# Pegasus tin

Archaeological survey of the Pegasus tin field, southern Stewart Island/Rakiura

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#### Cover photograph

Large expanse of tin working tailings at Site D49/49, looking towards the southeast in the eastern set of workings.

Photo: P. Petchey.

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## **Preface**

All of the historic sites described in this report are legally protected, and should not be disturbed in any way. Under the National Parks Act (1980) and Historic Places Act (1993) it is an offence to disturb any historic or archaeological site, or remove any item from any site. This includes bottles and other small portable artefacts.

The mining sites in the Pegasus tin field are extremely well preserved, and care must be taken even when walking across areas of tailings. Do not dislodge or move loose stones. Leave all sites exactly as they were found.

Anyone visiting the Pegasus tin field should be aware of a number of safety issues. Southern Stewart Island/Rakiura is remote and the weather can be highly changeable, but can also be bad for extended periods of time. Many areas—in particular the crest of the Tin Range—are very exposed. Bad weather can also limit visibility, and tracks in the area are not always clearly marked. Anyone venturing off these existing tracks should be extremely cautious. The bush is thick, and difficult to navigate through. Streams can rise rapidly in wet weather, and the dark (tannin-stained) water makes it difficult to judge the depth of pools or streams, and can hide underwater snags.

Anyone walking in this area should be properly equipped, with wet- and cold-weather clothing, adequate food, up-to-date maps, and should consider carrying a personal locator beacon. It should be noted that maps older than the 2000 edition of NZMS 260 D49 Mt Allen are no longer accurate. In particular, any buildings shown in the area of the north arm of Port Pegasus no longer exist. There is no shelter anywhere in the Pegasus tin field, and cellphones do not operate in the area.

In addition, scattered around the tin field are dozens of small prospect pits. They typically measure 2 ft by 4 ft (0.6 m by 1.2 m), can be up to 5 ft (1.5 m) deep, are often hard to see, and are sometimes filled with water. During the survey, several drowned kiwi were seen in such pits. Some areas of tin workings also have deep pits, tail races and steep drops off worked faces.

The Robertson River catchment on the east side of the Tin Range is a restricted area, and entry is by permit only. Contact the Department of Conservation, Southern Islands Area Office, Invercargill, for more information.

## Pegasus tin

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#### ABSTRACT

Tin was discovered in Pegasus Creek on the western flanks of the Tin Range in southern Stewart Island/Rakiura, New Zealand in 1888. A party of gold prospectors found that heavy black sand was interfering with gold recovery, and this sand was identified as stream tin (tin ore, cassiterite). A rush to the locality ensued, with 144 mining claims registered by 1890. A store, hotel and post office were established on the shore of the northern inlet of Port Pegasus. Unfortunately, the tin deposits were nowhere near as rich as had been anticipated, and by the end of 1890 the rush was over. Some desultory prospecting continued, but several mining authorities that inspected the field were quite candid about its lack of promise. However, a rise in tin prices in the early twentieth century renewed interest in the area, and a company was formed to mine tin from the Tin Range. Over £9000 was spent between 1912 and 1917, but again it was a failure. Much of the mining equipment was abandoned on site, where it remains today. No accurate returns were published, but it has been estimated that less than one ton of cassiterite was ever recovered from the area. An archaeological survey of the Pegasus tin field was carried out in 2001 and 2002 to record the surviving physical evidence of these two periods of tin mining. This survey found extensive evidence of alluvial tin mining scattered over an area of 36 km<sup>2</sup>. It appears that standard alluvial mining methods, as used widely in the Central Otago goldfields, were applied to tin mining. Tin ore, like gold, has a high specific gravity, and the same alluvial mining technology can be used to recover both minerals. At the time of the survey, many of the mining sites had become overgrown, but the lack of large animals and human visitation in this area has meant that the archaeological features have remained in excellent condition. What was recorded during the survey is possibly New Zealand's best preserved alluvial mining field, and the only tin mining field. The area has extremely high historical, interpretative and scientific values which, until now, have been largely unknown.

Key words: Historic archaeology, industrial archaeology, mining, alluvial mining, tin, cassiterite, sluicing, tin rush, New Zealand, Stewart Island/Rakiura, Port Pegasus/Pikihatiti, Pegasus Creek, Pegasus Survey District, Tin Range, history, nineteenth century.

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## 1. Introduction

New Zealand's only tin rush occurred in southern Stewart Island/Rakiura (Fig. 1) in 1888, when an assay revealed that heavy black sand being found by gold prospectors in Pegasus Creek on the western flank of the Tin Range (then known as the 'Remarkables') was tin ore. The resultant rush to the area was spectacularly unsuccessful, and by 1890 the boom was over. A second attempt to mine tin in the area between 1912 and 1917 was similarly ill-fated, despite the expenditure of thousands of pounds on a wharf, tramway and mining equipment. The area is now deserted and reverting to scrub and forest, and is part of the new Rakiura National Park.

Although the story of the tin mining has been told a number of times in various publications (e.g. Howard 1940; Walrond 1999), there has been little information available about the archaeologial evidence of the tin field itself. No one knew

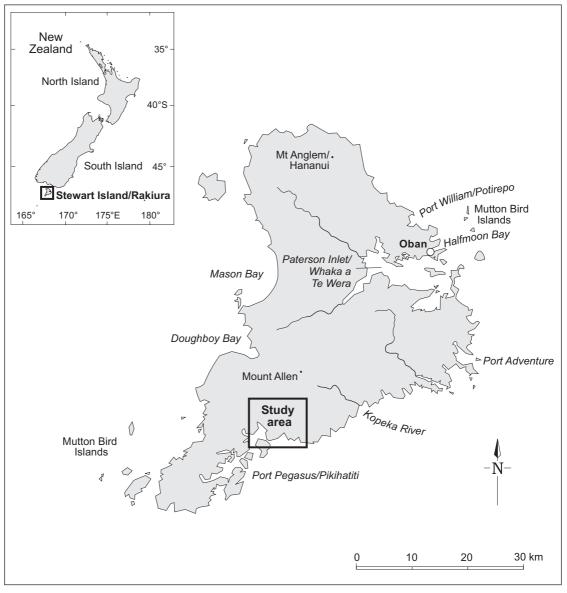


Figure 1. Stewart Island/Rakiura, showing location of main study area. Map by C. Edkins, DOC, Wellington.

the nature, extent or condition of the old tin workings, and the Department of Conservation (DOC) commissioned an archaeological survey to obtain some of this information. The survey was intended to locate and accurately record as much of the archaeological detail of the tin field as possible, the results of which are presented in this report.

What was found was a very overgrown but particularly well-preserved alluvial mining field. The technology employed was typical alluvial gold-mining technology as used in many of the New Zealand gold fields in the late nineteenth century, applied in this instance to a tin field. The isolation of the Pegasus tin field and absence of other factors such as reworking by later mining and stock trampling has preserved the evidence of this mining technology in a condition unrivalled on mainland New Zealand.

This report describes New Zealand's only historic tin mining field which is also, possibly, the best-preserved historic alluvial mining field in New Zealand.

### 2. Tin

Tin ore would seem, at first, to be an unlikely mineral for a mining rush, particularly in the context of southern New Zealand, with its famous gold rushes of the 1860s. Tin ore is a dull dark grey mineral, without the obvious immediate attraction of gold. However, tin has long been a valuable metal, and continues to be so today.

