20 km west of Riverton, the largest island off Cosy Nook is Matariki Island (see Figure A2.36), said to be the location of a pa, variously known as 'Old Pa', Te Kiri o tunu or Te Kiri O Tunoho (Ashwell 2002:14; Brailsford 1981:229). It is accessible by wading at low tide, although the field visit for this research was carried out using a boat at high tide.



Figure A2.36: View south of Matariki Island from the mainland at high tide (field visit 2011)

### Occupation Period:

Matariki is reported to have been occupied in both the prehistoric and early historic period. Prehistoric material was fossicked in the early nineteenth century (NZAA Site Record D46/64), excavated by Higham (1968), and noted by the author in the form of an adze held by a local resident,. Along with ethnohistoric tradition this suggests that the pa and surrounding area was first settled in the prehistoric. The earliest European accounts record the occupation

of people in the same area during the early 1800s (Boultbee in Stark 1986). It is reported that Kiri-o-Tunu was rebuilt by Te Wero to defend against an expected attack from Te Rauparaha (Buddle 1912:180). Cosy Nook was occupied by the Te Au family until its sale in 1860 (Garven *et al.* 1997; Mantell 1886:55).

#### Background:

#### Archaeological Investigations

Teviotdale wrote of the pa on Pahia Island in 1929 (personal diary December 7, relevant entries in NZAA Site Record D46/64). Teviotdale (1929 recorded in NZAA Site Record Form D46/64) reported a cleared channel amongst the rocks, but this was unable to be field checked by the author due to the high tide at the time of the visit. Teviotdale's source, 'Mr King', told him of earthworks still defined and that "When Mr King had first seen it, the totara posts of the gateway were still standing, although they were now burnt away". Buddle (1912:180) also reported a scrub fire on the island which burnt the posts of the pa.

Higham (1968) excavated at Pahia, across from Matariki Island, which was presumably occupied by the establishers of the pa. The only note he makes in his publication (Higham 1968:158) of the material culture specifically from Pahia was "evidence of argillite working, fish and shellfish collecting, as well as trading in gun flint, pottery, iron nails and clay pipes. No archaeological evidence for potato cultivation." He was also unsure as to the permanency of the occupation.

While there is currently no visible midden or umu on the island, other material culture, including adzes and personal adornments from Pahia are known from fossicking, and erosion continues to expose cultural deposits (held by the Otago Museum, Southland Museum and private collections). These suggest a prehistoric occupation of the area (NZAA Site Record D46/64; Skinner 1933:310-320).

#### Early European Accounts:

Some of the earliest writings about the southern shores of New Zealand by early European visitors mention Pahia, although none of them mention a fortification specifically. The 'Snapper' passed through the area in 1824 and wrote of Pahia: "the village standing at the further end of an open Bay and on the slope of a hill" (de Blosseville in McNab 1907:202).

A more detailed description of the village is given by Boultbee (in Starke 1986:204-205, 207) who reported gardens, albeit some distance from the whares. The reported chief of the area at this point, the 1820s, is given as Pahia.

An early photo of Matariki was published in *The Cyclopedia of New Zealand* in 1905, although no fortifications are visible.



Figure A2.37: Early photograph of Matariki Island, perhaps from the shore (Cyclopedia Company Limited 1905:776)

### Ethnohistoric Traditions:

Tradition recalls that Te Wera left Huriawa after the siege that occurred there (see Pa a te Wera) and occupied Motu Rata, at the Taieri River mouth; the Neck and Smoky, both on Stewart Island; and finally, Matariki Island at Te Ahi Rahuru ('fire kindled for warmth and comfort'), the easternmost point of Te Waewae Bay (Buddle 1912:173-180). Buddle wrote:

The bluff to the west is Matawhero; below this is a terrace formation called Mataariki. Here were the cultivations and kaika-noho (dwelling-place) of the Ngai-Tahu hapu Te Aitanga-a-Kuri, whose fighting pa was Kiri-o-Tunu, the largest of some rocky islets separated from the shore of Mata-ariki by a narrow strait. Mata-ariki was the scene of a great fight (1912:174).

Traditions record that Ngati Mamoe caught the Ngai Tahu inhabitants unarmed, killed or enslaved the occupants and burnt the pa. It is reported that those killed were cooked in numerous hangi on the ridge above Mata-ariki (Buddle 1912:175). Ngai Tahu eventually took

revenge and this is reported as the final defeat of the Ngati Mamoe (Anderson 1998:50; Ashwell 2002:14; Buddle 1912:174; Carrington *et al.* 2008:153; Hall-Jones 1945:66; Taylor 1952:158). It was noted that there was a series of cultivation terraces, therefore it is thought that this occurred around 1775 (Beattie 1945:66). However, it may be that cultivations were not occurring at this time, but later when the pa was re-established.