Tin (symbol Sn) is a metallic element that occurs most often as its oxide—tinstone or cassiterite (SnO<sub>2</sub>). Cassiterite has a high specific gravity, and can be sorted by washing, where water is used to wash away lighter material (sand, soil, etc.), leaving the heavier ore. This is the same technique used for alluvial gold mining, so was well understood by New Zealand miners of the 1880s.

Tin is valuable because it is easily smelted, is soft and easily worked, and readily forms alloys with other metals. Historically, two of the most important of these alloys have been bronze (tin and copper) and pewter (tin and lead). During the twentieth century, the largest consumption of tin was in the manufacture of tinplate. Tin is resistant to attack by most organic acids in moderate concentrations, making it attractive for use in contact with foodstuffs (as in 'tins' or 'tin cans' for the common tin-plated steel cans). This use has been declining over the past three decades because of the increasing use of aluminium and plastics. The largest use of tin (32% of world consumption) is now in the production of solder and other fusible alloys, demand being fuelled by legislation in Europe, Japan and China requiring a move to lead-free solder<sup>1</sup>. Tin and tin compounds are also used in glass manufacture, in toothpaste, as catalysts in industrial processes, and in the manufacture of polyvinyl chloride (PVC) (Christie & Braithwaite 1996a: 11).

The earliest use of tin was in the production of bronze (copper-tin alloy) in Egypt and Mesopotamia about 5000 years ago. Tin became a major trade item, and as supplies in Asia Minor and Persia became exhausted, it was sourced from mines in England, France, Germany and Spain (Christie & Braithwaite 1996a: 11).

<sup>&</sup>lt;sup>1</sup> See www.roskill.com/reports/tin; www.mcxindia.com/tin\_res.aspx (viewed 22 May 2006.)

The county of Cornwall in England was one of the world's main sources of tin for many centuries; deposits being discovered there before the Roman invasion of Britain (Herring & Rose 2001: 47). The earliest tin mining concentrated on shallow alluvial and eluvial deposits, using running water to wash away the ground; with the resultant workings being termed 'streamworks.' By the fourteenth and fifteenth centuries, much of the easily-won tin had been mined, and the miners' attention turned to the lodes themselves (Herring & Rose 2001: 56). The hardrock mining that ensued created today's stereotypical Cornish mining landscape, dotted with the chimneys and pumphouses of underground tin mines. However, by the beginning of the twentieth century, the lode deposits were also beginning to run out. Some Cornish tin miners migrated to the Otago goldfields, where they were known for their underground mining expertise.

Today, most of the world's tin supply comes from alluvial deposits of cassiterite in Southeast Asia. China is the largest single producer of tin (115 000 t), with Indonesia (80 000 t), Peru (42 000 t), Bolivia (17 000 t) and Brazil (12 300 t) also supplying large quantities<sup>2</sup>. In New Zealand, tin deposits have been recorded in Westland and southern Stewart Island/Rakiura, but none have been economically mined (Christie & Braithwaite 1996a: 12–13). The latter area is the subject of this report.

# 3. Geological and geographical setting of Pegasus tin field

Stewart Island/Rakiura is the southern-most of New Zealand's three main islands, lying 24 km south of the South Island, between latitudes 46°S and 48°S (Fig. 1). The island has an area of 1720 km², much of which is included in the recently created Rakiura National Park.

There is only one permanent settlement on Stewart Island/Rakiura, at Oban in Halfmoon Bay, in the northeast of the island. Small cribs and huts are present in other areas, including those used annually by muttonbirders. The population of the island is generally about 400, although it increases significantly in the summer months. A limited road network exists only around Oban, and some of the rest of the island is accessible by walking tracks, or by boat or air, the latter restricted to places where landing sites are available for helicopters or fixed-wing aeroplanes. Much of the island, particularly south of the Freshwater River, is untracked.

The topography of much of Stewart Island/Rakiura is dominated by a gently east-sloping plateau that rises from about 20 m above sea level in the east to between 400 m and 500 m in the middle of the island (Turnbull & Allibone 2003: 12). The highest peak is Mt Anglem in the north (980 m). The Pegasus tin field is located on the flanks of the southern end of the Tin Range, adjacent to the north arm of Port Pegasus. The highest point on the Tin Range is Mt Allen (716 m), while

<sup>&</sup>lt;sup>2</sup> 2005 production data (in tonnes) from <u>Minerals.usgs.gov/minerals/pubs/commodity/tin/tin\_mcs06.pdf</u> (viewed 22 May 2006).

Trig D, at the southern end of the range, reaches 503 m. The Tin Range is drained to the west by Pegasus Creek and its tributaries, and to the east by the Robertson River and its tributaries.

The coastline of Stewart Island/Rakiura is generally craggy and rocky, although Mason Bay on the west coast (Fig. 1) has a c. 11-km-long sandy beach. There are several large natural harbours on the east coast, including Port William, Paterson Inlet, Port Adventure and Port Pegasus. These harbours are drowned valley systems, and so lack the steep cliffs that are typical of the more exposed open coast.

The vegetation across most of Stewart Island/Rakiura is forest and scrub, with some very boggy areas in valleys and low-lying areas. The transition from forest to sub-alpine scrub occurs at very low altitudes because of the harsh environment, and on the southern Tin Range the bushline is at 440 m. Most of Stewart Island/Rakiura has relatively unmodified vegetation, with stands of rimu (*Dacrydium cupressinum*), kamahi (*Weinmannia racemosa*) and southern rata (*Metrosideros umbellata*) forest at low altitudes. However, much of the Pegasus tin field was cleared by fires lit by the tin miners in 1888/89 to improve access, and this area is now largely covered by regenerating scrub, including manuka (*Leptospermum scoparium*) and leatherwood (*Olearia colensoi*).

Approximately 90% of the rocks underlying Stewart Island/Rakiura are plutonic (igneous rock formed at great depth). In the southern part of the island, recent geological mapping has identified and named the Knob Pluton. This underlies most of the southern Tin Range (summarised by Turnbull & Allibone 2003: 19, 72). The pluton consists mainly of medium- to coarse-grained biotite-muscovite granite. The crest of the Tin Range consists of a much older, highly metamorphosed and folded roof pendant of Pegasus Group biotite-muscovite schist containing bands of quartzite and calcareous schists. These are remnants of the rocks that the pluton intruded into as it formed. Williams (1965: 200) described the tin mineralisation as consisting of greyish quartzose griesen with topaz, biotite and gahnite, cut by branching veins a few centimetres thick of quartz, biotite, topaz, manganiferous garnet, wolframite (tunsten ore), cassiterite (tin ore) and gahnite. After he visited the Pegasus tin field, McKay (1890: 83) reported that the cassiterite-rich quartz vein was only about 1 ft (300 mm) thick at the southern end of the range, and not more than 7 in (180 mm) thick further north. He also commented that wolframite was considerably more abundant than cassiterite.

The eluvial and alluvial cassiterite deposits found by the tin miners were the result of the gradual erosion of the greisen rocks over many millennia, and the natural sorting of the heavy tin ore in the streams and gravels arising from the Tin Range. These placer deposits were mapped by G.J. Williams in 1933 (Williams 1933: figure 2; 1965: figure 13-7) (Fig. 2). The apparently rich cassiterite deposits were the result of gradual accumulation over a long period rather than the existence of a fabulously rich 'mother-lode'. This fact was not realised by the tin miners who rushed the area in 1888. Even the geologist Alexander McKay thought that richer deposits of cassiterite must be present, commenting that 'it is hardly conceivable that the narrow and comparatively poor outcrops in the southern end of the Tin Range can have yielded the whole of the stream-tin that has found its way into the creek-valleys, or yet rests on the fringing table-lands south and south-west of the Tin Range' (McKay 1890: 85). However, when Williams & Mackie (1959) sampled the Pegasus tin field in 1949, they found it generally poor (in both tin and gold),

and commented that 'the ground would provide a bare living for a limited time to a small operation'. Their assessment of the Kopeka River workings was even less encouraging: 'none of the values from old pits or workings ... approach the economic limit in either gold or cassiterite' (Williams & Mackie 1959: 5).

Unfortunately for the aspirations of the tin miners, Williams and Mackie were right.

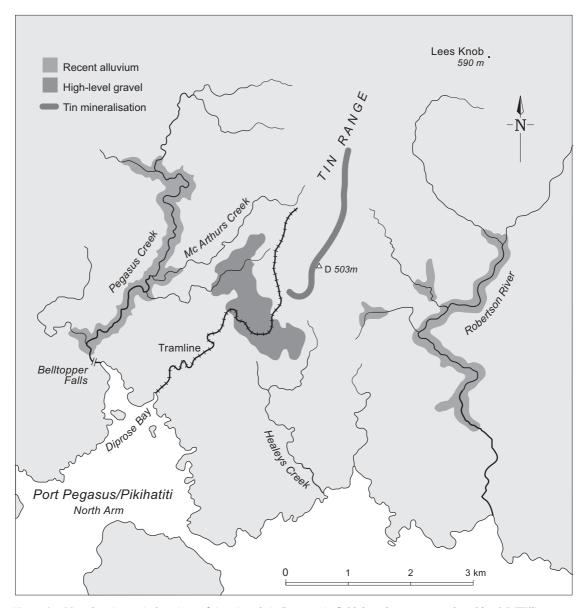


Figure 2. Map showing main locations of tin minerals in Pegasus tin field; based on maps produced by G.J. Williams. *Map by C. Edkins, DOC, Wellington.* 

## 4. Place names

The use of place names associated with the tin mining at Port Pegasus has always been subject to both formal change and informal variation. This section attempts to outline some of these changes.

Port Pegasus is a large harbour on the east coast of Stewart Island/Rakiura, and was named after Captains S. Chase's vessel *Pegasus*. The first European to enter Port Pegasus was probably the American O.F. Smith of the *Independence*, who submitted a map of what was yet to become Stewart Island to Governor King of New South Wales in 1806 (Howard 1940:19-22). Smith named Port Pegasus as 'Port Honduras', and also discovered Foveaux Straight (which he named 'Smiths Straits') (Howard 1940: 19). The first detailed survey of Port Pegasus was made in 1809 by William Stewart (after whom Stewart Island is named), first officer of the sealer *Pegasus* (after which Port Pegasus is named) (Howard 1940: 28-29). Stewart named it 'Southern Port', but 'Port Pegasus' was being used on maps by 1820 (Howard 1940: 32). A number of plans from the late nineteenth century (e.g. S.O. 2610) call it 'Pegasus Harbour'. Most recently, the official name has been changed to Port Pegasus/Pikihatiti by the Ngai Tahu Claims Settlement Act 1998 (section 269, schedule 96).

The Post Office that was established on the northeast shore of the north arm of Port Pegasus in 1889 to service the tin miners was officially named 'Port Pegasus' (N.Z. Gazette 1889: 379), thereby giving an official name to the small settlement that otherwise had no formal existence (other than a licence for the hotel there).

The mapping of New Zealand involved initial triangulation surveys to accurately establish survey trig stations, around which survey districts were drawn up, which were further divided into blocks. The standard description of a piece of land for most of modern history has been section (or run) number/block number/survey district. The survey of the tin claims was undertaken in 1889, and most of the tin workings are within Blocks 2, 3, 7 and 8, Pegasus Survey District. The Pegasus Survey District occupies much of the central portion of Stewart Island/Rakiura. As a result, there are many contemporary references to tin mining in the 'Pegasus District' (e.g. Williams 1934: fig. 1).

The range of hills from which the tin ore originated was originally named 'The Remarkables', but the name was officially changed to the 'Tin Range' in 1966 (W. Shaw, N.Z. Geographic Board, pers. comm.; N.Z. Gazette 1966: 22) to avoid confusion with the range of the same name near Queenstown. However, the two names were both used concurrently for many years. 'Tin Range' was already in common use by 1889 (e.g. see McKay 1890: 83), while 'Remarkables' was still used in 1912 (e.g. see The Stewart Island Tin and Wolfram Lodes Limited 1912).

More recently, during the period of operation of the Kakapo Project (from 1977 to the late 1990s, see Section 5.4), a mixture of old formal names and new informal names came into common use amongst the (predominantly but not exclusively) male workforce. Examples are the 'Buttocks' (two large rounded rock outcrops at the southern end of the Tin Range, see Section 7.4), and the 'Nipples' (two

distinctive rocks on a distant skyline to the east of Scollays Flat). This geographic lexicon was itself subject to change (A. Cox, pers. comm.), and the names given in this report only represent a few individuals' memories of the period.

Therefore, several names and many variations have been used for the tin mining area, with 'Port Pegasus', 'Pegasus', 'Pegasus District' and 'Tin Range' all being common ('at Pegasus' was particularly common), and all having historic precedents. This report generally uses 'Pegasus tin field' when referring to the area that was worked for tin during the tin rush. This term was used in 1912, when Prof. D.B. Waters reported on the 'Pegasus Tin Fields, Stewart Island' for The Stewart Island Tin and Wolfram Lodes Limited (1912 prospectus). Where other names are used (such as 'Tin Range'), it is in reference to specific features or areas within the tin field.

It is mapping convention that apostrophes are not used in names. Thus, all possessive names shown on the maps are without apostrophes and this usage has been continued in the text (except in quotes). Hence, for example, Healeys Creek rather than Healey's Creek.

# 5. History of tin mining in the Pegasus tin field

#### 5.1 THE TIN RUSH: 1888-1893

The history of the Pegasus tin rush has been recounted in a number of reports, such as those of Hall-Jones (1994), Howard (1940) and Walrond (1999). It is not intended to offer here anything more than a brief overview of the general background to the tin rush, to place the archaeological evidence in context. However, a word of warning is required. As Howard (1940: 295) clearly stated, but which is otherwise often overlooked, 'the story which follows is given not as a record of fact but as a local tradition, which loses nothing when compared with the best examples of mining fiction'. He was referring to the specific case of the start of the rush after the identification of stream tin in Pegasus Creek, but the warning can apply to much of the available information about the tin field. Many of the contemporary reports of the field exaggerated its worth considerably, and several unconfirmed reports exist of large finds of both tin and gold. Even primary historical sources can be misleading; the reader has been warned.