#### Basis of Identification as a Pa:

Matariki Island was identified as a pa based on archaeological evidence, ethnohistoric traditions and natural features interpreted as having had a defensive function.

#### -Archaeological Evidence

As noted by Teviodale in 1929 (in NZAA Site Record Form D46/64), there is surface evidence that indicates Matariki Island has been modified and fortifications established. A visit by the author to the island in 2011 illustrated that, although the island is currently covered in heavy scrub, small banks and very shallow ditches behind said banks were identifiable (see Figure A2.38 and Figure A2.39). These are located on the eastern side of the island. All sides of the island are steep and the top is particularly flat, at some points over ten meters wide, which does not easily fit, in the opinion of the author, with a natural explanation, although further investigation would be required to confirm this. Therefore, the landscaping of the island is suggested to potentially be the product of deliberate modification, resulting in the flat areas having an increased defensive potential, taking advantage of both the natural height, the steepening of the approach, and natural visibility.

The bank and shallow ditch on the eastern side of the island are currently not large enough to be considered defensive per say. The bank is directly above the steep incline to the rocks below and the shallow ditch is directly behind this. They may have once been larger, but further investigations would have to occur to determine this. There are similar earthworks present at Huriawa. The steep bank/ wall, with a small bank at the top and a shallow ditch behind are identifiable at both sites. Excavations at Huriawa determined that palisading ran along the small bank at the top of the wall (Knight n.d.). Therefore, this could also be considered for the Matariki Island bank.



Figure A2.38: Looking down the bank in the southerly direction at Matariki Island (field visit 2011)

The final fortification of the island was reported to have been created in fear of an attack from Te Rauparaha, who had muskets (Buddle 1912:180). Therefore, the final phase of the pa may have been established with regard to defence against muskets. It is currently unknown when the bank at Matariki Island was constructed, as the pa was reportedly in use in both the prehistoric and historic.

There is a single post currently standing on the southern side of the island. It is located where the flat area on top of the island drops away to a steep slope. There are also other posts similar to the one still standing that are no longer in situ, but are at the bottom of the slope and on the rocks. Finally, there is a small wooden fence, of no obvious function, located on the southern side of the island. When or why these items were brought to the island is unknown. None of them appear to have been burnt, and so would suggest they may have appeared after the reported scrub fire. It is reported (Rūnanga o Ngāi Tahu, Ōraka-Aparima pers. comm. 2011) that a whaling lookout was located on the island after it was a pa, but this still does not account for the posts and the reported fire.



Figure A2.39: Looking south across the shallow ditch (foreground where bag is located) and bank directly behind (field visit 2011)

#### -Ethnohistoric Traditions

As indicated in the background section above, ethnohistoric traditions indicate that Matariki Island was the defensive position of the people who lived there. It is reported that the pa was protected by a taniwha in the form of a whale that lived in the strait between the island and the mainland (Anderson 1998:50; Ashwell 2002:14; Buddle 1912:174; Carrington *et al.* 2008:153; Hall-Jones 1945:66; Taylor 1952:158). The use of the word pa is therefore referring to a place that is more than an occupation site and is actively being protected and defended. There is a blow hole on the eastern side of the island that can be heard at high tide (field visit 2011).

#### -Natural Features

The pa is an island most of the time, which makes it naturally defendable with the sea around it. It is only accessible on foot by wading at low tide, hindering a stealthy approach. Even at high tide, there are hazardous reefs. However, Cosy Nook and the island itself afford protection against heavy swells from the south (field visit 2011).

# 28. Otauira Pa

# Site type indicated by NZAA Site Record:

The archaeological site (NZAA Site F47/15) located on this peninsula is recorded as a midden.

# Location:

Reported by Beattie (1920a:194) to be where the Waipara Lighthouse at Otara is located (see Figure A2.40). The peninsula on which the lighthouse is located is just over 100 meters by 100 meters.



Figure A2.40: Waipara Lighthouse at Otara in the 1970s (information board at Waipara Lighthouse, 2011)

### Occupation Period:

Unknown- possibly late prehistoric. The midden contains no European material however, whether the midden is related to the reported pa is unknown.