Gold was discovered in Pegasus Creek in 1882 by the prospector Louis Longuet, after whom Longuet Creek is named. Although Longuet did not think the find profitable, it did attract other parties to Pegasus Creek over the next few years. One group, comprising G. Swain, J.R. Thomson, A.E. Livingstone and others, worked upstream from what was soon to be named Belltopper Falls on Pegasus Creek in late 1888. They were hampered, as Longuet had been, by a heavy black sand in the wash which interfered with gold recovery. They sent a sample of this sand to Professor J.G. Black at Otago University, who identified it as stream tin (cassiterite, tin ore). Black left immediately for Pegasus Creek, chartering Robert Scollay's cutter *Enterprise* to take him south (Walrond 1999: 90). However, his hurried preparations were observed in Bluff, and news soon began to leak out about a new mining field.

Black returned to Halfmoon Bay on Stewart Island/Rakiura with a load of samples from Pegasus Creek that were smelted at Scollay's forge. He then carried on to Invercargill, before setting out again intending to return to Pegasus Creek, but rough seas forced the steamer *Awarua* back, and the party instead set out on a five-day overland march back to the tin field. Soon after they arrived, a boat carrying the first of the rival prospectors pulled in, and New Zealand's first and only tin rush had begun.

The rush was concentrated on the streams that drained the southern Tin Range. This included part of the Pegasus Creek catchment on the west side of the range, and part of the Robertson River catchment on the east side (see Figs 2 and 3). As part of the 'local tradition' that he recounted, Howard (1940: 295–296) describes how the tin miners arrived at Scollays Flat near the southeastern tip of the Tin Range, having walked up the Robertson River, and there won good returns. Estimates of the number of men actually on the field varied enormously, and there appears to be little by way of hard information. A reasonable estimate might be several hundred at the peak of the rush.

By the end of December 1888, at least forty-one prospecting licences had been issued, and nine leases, each of sixty acres, had been granted (Howard 1940: 297). The claims extended from the head of the north arm of Port Pegasus up to the crest of the Tin Range, and then to Lees Knob (see Figs 2 and 3). There were also some claims in the Kopeka River catchment, to the east. By January 1889, at least seventy-one mining licences had been issued (Hall-Jones 1994: 156). Essential for the orderly management of the new mining field was a formal survey of the mining claims. In the rugged, scrubby and muddy environment of the Pegasus tin field this was no mean undertaking, and it took T.S. Miller, H. Dundas and J. Hay nine months from January to September in 1889 to complete the survey<sup>3</sup>. The resultant map showed that about 144 applications had been made to that date (Fig. 3). The claims were concentrated along the main water courses: Pegasus, Healeys, Maori and Smiths Creeks and the Robertson River; and around the southern end and crest of the Tin Range. The proposed line of a tramway to the Tin Range was surveyed by G.G. Simpson, and was shown on the overall claims map, but it was not actually built until 1912. A separate survey of the Kopeka River claims was made by James Blakie (Spence 1890: 19).

Numerous comments were made in reports on the tin mining about the difficulty of communication in the area due to the scrub, forest and mud. The solution, although not documented, was obvious: burn the scrub off. Large areas of the Pegasus Creek and Robertson River catchments were burnt. Even at the time of the archaeological survey (2002) the boundaries of the burnt areas could clearly be seen, and charcoal-flecked stumps could still be found amongst the regenerating vegetation.

In January 1889, a sightseeing trip to the new tin fields was organised by entrepreneur William Todd, who took a group of about 50 people to Port Pegasus on board the S.S. *Invercargill*. Todd characteristically wore a formal belltopper hat, and this became dislodged by the branches of a tree at the waterfall at the mouth of Pegasus Creek, and the name 'Belltopper Falls' immediately stuck (Hall-Jones 1994: 156; Walrond 1999: 93).

<sup>3</sup> The map that was produced was used to define the search area during the archaeological survey of the tin field.



Figure 3. Map of tin claims, Pegasus District, 1890. Map held at Rakiura Museum.

To serve the new mining community, Louis Rodgers established a store and Post Office at the northern arm of Port Pegasus in 1889 (NZ Gazette 1889: 379), taking ten tons of stores in with him on Todd's sightseeing trip. To these enterprises he soon added a hotel. Two different accounts of the hotel establishment are told: Howard (1940: 300) stated that the original liquor licence had been granted to G. Prior, but before the new building was erected, Rodgers took over the business, which was opened in late July, 1889. Hall-Jones (1994: 157) stated that Rodgers had his hotel open at the same time, but only gained a liquor licence after being fined for trading without one.

However, despite the number of claims registered, there appears to have been a dearth of mining activity. Many of the claims were speculative, with no actual work being carried out by the holders. In many cases, the claims had been applied for without the applicants ever having seen the ground. The government geologist, Alexander McKay, and the Inspector of Mines, H.A. Gordon, both made comments to this end when they visited the field in 1889 and 1890 respectively (for example, see Gordon 1889: 79<sup>4</sup>). Some claims were being worked though, and Gordon described a number of these on the occasion of his visit (Gordon 1890: 94-96). Both ground sluicing and hydraulic sluicing were being used to mine the alluvial ground, while several attempts were being made to locate tin lodes in the Tin Range (still known as the 'Remarkables' at that time). One of the tunnelling parties included Professor Black, who was visited by Todd's sightseeing party in January 1889.

By late 1890 it was apparent that despite continuing optimism on the part of a few miners, the boom was over. Applications for new claims dropped to nothing, and many of the existing claims were abandoned (Spence 1890: 19). When H.A. Gordon visited the field in 1890, only about twenty men were working there. In addition, none of the claims that he inspected showed payable amounts of either tin or gold. He commented that 'a little tin is found almost anywhere, but it is widely distributed, and, in general, in narrow runs ... it would never give employment to a large population' (Gordon 1890: 94–96). The Post Office at Port Pegasus was closed in April 1891, with only a few men left working the claims. A minor revitalisation occurred in late 1892 when a report of three tons of tin and 80 ounces of gold being recovered from a claim on the eastern side of the Tin Range was announced, but never actually confirmed. The mining population rose again, and the Post Office was reopened in January 1893 but, inevitably, was closed again in August of the same year (Howard 1940: 302–303). The tin rush was well and truly over.

Rodgers' hotel and store was bought by Robert Fraser and Arthur Ford. They continued prospecting for tin in the hills, and when a fish-freezing station was established across the inlet from the old hotel, it gave them an additional source of income. They remained in residence until about 1914 (Howard 1940: 303).

Although the tin field was largely abandoned, it appears that there was a small amount of ongoing activity. While little of this is recorded, there is some evidence available. The Stewart Island Tin and Wolfram Lodes Limited, the mining company that reopened the Pegasus tin field in 1912 (see Section 5.2), had obtained a number of existing water race and dam licences which were dated 1904. There

<sup>&</sup>lt;sup>4</sup> Note that McKay's comments on his visit were published in Gordon's annual report on mining in the Appendices to the Journals of the House of Representatives (AJHR).

was also a small amount of activity in the Kopeka River field, as a geological field trip in 1949 found scraps of an 1898 newspaper in an old camp there (Williams & Mackie 1959: 2). However, the tin rush was effectively over. There is no record of how much tin was recovered, although Williams & Mackie (1959: 2) state that the Tucker Mining Company sent out 6 hundredweight of tin concentrates in 1889.

#### 5.2 THE TIN MINING COMPANY: 1912-1917

Despite the poor returns of the tin rush, and the sound words of advice from experts such as H.A. Gordon, 1912 saw a fresh attempt to open up tin mines in the Pegasus tin field. The value of tin had risen steeply since 1893, from £68 per ton to £400 per ton. Wolframite, which had formerly been worthless, had risen to £100 per ton, possibly because of the worsening world political situation, with tungsten increasingly being used in the production of toughened steel for armaments (Howard 1940: 304; The Stewart Island Tin and Wolfram Lodes Limited 1912). While these changed circumstances obviously did not increase the amount of either mineral present in the Pegasus tin field, they did focus people's attention on known deposits of these minerals—however limited they might be—and the lessons of twenty years earlier were easily ignored.

A new company—The Stewart Island Tin and Wolfram Lodes Limited—was formed in Dunedin, with the intention of acquiring and mining 223 acres of alluvial ground and 224 acres of lode ground. The company prospectus made the confident claim that 'prospecting has proved the presence of at least one immense lode, through the whole length and width of which assays have proved that tin exists' (The Stewart Island Tin and Wolfram Lodes Limited 1912).

The company's intention was to construct a base at Diprose Bay on the north arm of Port Pegasus, construct a tramway up into the western flank of the Tin Range (this had been surveyed but never built in the 1880s), and commence alluvial mining. The expectation was that this would then provide income to allow development of the lode claims.

Work commenced in February 1913, with the Diprose Bay base being established. A large wharf was built—43 feet long and 18 feet wide—connected to the shore by 2 chains of decked trestling. On shore, a two-roomed cottage with a large store, three huts and a blacksmith's shop were built, and work commenced on the tramway.

The tramway construction presented a number of problems, including half a mile of soft ground from the 2 mile 37 chain point, that required a log and rock bed to be constructed before the ballast was laid down. The formation up to the alluvial mining ground was 3 miles 32 chains long, but the tramway was continued up to the dam site in McArthurs Creek, a total distance of 4 miles 42 chains. Part of this upper section of tramway was laid on the same bench as the fluming from the dam to the intended workings. By December 1915, the tramway and fluming were complete, the pipes to the alluvial ground laid, and the dam was under construction (The Stewart Island Tin and Wolfram Lodes Limited, Directors' reports 1913–1916).

Mining commenced in 1916, but it was not a success. Over £9000 had been spent, but six months of mining in 1917 yielded only 2.5 hundredweight of tin and wolframite (tungsten) concentrates, worth some £12 (The Stewart Island Tin and Wolfram Lodes Limited, 1916; Walrond 1999: 103). As the results of the archaeological survey show, the company abandoned much of its plant on site, where it still lies rusting in the forest today. The company even left its pair of horses in the Pegasus tin field, one of them surviving in the Tin Range well into the 1930s (Hall-Jones 1994: 172; Walrond 1999: 98).

For all this effort by hundreds of men over a number of years, Williams (1965: 199) estimated that total production from the Pegasus tin field did not exceed one ton of cassiterite, taking into account both the earlier tin rush and later company working periods.

#### 5.3 WORK AFTER 1917

Some desultory prospecting work by a few individuals continued in the Pegasus tin field. During the 1920s and 1930s, a Dane—Carl Yunge—lived at the fishing base and combined fishing and tin prospecting, maintaining one of the old miners' huts on the track to the Tin Range<sup>5</sup> (Hall-Jones 1994: 172).

In 1933 the geologist G.J. Williams published the results of an investigation into the Pegasus tin field, and several of his photographs of the old tin workings have been used in subsequent publications (such as Howard 1940: facing p. 304).

The last tin miner was Ted Carrington. An ex-civil engineer for the city of Napier, Carrington was well known as an engineer and inventor, and is still well remembered on Steward Island. Hall-Jones (1994: 173–174) provided some information about him:

'Born in Arthurton in 1889 Edward Carrington ... moved to Stewart Island in 1937. Carrington made a number of trips to Port Pegasus with Bill Thomson, staying there for a few months at a time. He used to walk the Tin Range and in doing so he found an easier more direct route off the south-east that led down through Scollays Flat to Maori Bay. Carrington erected a storehouse at Maori Bay and Peter McKellar, as a lad, helped "Carrie" pack tinstone down to the storehouse where it was picked up by Bill Thomson in the *Ranui*. Using an old miner's hut (subsequently known as "Carrington's") at Scollay's Flat, "Carrie" did "a certain amount of surveying and laying down of levels at Smith's Creek, with the idea of making a diversion channel and harnessing water to work the alluvial bed of the deep hole of the creek. But he did very little actual mining work there." In 1942 Carl Yunge sold his Pegasus house to Carrington.'

Carrington appears to have done little mining after the 1940s, although he did accompany G.J. Williams and University of Otago students on a field trip into the area in 1949 (Williams & Mackie 1959). Ted Carrington died in Christchurch in 1985 at the age of 92, and with his death the Pegasus tin mining era came to an end. His house at the old fishing base and his two huts, one at Maori Bay and one inland, have all now collapsed, and the bush is again taking over.

More recently, however, the Pegasus tin field has played another significant role in New Zealand history.

<sup>5</sup> This is almost certainly the now-collapsed hut (D49/37) beside the Surveyors Track, adjacent to the 1912 sluicings.

#### 5.4 THE KAKAPO PROJECT

In 1977, a population of the endangered flightless parrot the kakapo (*Strigops babroptilus*) was found in south-eastern Stewart Island/Rakiura, particularly around the southern end of the Tin Range. Ironically, it appears that the regenerating bush on the land burnt-off by the tin miners had produced ideal kakapo habitat. A programme of study, and later bird removal to predator-free islands, was undertaken over the following fifteen years by the Wildlife Service and, later, the new Department of Conservation.

The Kakapo Project established a number of camp sites, beginning with a temporary camp in Healeys Creek. In about 1979, a permanent camp was set up at Scollays Flat. This was then replaced in the early 1980s by a purpose-built hut on the edge of the same flat (A. Cox, S. King, pers. comms). A track network was developed throughout the Pegasus Creek/Tin Range/Robertson River area, which allowed workers to move about relatively easily, and gave access to identified kakapo nesting and track and bowl sites. As this was the area of the earlier tin mining attempts, many of the old tin miners' tracks were reopened and reused.

At the same time, the existing tramping track network was modified slightly to take people away from the kakapo habitats. The Tin Range Track which ran along the crest of the range and then led down the old Surveyors Track (discussed further below) was redirected to incorporate the northern end of the old tramway (see also below), to reduce traffic on the southern tip of the range. Entry to the Robertson River catchment area was restricted to permit holders only.

Because of predation by cats, all of the known kakapo were removed from the area in the 1990s, and re-established on predator-free islands. The Scollays Flat hut was then dismantled. It is believed that no kakapo remain in the area, and no kakapo sign was seen during the archaeological survey.

The present archaeological study of the Pegasus tin field has benefited from the Kakapo Project in two main ways. Firstly, the track network developed during the project was able to be used. Secondly, many of the Kakapo Project workers built up a detailed knowledge of the area in their searches for the birds, and the assistance and advice from some of these individuals was invaluable in relocating areas of tin workings.