### Background:

There is an archaeological site (F47/15) on the Peninsula, where the Waipara lighthouse is located that is recorded as midden. The site is located on the western side of the peninsula, and is reported to be visible for 25 meters intermittently along the bank. The midden contains a mixture of shellfish and fish (NZAA Site Record F47/15). Whether the midden is related to

the reported pa is unknown. However, it does not appear to extend to the area that would be naturally defendable on the peninsula itself (field visit 2011).

### Basis of Identification as a Pa:

The site was identified as a pa based on European accounts (Beattie 1920a:194). The location of the site on a peninsula is generally interpreted as giving natural defence at other pa sites and therefore, must also be considered.

This site is labelled as a pa based on the following:

- European Account:

# Beattie noted:

The last battle among the southern Maoris so far as I know was at Te Anau, where Puku-tahi, Te Maui, and (I think) Pokohiwi were killed. After this many people 'broke out' from Kaiapohia and came south, the first being Haru, who went down as far as Foveaux Strait, where he built the Otauira pa near where the Wai-papa lighthouse at Otara now is...Then we come to the Rau-paraha wars (1920a:194).

# - Natural Features:

The reported site is located on a peninsula and this location of sites in such situations is reported as giving natural defence.

# 29. Parangiaio Point (E48/34)

#### Site type indicated by NZAA Site Record: Midden oven

#### Location:

Ruapuke Island is just under 13 km squared and was a focal point for Maori in the protohistoric and late prehistoric eras (Coutts and Jurisich 1972; Hall-Jones 1943:58). The pa on Ruapuke Island was reported to have been located on Parangiaio Point (Roberts 1913:80) and is also known as old Ruapuke Pa (Buddle 1912:179; NZAA Site Record E48/33).

Parangiaio Point is a peninsula located on the eastern side of Ruapuke Island at approximately the half way point. The peninsula is approximately 200 meters long and 150 meters wide. The isthmus is approximately 50 meters wide.

#### Occupation Period:

Possibly prehistoric and/ or re/ established in the historic period during the 1830s.

#### Background:

Parangiaio Point has been occupied from the prehistoric into the historic era and is now a cemetery (Beattie 1944:74; NZAA Archsite). Early 19th century European accounts indicate that a small hamlet was situated at Parangiaio Point and was also known as Ruapuke Village. People continued to live in this area through into the 1940s (Coutts and Jurisich 1972).

Coutts and Jurisich (1972) excavated at the isthmus of Parangiaio Point but found no evidence of fortifications. The isthmus is currently reported to be under a large sand drift. Coutts and Jurisich (1972) recorded that there was no sign of occupation on the promontory itself, however, European artefacts and an occupation horizon (10 - 20 cm) were reported on the sandy isthmus. An excavation, 2.4 by 3.2 meters revealed an intrusive coffin and an open hearth fire with charcoal, burnt pebbles and midden. Midden continued throughout the opened area and was thought to be of prehistoric origin (Coutts and Jurisich 1972:17).

#### Basis of Identification as a Pa:

The site was identified as a pa based on European accounts, ethnohistoric traditions and natural features interpreted as having a defensive function.

#### - European accounts

Coutts and Jurisich wrote of the Parangiaio Pa as part of their archaeological investigation of Ruapuke Island:

As a response to the threat of invasion from Te Rauparaha, the inhabitants of Ruapuke are said to have built a pa on Parangiaio Point. This is headland with steep rocky margins and connected to the mainland by a narrow sandy neck (Carrick 1903:108). Presumably the neck was guarded with a palisade. In 1844 the pa had fallen into a state of disrepair (Barnicoat Journal). No detailed descriptions of the pa are available (1972:9).

#### - Ethnohistoric traditions

Parangiaio Point is reported to have had two pa established on it at different times. There are no reports of there having ever been any battles on Ruapuke Island. There is disagreement over who originally established the pa, which is assumed to have been in the prehistoric era. One report suggests that the pa was originally established as "the principle pa of the ancient Ngati Mamoe" (Roberts 1913:80; Taylor 1952:162). However, others disagree and argue that Ruapuke Island was never occupied by the Ngati Mamoe (Beattie 1916c:97). The second period of occupation, or establishment of a pa was by Tuhawaiki in the historic period as a response to Te Rauparaha's invasion into the South Island in the 1830s (Roberts 1913:80). This pa is reported not to have been completed as the builders realised they would not be attacked.