## 6. The archaeological survey

The archaeological survey of the Pegasus tin field was carried out during 2001 and 2002. Seven trips, each of a week to ten days duration, were made to the area with two people on each trip. Five trips were made to the west side of the Tin Range, with a base camp set up at the old Kakapo Project cat camp<sup>6</sup> site on the north arm of Port Pegasus. Two trips were then made to the east side of the range, with the base camp at Scollays Flat, near the old Kakapo Project hut site.

<sup>&</sup>lt;sup>6</sup> The old base for cat control operations, cats being a significant predator threat to kakapo.

Time in the field was fairly evenly split between extensive exploration, and the detailed recording of sites that were found (see below for description of survey techniques). The search techniques were based both on information provided by ex-Kakapo Project workers who had spent extensive periods of time in the area in the 1980s and 1990s, and on the areas defined by the original mining claim surveys of 1890 (Fig. 3).

Much of the area that was mined in the 1880s and 1890s had been burnt off by the miners, with some more recent fires reportedly set to maintain open spaces for deer shooting. As a result of this, most of the areas that are archaeologically interesting are covered with regenerating scrub and bush, which can be very difficult to negotiate. This has inevitably led to some sites being missed during the survey, as the dense vegetation meant that at times during the fieldwork it was quite possible to be only a matter of a few feet from a site and still not be able to see it. Some of the sites reported by Kakapo Project workers were only observed once, despite many trips having been made to the same general area. The visibility problems should be borne in mind by people reading this report—while the survey coverage is believed to be good and representative, it is not complete. More sites certainly exist.

The Kopeka River sites were not surveyed, as this small tin mining area lies some distance to the east of the main Pegasus tin field, and access is difficult. In 1949, a geological field trip to the Kopeka catchment encountered the remains of an old camp in which scraps of an 1898 newspaper were found (Williams & Mackie 1959: 2).

#### 6.1 SURVEY METHOD

Two main recording methods were used in this survey. The location of all sites was recorded using a hand-held GPS unit, while conventional tape and compass survey techniques were used to record the detail of these sites.

All GPS recordings were made with a hand-held Garmin 12 unit, which has proved very effective in earlier field recording of extensive archaeological features (Petchey 2001). The NZMS 260 D46 topographical map was enlarged to 1:25 000 and features were plotted onto it (Fig. 4). While the locations of features such as streams and tracks on topographical maps can be somewhat inaccurate, a field check with the GPS unit on Trig D was in exact agreement with its location on the topographical map. As well as recording discrete site locations, GPS surveying was also used to record extensive linear features such as the tramway, surveyors track, and the old Kakapo Project track network (discussed further below).

However, hand-held GPS readings always contain a degree of error, which can be significant in places where satellite reception is bad, such as in forested and bush areas (personal experience has shown errors up to 100 m in such conditions). Hand-held GPS survey is therefore not suitable for the fine-scale recording of sites, where conventional tape and compass mapping is most appropriate. The detailed tape and compass surveys of individual sites were plotted at a scale of 1:500, but have been reduced for reproduction in this report.

Aerial photographs of the area were examined, particularly the original 1951 series (Runs 1888 and 1889, flown 1 February 1951). However, although these are of excellent quality, they are generally at too large a scale to show fine ground

detail, and many of the areas of tin workings had already become overgrown by the 1950s. Some photographs were taken from a helicopter during the fieldwork, and information from them was used to enhance the tape and compass plans of some sites.

New Zealand Archaeological Association (NZAA) Site Record Numbers have been allocated to all the sites that were identified. These numbers are all based on the NZMS 260 D49 Mt Allen (2000 edition) map sheet. Grid references (G.R.) listed in following sections are given in six-digit format, defining a square 100 m  $\times$  100 m, which is the standard used in the NZAA system. Before the survey there were already several existing site records, from coastline surveys undertaken in the 1980s (Cave 1981; Williams 1982). These sites are listed below, with updates from the present survey given in parentheses:

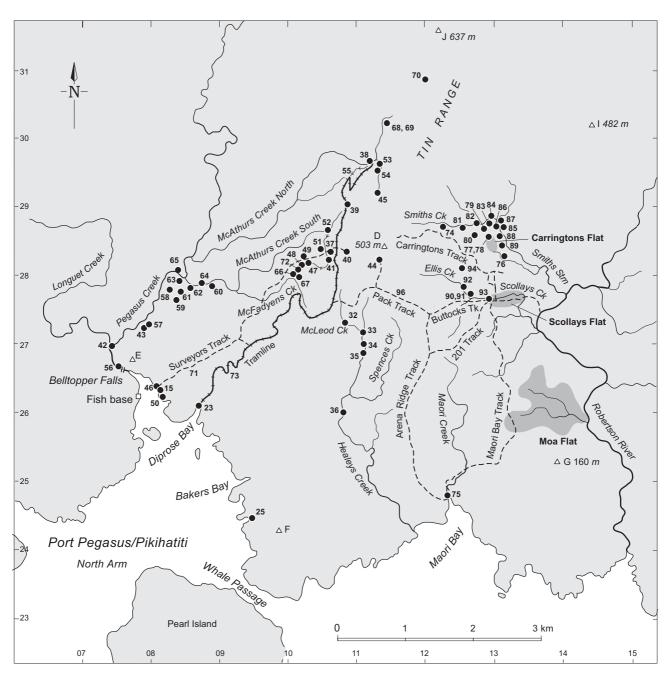


Figure 4. Pegasus tin field archeological survey—recorded archaeological sites. Note that recorded site numbers all have have a map prefix; in this case it is D49/. *Map by C. Edkins, DOC, Wellington.* 

- D49/15 Tin mining settlement (position corrected)
- D49/16 Tin mining, generic (no longer relevant, superseded)
- D49/23 Diprose Bay base (tramway given separate number)
- D49/25 Adit

#### 6.2 USE OF THE ORIGINAL MINING CLAIM SURVEYS

The original survey plans of the tin mining claims in the Pegasus District were used to guide the initial search. The overall field is shown in a single published map (Fig. 3), and by a series of unpublished survey office (S.O.) plans (held by Land Information New Zealand, see Section 18 for the plan numbers). Each mining claim was surveyed as a formal section, and is identified by its section and block numbers (all in the Pegasus Survey district).

The published plan of the mining claims was scaled to 1:50 000, and then the overall boundary of the claim area was traced onto the NZMS 260 D49 Mt Allen map. The overlay was not exact. As can be expected, given the nature of the terrain in the mining area, the positions of stream courses marked on the original maps are not always accurate. However, in general, a reasonable match between the historic and modern maps was made.

Correlation of the original claim holders and the present archaeological evidence was made during the analysis stage by two methods. The Rakiura Museum holds a typewritten list matching names to application numbers (which are shown on Fig. 3 as well as section numbers). This list is reproduced in Appendix 1. To check its accuracy, the individual S.O. plans and some of the original surveyors' notebooks<sup>7</sup> (Fieldbooks 197 and 194) were consulted and, where names were given, they showed an exact agreement with the typewritten list, thus allowing its use with some confidence.

The correlation between name and surveyed claim was then used to associate claim holder with archaeological evidence of tin mining. While not necessarily proving who was responsible for a particular set of workings, it does allow some informed speculation about the individuals concerned. It is interesting to note that one of the largest single areas of workings recorded—D49/93 on the edge of Scollays Flat—was not in a claim area. Similarly, the workings and large hut sites (D49/68 and 69) high on the western flank of the Tin Range were in an area of Crown Land. It is therefore clear that what actually occurred on the ground was not necessarily determined by legal claim boundaries.