- Natural features interpreted as having a defensive function

As described by Coutts and Jurisich (1972:9) the headland has "steep rocky margins" as well as a narrow isthmus connecting it to the mainland. The steep rocks would not have required further fortification, and so would have been a natural feature interpreted as having a defensive function.

# 30. Putatara Pa, East Ruggedy, Stewart Island

# Site type indicated by NZAA Site Record:

This site does not have a site record. NZAA Site Records that mention this pa are D48/1 and D48/2, which are the site types 'workshop' and 'ovens/ middens (village site?)' respectively. It has been suggested that both these sites are pa.

### Location:

Ruggedy is located on the north western side of Stewart Island. It has steep cliffs creating a mixture of hard shores and sandy beaches. The sites are both located in the sand dunes that are extensive in the areas behind the sandy beaches.

### Occupation Period:

Probably prehistoric based on ethnohistoric traditions and a lack of European artefacts at the sites.

# Background:

# D48/1 East Ruggedy:

The main source of information on this site is a short report written by the Southland Museum staff when they visited it, as well as D48/2, and collected some surface artefacts from the site in 1972. They found the remains of a working floor, primarily consisting of argillite. The record of the trip states that the site was in the dunes of East Ruggedy Beach (see Figure A2.41 - NZAA Site Recording Scheme record D48/1).

Some fishhooks held by the Otago museum are thought to be from this area. However, there is some confusion over whether they are from the Ruggedy Islands, as claimed by the finder, or if they are from East Ruggedy as was concluded by the finder's brother. He thought they were most likely from D48/1,"the dune midden" (NZAA Site Record D48/2). Hjarno (1967:10) concluded that they seemed to be from the post moa period.


Figure A2.41: NZAA Site D48/1 with East Ruggedy in the background (field visit 2009)

A visit to this site (December 2009) identified midden eroding from the front dune and erosion of the site onto the beach (see Figure A2.42). The whole area is probably deflated. This appears to not have been visible in the 1972 field visit. The area was littered with midden, lithic material, charcoal and worked bone. They appeared to have not been weathered, so may have only recently eroded from the above banks, although how much the site has deflated is unknown. Still eroding from the above bank was midden and charcoal that appeared to be part of a hearth.



Figure A2.42: Dune deflation and cultural material exposure behind foreshore at NZAA Site D48/1 (field visit 2009)

#### D48/2 West Ruggedy:

The Southland museum staff (1972:2 in NZAA Site Record D48/2) also went to the area where what they termed the "old village or pa site" had been situated evident by earthen ovens and midden. They located the site behind the first line of sand dunes. Evidence of occupation included midden and some lithic material (argillite and nephrite) (NZAA Site Record D48/2).

A visit to this site was carried out in December 2009. The site was not easily recognisable and so may be covered at present by sand. A possible area of lithic working, similar to D48/1 and a small amount of midden were identified (see Figure A2.43).



Figure A2.43: Small midden scatter near reported site of D48/2 (field visit 2009)

### Basis of Identification as a Pa:

Putatara was identified as a pa based on ethnohistoric traditions and European accounts. The European accounts suggest a number of different locations for the pa site.

Ethnohistoric traditions:

Putatara (the trumpet) is the reported site of the only battle on Stewart Island. The battle is tied into the tradition of the pa on the Taieri Plains. Tukiauau came to Putatara Pa looking for refuge but his adversary, Tu Wiri Roa, who pursued him to Stewart Island, killed him. Tu Wiri Roa then turned his attention to the pa, which eventually fell, and almost everyone was killed bar two small boys who in turn later attacked Omoua pa (Anderson 1998:43; Ashwell 2002:30; Buddle 1912:178).

Buddle (1912:178) places this in the mid 17th century. However, a letter to Basil Hoard (NZAA Site Record D48/1) on the 16/8/1939 records the existence of a settlement at Ruggedy, where the chief Tukete, believed to be a 'papapuri', lived when European sealers lived in the area. However, the exact location and relevance is unknown. The events on the Taieri Plains are believed to have occurred during the first half of the 18th century (see Taieri Plains Ethnohistoric Traditions Section).

#### European accounts

The European accounts suggest a number of different potential sites for the location of Putatara Pa. The site is not believed to be within the Maori reserve at the northern end of East Ruggedy (Ashwell 2002:30), but possibly at either East Ruggedy, between East and West Ruggedy or West Ruggedy.

#### East Ruggedy:

Early European writers locate Putatara at East Ruggedy across from the Rugged Islands at Ruggedy Point (Buddle 1912:178; Sansom 1982:52). Sansom (1982:24) was told to be her Maori informant, Morokiekie, that "Ruggedy was a natural for a pa, he said. This was Pa Putatara. Many adzes and curios have been found there and Ruggedy has a sheltered little corner too [with] ... Lovely clear green water with a sandy bottom". This could suggest an already known site, such as D48/1 (see background). However, the location of the site is thought to have been in an area of good visibility, such as the high ground between East and West Ruggedy (Sansom 1982:24,52).

The main reason for a field visit was to field check a report, by Department of Conservation worker Phred Dobbins, of a pa in the area (pers. comm. Rachael Egerton 2009). Dobbins visited East Ruggedy after a large fire burnt through the area in 1988/90. He said the fire burnt back from the shore line. Dobbins reported that he followed the burnt area up steep ground for about a kilometer, before the land flattened into a series of terraces, ditches and banks, with a spring or water source in the centre. The location is only that given by the mark on the map by Dobbins (see Figure A2.44) (pers. comm. Rachael Egerton 2009).

A field visit in December 2009 revealed that the area is now covered in scrub. A possible site was identified. However, on the surface, the site appeared to be natural.

West Ruggedy:

There is no other information on this site other than what was given in the background. The suggestion that the site was a pa is based on information given in the Southland Museum report (NZAA Site Records D48/1-2). However, the site is located on a "high headland" which may have afforded some natural defence.

380 McArthurs Rugged Islands No. D48/25 Putatara (Rugged) I D49 D48/001 252 Ruggedy Beach D48/002 West North Red Head

Figure A2.44: Reported location of a pa by DOC employee Phil Dobbins (courtesy Rachael Egerton, 2009)

# 31. Freshwater River, Stewart Island (D48/8)

## Site type indicated by NZAA Site Record: pa?

Location:

Unknown, but possibly at mid flats, lower Fresh Water River.

Occupation Period:

Unknown

Background:

The location of the site is unknown. The general area is flat and swampy.

Basis of Identification as a Pa:

It was suggested there was a pa at Freshwater River based on a European account.

- European account

This pa was recorded by Mr M Kershaw in a list of sites on Stewart Island. The only information currently available is that "there is a pa at the above location" (NZAA Site Record D48/8).

**Appendix Three** 

Radiocarbon Dates from Pa and Enclosures Sites in Murihiku

Table A3.1:Radiocarbon dates from pa and enclosure sites in Muril
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Assemblage	Sample Context	Lab Number	C.R.A	Error	Delta 13	Sample Material	Source	Sample Suitability	Notes
Katiki Point (Te Raka a Hine atea Pa)	Wooden slab from house site 2	NZ0696	886	49	-25.00	Wood (Podocarpus totara)	New Zealand Radiocarbon Data Base (RCDB); Smith and James-Lee 2009; Trotter 1967b	Reject	Unsuitable species
Katiki Point (Te Raka a Hine atea Pa)	Thin shell midden by house site	NZ0697	519	59	1.51	Shell carbonate (unspecified)	Smith and James-Lee 2009; Trotter 1967b; RCDB	Ok	Close date
Taiaroa Head (Pukekura Pa)	Midden	NZ1935	210	57	-25.90	Charcoal (unspecified species)	Smith and James-Less 2009; Leach and Hamel 1978; RCDB	?	Maximum age for late period deposit
Mapoutahi	Bottom of Layer 2, immediately beyond defences	NZ6698	182	45	-24.72	Charcoal ( <i>Myrsine australis</i> - dominant; <i>Carpodetus serratus</i> , <i>Pittosporum tenuifolium</i> - subdominant; <i>Hebe</i> sp., unidentified - minor)	Smith and James-Lee 2009; RCDB	Ok	Close date
Mapoutahi	Oven or rake-out, Layer 3	NZ6759	257	50	-24.68	Charcoal ( <i>Melicytus ramiflorus</i> - dominant; <i>Sophora</i> <i>microphylla</i> , <i>Myrsine australis</i> , <i>Leptospermum scoparium</i> , <i>Hebe</i> sp., <i>Coriaria arborea</i> , <i>Podocarpus totara/hallii</i> , unidentified - minor)	Smith and James-Lee 2009; RCDB	Ok	Close date
Mapoutahi	Oven, Layer 3 between palisade lines	NZ6770	258	50	-24.33	Charcoal ( <i>Leptospermum</i> scoparium, Myrsine australis - codominant; Pittisporum tenuifolium, Carpodetus serratus, Coprosma sp., Hebe sp., unidentified - minor)	Smith and James-Lee 2009; RCDB	Ok	Close date