In the archaeological descriptions below, Section and Block numbers are given, together with the original Licence Application number for that claim.

#### 6.3 THE FIELD EVIDENCE

As stated above, the area that was searched for archaeological remains was largely defined by the area of the mining claims surveyed in 1889. The 1912 mining company took over a number of these claims. So, with the exception of the Diprose Bay base, the original 1889 survey was applicable to both periods of mining. Figure 4 shows the locations of the sites recorded during the survey and the layout of the track network.

<sup>&</sup>lt;sup>7</sup> These fieldbooks are now held by the Dunedin office of LINZ. However, not all of the relevant fieldbooks were located.

The field evidence discussed below is grouped geographically. The overall track network is discussed first, as this provides the link between all of the surveyed areas. Both the original tin miners' tracks and the later Kakapo Project tracks are addressed. The Pegasus Creek sites are described next, and then the remainder of the sites on the western side of the Tin Range, the Healeys Creek sites and, finally, the eastern (Scollays Flat, Robertson River, etc.) sites. Wherever it is possible to associate names or events with discrete sets of workings, this is done together with the archaeological descriptions.

Each archaeological site that was recorded during the survey was given a New Zealand Archaeological Association Site Record Number (NZAA Site No.). These numbers are given in the following site descriptions, together with a grid reference (to 100 m accuracy), with the descriptions of the sites. The tape and compass plans of each site accompany the site descriptions. A complete list of sites is provided in Appendix 2.

## 7. The track network

Many of the tracks in the Pegasus tin field were established by the tin miners and are therefore historic in their own right. The tracks as they existed in 1890 are shown on S.O. 2610 held by Land Information New Zealand (LINZ). The main early track that still exists is the Surveyors Track that climbs up the western flank of the Tin Range (see Fig. 4). Of the other tracks shown on this early plan, none now exist, although the line of one, dropping east from Trig D, was still visible in the 1951 aerial photographs (Run 1888/19). The old tracks reused by the Kakapo Project were either cut after S.O. 2610 was drawn, or were missed from that survey.

Most of the tracks that were used during the archaeological survey had last been in use during the Kakapo Project period, when researchers, kakapo trackers and predator control teams had been active throughout the area. After a decade of neglect, many of them had become overgrown and hard to follow. Several tracks are being kept open for recreational use, such as parts of the old Diprose Bay tramway and the Surveyors Track.

The tracks that were followed were plotted using a hand-held GPS, and their routes are shown in Fig. 4. The positions of tracks shown on NZMS 260 D49 Mt Allen (2000 edition) are far from accurate.

#### 7.1 THE SURVEYORS TRACK

NZAA Site No. D49/71

Grid Reference (G.R.) 083 265 (point on lower end of track)

The Surveyors Track was cut in 1888-89 to provide access to the tin field so that the mining claims could be surveyed, a job that took T.S. Miller, H. Dundas and J. Hay nine months to carry out. The very straight lines taken by the track, particularly in the lower sections, strongly suggest the input of the surveyors, but

its route was quite possibly based on an informal track cut by the first miners. The track remains in use today as a tramping track, comprising the southern end of the Tin Range Track. It runs from the hotel site in the north arm of Port Pegasus to the tops of the Tin Range. It meets the Tramway (D49/73, Section 7.2 below) about 1 km west of Trig D, and originally continued straight up the hill towards the Trig. A surveyors' camp which was established in this upper section was relocated during the survey (see below, D49/40). With the discovery of kakapo in the area, the top end of the Surveyors Track was closed, and trampers directed along the tramway to reach the tops of the Tin Range further north. This has led to the upper section of the Surveyors Track becoming overgrown, and it could not be followed above the old camp site.

The Surveyors Track is marked on the NZMS 260 D46 topographical map, but the track was resurveyed using hand-held GPS, and the resulting plot is shown on Fig. 4. The track follows a reasonably even gradient apart from one short steep section. It passes close by several areas of alluvial tin mining and a large water storage reservoir.

In some places small deviations from the original track have developed, probably to avoid sections that had become boggy. As much of the track appears to follow straight lines, a return to its original path—wherever possible—is to be desired. Some cutting of drains may be required to allow wet areas to drain properly.

#### 7.2 TRAMWAY

NZAA Site No. D49/73

G.R. 087 261 (point on lower end of tramway)

The Diprose Bay Tramway was constructed between 1912 and 1915 by the Stewart Island Tin and Wolfram Lodes Limited, but the original survey (of at least the lower end) dates from the tin rush period of mining in the late 1880s. The surviving plans of the tramway (listed in Section 17) are not dated, but are almost certainly from the earlier period.

The tramway is also shown on the NZMS 260 D49 topographical map, but the GPS survey showed that the map is inaccurate. When plotted out, the GPS survey showed a close correlation with the contemporary surveyed plans of the tramway. It runs from Diprose Bay up the western flank of the Tin Range, terminating 1 km north of Trig D (see Fig. 4)

A section of the lower tramway (approx. 1-km long) has been cleared by DOC using volunteer labour. The work has involved the removal of mud and leaf litter overburden and the re-establishment of drainage and water tables. This has eliminated boggy areas, and reduced erosion of the track caused by water running down ruts made by walkers. A further 1-km section has had the vegetation removed, but has yet to have drainage re-established. A middle section of the tramway is overgrown and virtually impassable. Most of this section was followed in order to complete the survey, but it is not currently a viable walking route. The upper section of the tramway is in use as part of the Tin Range Track and, while generally sound, is in need of work on its drainage to avoid continued erosion.

Lineside features such as large excavations into the bank (borrow pits?) were recorded, together with several possible building sites (see D49/39 below). Of particular interest is the zig-zag at the northern end of the tramway, constructed to gain altitude to cross a saddle. The fluming to the mining company's workings also crossed this saddle, and shared the tramway bench from the bottom of this zig-zag to the top of the pipeline to the workings.

Numerous timber sleepers remain in situ along the tramway, but most rails have been lifted. Of interest is the fact that the lower section of the tramway appears to have been built with iron rails, but the upper section was constructed with wooden rails, some of which are still in place. The measured gauge was 2 ft 3 in. Ballasting between the sleepers appears to have been carefully placed, no doubt to allow the mining company's two horses to easily walk along the line, as they were the only motive power on the tramway. The steepest gradient was 1 in 11, although it was generally between 1 in 15 and 1 in 18 in the hill sections, with some flat sections (based on the original surveys, S.O. 2633, 2634, 2635).

#### 7.2.1 Terrace beside tramway

NZAA Site No. D49/39

G.R. 108 290

This site is a  $4.5 \text{ m} \times 3.6 \text{ m}$  terrace cut into the bank immediately above the tramway. Sitting on it are two large timber beams, each  $12 \text{ in} \times 4 \text{ in}$  (in section) and 8 ft long. One has a length of angle iron attached to one corner. The purpose of the beams is unknown, but they were possibly related to tramway operations.

#### 7.3 PACKHORSE TRACK

NZAA Site No. D49/96

G.R. 106 276

The Packhorse Track (also known as the Pack Track) was an old track reopened and named for the Kakapo Project. It leads from the tramway across the southern face of the Tin Range, below Trig D, crossing the headwaters of Healeys Creek. A side track leads off the Pack Track to the north to meet Black's adit (site D49/44) and Trig D.