Assemblage	Sample Context	Lab Number	C.R.A	Error	Delta 13	Sample Material	Source	Sample Suita	bility	Notes
Mapoutahi		Oven material, Layer 3 alongside palisade	NZ6771	269	50	-22.40	Charcoal (Podocarpus totara/hallii - dominant; Myrsine australis - subdominant; Coriaria arborea, unidentified - minor)	Smith and James-Lee 2009; RCDB	Ok	Close date
Murdering Beach (Whareakeake)	Outer ring of palisade post butt	NZ0851	342	48	- 25.00	Wood (unspecified)	RCDB	Reject		Unknown species
Murdering Beach	h (Whareakeake)	Outer ring of palisade post butt	NZ0852	316	59	-25.00	Wood (unspecified)	RCDB	Reject	Unknown species
Murdering Beach	h (Whareakeake)	Outer ring of palisade post butt	NZ0853	310	47	-25.00	Wood (unspecified)	RCDB	Reject	Unknown species

Table A3.1: Radiocarbon dates from pa and enclosure sites in Murihiku

## **Appendix Four**

Identifying Attributes at Murihiku Pa Sites

(Information sourced from Appendix Two)

Site (see Figure 5.1)	Site name	Confidence Level of Site as a pa	Characteri	istics of po	a as identified	in Chapter 3:				
			Ditch	Bank	Defence scarp	Palisade	Other built fortification	Identified high platform or tihi	Natural features	Ethnohist- oric Sources
1	Te Waiateruati	1	Y	Y	Possible gun pits	Reported	Y Recorded gates		Y	Y (O + E)
2	Otipua	4							?	Y (E)
3	Camp Hill	4	Unclear if or cultural	natural					Ν	
4	Те Кара	4							Ν	Y (E)
5	Huru Huru's pa	3				? Unclear if fence or palisade			Ν	Y (E)
6	Cape Wanbrow	4							Y	? (O + E)
7	Te Raka a Hine atea pa	2	Shallow ditch reported- now bedrock				? Oral traditions of gate		Y	Y (O +E )

Table A4.1: Identifying attributes at Murihiku pa sites (see Appendix Two for sources)

Note: Natural features refers to natural features that have been interpreted as having had a potential defensive function; O = oral tradition; E = early European

Site (see Figure 5.1)	Site name	Confidenc e Level of Site as a pa	Characte	eristics of	Èpa as identij	fied in Chapter 3:				
			Ditch	Bank	Defence scarp	Palisade	Other built fortification	Identified high platform or tihi	Natural features	Ethnohist -oric Sources
8	Cornish Head	3							Y	
9	Pa a Te Wera	1	Y	Y	Y	Y	? Oral tradition of gate	Y	Y	Y (O + E)
10	Brinns Point	4							Y	
11	Omimi	4	?						Y	
12	Mapoutahi	1	Y	Y		Y	Y - Based on archaeological work	Y	Y	Y (O + E)
13	Stream outlet at Long Beach	4							?	
14	Whareakeake	2				Y			?	
15	Teraepuha	3							Y	Y (E)
16	Otaheiti	3							Y	Y (E)

Table A4.1 (cont.): Identifying attributes at Murihiku pa sites (see Appendix Two for sources)

Site (see Figure 5.1)	Site name	Confidence Level of Site as a pa	Character	istics of p	a as identified	in Chapter 3:				
			Ditch	Bank	Defence scarp	Palisade	Other built fortification	Identified high platform or tihi	Natural features	Ethnohist- oric Sources
17	Pukekura	2	? Reported destroyed modern wa	ily by all					Y	Y (O + E)
18	Tarewai Point	4							Y	Y? (O)
19	Pa o Ngatikuri	3							Y	Y (O)
20	Aurakitaurira	4							Ν	Y (O + E)
21	Pa Tu Pare Taniwha	3				? Oral traditions suggest double palisade			Y	Y (O + E)
22	Whakapaupuka	2							Y	Y (O + E)
23	Omoua Pa	3	? Reported	1		? Oral traditions suggest double palisade			Y	Y (O + E)
24	Te Anau	4								Y (E)

Table A4.1 (cont.): Identifying attributes at Murihiku pa sites (see Appendix Two for sources)

Site (see Figure 5.1)	Site name	Confidenc e Level of Site as a pa	Characte	haracteristics of pa as identified in Chapter 3:						
			Ditch	Bank	Defence scarp	Palisade	Other built fortification	Identified high platform or tihi	Natural features	Ethnohist -oric Sources
25	Anchor Island	4							Y	Y (E)
26	Pa a Te Whara	4							Y	Y (O + E)
27	Te Kiri o Tunoho	1	Y	Y			Reported gate		Y	Y (O + E)
28	Otauira pa	4							Y	Y (E)
29	Parangiaio	3							Y	Y (O + E)
30	Putatara	3							? (location unknown)	Y (O + E)
31	Freshwater River	4							? (location unknown)	Y (E)

Table A4.1 (cont.): Identifying attributes at Murihiku pa sites (see Appendix Two for sources)

## **Appendix Five**

Naturally Enclosing Features at Identified Pa Sites in Murihiku

(Information sourced from Appendix Two)

Site number (see Figure 5.1)	Site name for purpose of this thesis	Confidence Level of site as a pa	Physical location	Occupation period	Are natural features interpreted as having a defensive function present at this site?	Said natural feature:
1	Te Waiateruati	1	River side	Prehistoric occupation (oral traditions) historic 1830s fortification (archaeology and European accounts)	Y	Inclined slope to stream- is a gunfighter pa so different requirements to prehistoric pa
9	Pa a Te Wera	1	Peninsula	Prehistoric (c.1750?)	Y	Cliff/inclined banks/water
12	Mapoutahi	1	Peninsula	Prehistoric (c.1750?)	Y	Cliff
27	Te Kiri o Tunoho	1	Island	Prehistoric (Te Wera post Huriawa) and historic?	Y	Island
7	Te Raka a Hine atea pa	2	Peninsula	Prehistoric (c.1750?)	Y	Cliff/ inclined banks/ water
14	Whareakeake	2	Bay/ swamp?	Into the historic	?	Former swamp?
17	Pukekura	2	Peninsula	Prehistoric (c.1650 onwards)	Y	Inclined slope/cliff/water
22	Whakapaupuka	2	Swamp Island	Prehistoric	Y	Swamp Island
5	Huru Huru's pa	3	River side	Historic	Ν	
8	Cornish Head	3	Headland	Prehistoric (same as Huriawa?)	Y	Cliff

Table A5.1: Naturally enclosing features at identified pa sites in Murihiku (see Appendix Two for sources)

Site number (see Figure 5.1)	Site name for purpose of this thesis	Confidence Level of site as a pa	ee Physical Occupation period ite location		Are natural features interpreted as having a defensive function present at this site?	Said natural feature:
15	Teraepuha	3	Peninsula	Historic	Y	Incline sloped/ water
16	Otaheiti	3	Peninsula	Historic	Y	Cliff
19	Pa o Ngatikuri	3	Headland	Prehistoric?	Y	Cliff
21	Pa a Tu Pare Taniwha	3	Swamp Island	Prehistoric	Y	Swamp Island
23	Omoua Pa	3	Hilltop	Prehistoric	Y	Cliff/ inclined slope
29	Parangiaio	3	Peninsula	Prehistoric (oral traditions) and historic (European/oral traditions)	Y	Inclined slope/ water
30	Putatara	3	?	Prehistoric	?	
2	Otipua	4	River side	?	?	Located in river loop
3	Camp Hill	4	Hillside	Historic? (1830s?)	Ν	
4	Te Kapa	4	River side	Historic	Ν	

Table A5.1: Naturally enclosing features at identified pa sites in Murihiku (see Appendix Two for sources)

Site number (see Figure 5.1)	Site name for purpose of this thesis	Confidence Level of site as a pa	Physical location	Occupation period Are natural features interpreted as having a defensive function present at this site?		al features d as having a function present at	Said natural feature:
6	Cape Wanbrow	4	Headland		Early prehistoric (moa) and historic (bottle glass)	Y	Inclined slope/ water
10	Brinns Point	4	Headland		?	Y	Inclined slope/ water
11	Omimi	4	Headland		Early prehistoric (contains primary moa bone)	Y	Cliff
13	Stream outlet at Long Beach	4	Bay/ swamp?		?	?	Former swamp?
18	Tarewai Point	4	Headland		Prehistoric? (Rangipipikoa oral tradition) and historic (archaeological material)	Y	Inclined slope/ water

Table A5.1 (cont.): Naturally enclosing features at identified pa sites in Murihiku (see Appendix Two for sources)