The main track continues to a three-way intersection with the Buttocks Track and the Arena Ridge Track.

It is not certain when the track was cut. It is clearly visible on 1951 aerial photographs (Run 1888/18), suggesting that it was being used by Ted Carrington during the 1940s, but it is not shown on S.O. 2610 which dates to 1890. The routes between the Pegasus Creek and Robertson River catchments shown on S.O. 2610 either go over the top of the range, or through the low-altitude forest and scrub of the Healeys Creek catchment.

The Packhorse track was the main east-west link for the Kakapo Project workers in the 1980s and early 1990s. It is still passable, but is becoming overgrown in sections. It is still the best way to travel between the Pegasus Creek and Robertson River catchments.

#### 7.4 BUTTOCKS TRACK

The Buttocks Track (Fig. 4) was named by Kakapo Project workers. The name arises from a pair of large rounded rocks on the skyline at the top of the track. It is the eastern continuation of the Packhorse Track, which drops down into Scollays Flat. It is just visible in the 1951 aerial photographs (1888/19 and 20). It emerges onto Scollays Flat beside extensive tin workings at site D49/93.

#### 7.5 CARRINGTONS TRACK

This track leads down the eastern flank of the Tin Range from a point about 500 m north of Trig D (Fig. 4). It drops down onto West and East Bench Hills (named during the Kakapo Project), and then down onto Scollays Flat. There are numerous track intersections at its lower end and on Scollays Flat, reflecting the network of tracks that were used during the searches for kakapo.

There is little information about the history of this track, although comments by Hall-Jones (1994: 173) that Ted Carrington 'found an easier more direct route off the south-east end (of the Tin Range) that led down through Scollays Flat ...' suggest that Ted Carrington established this track.

#### 7.6 ARENA RIDGE TRACK

The Arena Ridge Track runs south along Arena Ridge from the Buttocks on the Packhorse Track, to terminate above Maori Bay (Fig. 4). The track was developed by the Kakapo Project workers, although it is likely that it evolved over time, being cut and marked as necessary, rather than formally cut at any one time.

Arena Ridge was so-named because of the large numbers of male Kakapo track and bowl systems that were found there; such a concentration of display areas being termed an 'arena' (A. Cox, pers. comm.). Although Arena is not the formal name of the ridge (it is shown as Te Ara Kake a Haereroa on the current maps), it is the name in common usage.

#### 7.7 201 TRACK

This track linked the Arena Ridge Track with the Scollays Flat Kakapo Project hut (Fig. 4). It was cut for the Kakapo Project, and is still reasonably passable, if one knows where to find it.

#### 7.8 MAORI BAY TRACK

The Maori Bay track links Scollays Flat and Maori Bay (Fig. 4), where there is a boat landing (only usable in calm seas). It was cut by Ted Carrington, who had huts at Maori Bay and at Carringtons Flat (both discussed in Section 10).

It was reopened for the Kakapo Project, although an alternative (and longer) route down Robertson River was in use for several years until the old track was rediscovered.

The track is now becoming overgrown and indistinct, and is extremely hard to find in some sections. It is no longer a viable route unless the user has specific knowledge of the track, particularly in the section where it enters and exits Moa Flat and the section nearest the coast.

## 8. Port Pegasus

Contact with the outside world for the tin miners was via Port Pegasus. Some overland trips were made to Halfmoon Bay, but it was extremely hard going, and almost all communication was by sea. As the first tin discoveries were made in Pegasus Creek (which flows into the north arm of Port Pegasus), from the very beginning of the tin rush most landings would have been in the same area. Louis Rodgers set up his hotel, post office and store on the northeast shore of the north arm of Port Pegasus, a short distance from Pegasus Creek, and the Surveyors Track starts at the old hotel site. Although the small settlement was never formally surveyed, the New Zealand Gazette (1889: 379) named the post office as 'Port Pegasus', and this appears to have been the name that was always used for the locality (as well as the port itself).

In 1897, a fishing base was set up on the opposite (northwest) shore of the inlet from the hotel building which, by that date, had closed and was occupied by two tin prospectors. The concrete base of the old wharf is now the most obvious feature at the fishing base. The last of the old houses at the base progressively collapsed during the late 1990s and early 2000s.

#### 8.1 PORT PEGASUS SETTLEMENT AND HOTEL

NZAA Site No. D49/15 (hut sites) NZAA Site No. D49/46 (hotel site)

G.R. 081 263

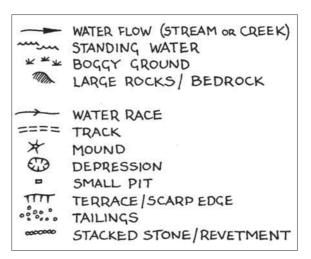
(Note: the original G.R. for D49/15 is wrong by approximately 400 m)

NZAA Site No. D49/50 (building site and boat landing)

G.R. 081 262

The settlement at Port Pegasus was established with the onset of the tin rush, and at one time included a hotel, store and post office (Figs 5, 6). These businesses were set up by Louis Rodgers in 1889 (at a cost of £400) to service the tin mining field. With the failure of the mining, the businesses also failed; Rodgers becoming bankrupt by mid 1890. The buildings were eventually bought by Arthur Ford, who lived at Port Pegasus until 1914. The hotel building stood until the 1940s, when it was dismantled by a Mr Skipper who worked at the fishing base on the opposite shore. It was known in its later years as the 'Red House', and had lots of old bottles at its rear. Some of the windows are now incorporated into Lil Skipper's house in Oban (Lil Skipper, pers. comm.).

Figure 5. Key to symbols used in Fig. 6 and subsequent plans in this report.



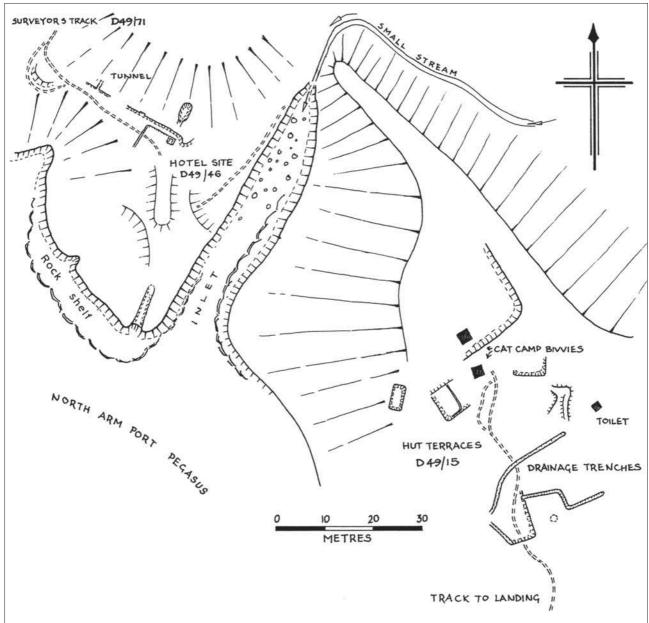


Figure 6. Plan of Port Pegasus settlement and hotel site and Surveyors Track start. Hut sites—D49/15; Hotel site—D49/46; Surveyors Track—D49/71.