Site number (see Figure 5.1)	Site name for purpose of this thesis	Confidence Level of site as a pa	Physical location	Occupation period	Are natural features interpreted as having a defensive function present at this site?	Said natural feature:
20	Aurakitaurira	4	Bay	Prehistoric	N	

 Site number (see Figure 5.1)	Site name for this thesis	purpose of	Confidence Level of site as a pa	Confidence Physical Level of location site as a pa		Are n inter defen prese	natural for preted as nsive fun ent at this	eatures having a action s site?	Said natural feature:
 24	Te Anau	4	Riverside			Historic	N		
25	Anchor Island	4	Peninsula			?	Y	Inclined slope/ water	
26	Pa a Te Whara	4	Island?			Prehistoric	Y	Island	
28	Otauira pa	4	Peninsula			Late prehistoric?	Y	Inclined slope/ water	
31	Freshwater River	4	Unknown, pos	ssibly riverside?		?			

Table A5.1 (cont.): Naturally enclosing features at identified pa sites in Murihiku (see Appendix Two for sources)

Appendix Six

European Visits to Reported Murihiku Pa

(Information sourced from Appendix Two)

Site number (see Figure 5.1)	Site name	Occupation period	Did Europeans visit this site when it was reported to be a 'functional' pa?
1	Te Waiateruati	Prehistoric (oral traditions) historic 1830s (archaeology and European accounts)	Y (Shortland, Mantell and Bishop Selwyn in 1840s)
2	Otipua	?	N (Reported as ruined)
3	Camp Hill	Historic? (1830s?)	?
4	Te Kapa	Historic	Y (Mantell 1840s)
5	Huru Huru's pa	Historic	Y (Mantell 1840s)
6	Cape Wanbrow	Two occupations: early prehistoric (moa) and historic (bottle glass)	?
7	Te Raka a Hine atea pa	Prehistoric (c.1750? based on oral traditions)	Ν
8	Cornish Head	Prehistoric	Ν
9	Pa a Te Wera	Prehistoric (c.1750? based on oral traditions)	Ν
10	Brinns Point	?	Ν
11	Omimi	Early prehistoric (contains primary moa bone)	Ν
12	Mapoutahi	Prehistoric (c.1750? based on oral traditions)	Ν

Table A6.1: Early Europeans at visits to identified pa sites in Murihiku (see Appendix Two for sources)

Site number (see Figure 5.1)	Site name	Occupation period	Did Europeans visit this site when it was reported to be a 'functional' pa?
13	Stream outlet at Long Beach	Historic? Reported huts in the area	? (Europeans in the area but no records)
14	Whareakeake	Two occupations: prehistoric and palisaded occupation into the historic period	? (Europeans in the area but no records, possibly 1817)
15	Teraepuha	Historic	? (Europeans in the area but no records)
16	Otaheiti	Historic	? (Europeans in the area but no records)
17	Pukekura	Prehistoric into early historic (established c.1650 based on oral traditions)	Y
18	Tarewai Point	Prehistoric? (based on Rangipipikoa oral tradition) and historic (archaeological material)	? (possibly 1817)
19	Pa o Ngatikuri	Prehistoric?	Ν
20	Aurakitaurira	Prehistoric	Ν
21	Pa Tu Pare Taniwha	Prehistoric	Ν
22	Whakapaupuka	Prehistoric	Ν
23	Omoua Pa	Prehistoric	N (Shortland visited this area in 1840s but makes no mention of the pa)

Table A6.1 (cont.): Early Europeans at visits to identified pa sites in Murihiku (see Appendix Two for sources)

Site number (see Figure 5.1)	Site name	Occupation period	Did Europeans visit this site when it was reported to be a 'functional' pa?
24	Te Anau	Historic (report of metal artefacts)	N (Reported as ruins)
25	Anchor Island	?	N (Reported as ruins)
26	Pa a Te Whara	Prehistoric	Ν
27	Te Kiri o Tunoho	Prehistoric? (Te Wera post Huriawa) and historic	Y (Mantell 1840s)
28	Otauira pa	Late prehistoric?	Ν
29	Parangiaio	Prehistoric (ethnohistoric traditions) and historic (European/ethnohistoric traditions)	? (Possibly, the second occupation was in the historic and Europeans visited the Island at this time)
30	Putatara	Prehistoric	Ν
31	Freshwater River	?	? (The site is recorded by a European but no details given)

Table A6.1 (cont.): Early Europeans at visits to identified pa sites in Murihiku (see Appendix Two for sources)