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A MINER'S COTTAGE SITE ON KAWAU ISLAND

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Introduction

In February 1997 a small archaeological investigation was carried out at site R9/779, near Dispute Cove in the Kawau Island Historic Reserve (Fig. 1).

The site, which is recorded as two terraces and a pit, had been found during an archaeological survey of the reserve, carried out in August 1993 by myself and Brenda Sewell. The site was not examined in detail at the time of discovery, as it was largely under regenerating kanuka. We did not make any attempt to interpret the site features, but considered it likely that the terraces were associated with pre-European Maori occupation, of which there is widespread evidence in the reserve. Although recorded with the terraces for convenience, the nearby pit was not considered to be necessarily related to the terraces. In fact the pit is circular in shape and this, together with its location on the flank rather than the top of a ridge, suggested that it was probably a European period feature and possibly of recent origin, or less likely, a tree throw depression.

In 1996, the site was inadvertently damaged by Department of Conservation field staff during the replacement of a footbridge over an adjacent gully. Although the work on the bridge did not affect the site, difficulties were encountered transporting materials and equipment to the construction site, and a vehicle track was constructed to gain access. Damage was sustained to one of the terraces when this track was repeatedly used by a tractor during a period of heavy rainfall.

The damage to site R9/779 was reported to the NZ Historic Places Trust, who subsequently requested that a limited investigation be undertaken to mitigate the damage that occurred.

A site investigation was subsequently carried out over a three and a half day period in February 1997, by myself, Brenda Sewell, and volunteer Simon Duff.

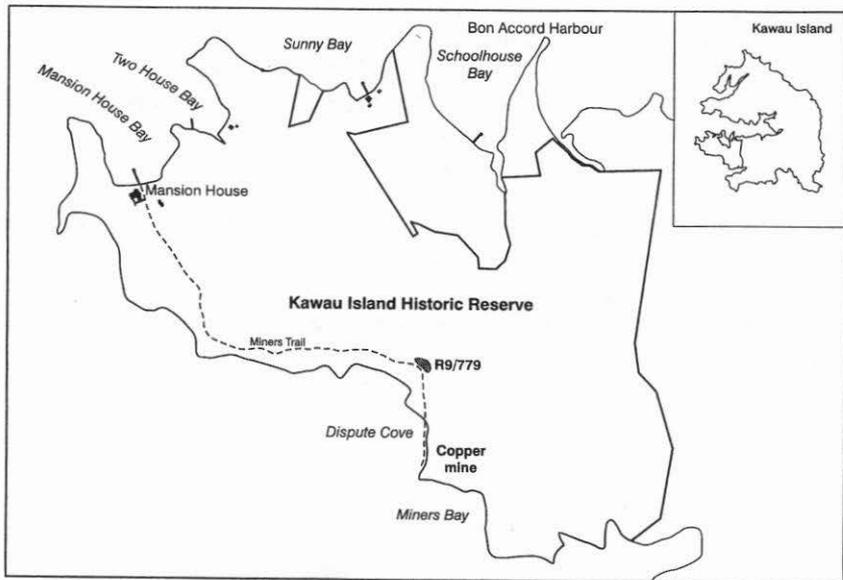


Figure 1. Location map.

Site description

Site R9/779 is located in kanuka shrubland about 40 m above sea level, just above the change in slope from the steeply sloping face of the coastal escarpment to the rolling hill country further inland. It became evident during the course of the investigation that this change in slope represents the head of an old slump block. The slump is perhaps 50 m wide and about 80 m from top to bottom.

The slope on which the site is located faces towards the south-west, and overlooks a gravel beach with sandstone rock outcrops. Immediately adjacent to the site is a deeply incised summer dry stream gully, which probably marks the western margin of the slump.

The site is situated beside a walking track which is locally known as the Miners Trail and leads from Mansion House Valley to the historic Kawau copper mine via Dispute Cove. The site is approximately 1.8 km from

Mansion House Valley, and about 350 m from the copper mine.

The main feature of the site is a pair of terraces: a lower terrace measuring approximately 12 x 3 m located close to (3m away from) the walking track and at almost the same elevation; and a larger upper terrace measuring perhaps 18 x 9 m (Fig. 2). There are further terraces upslope from these two. However, while the surfaces of the lower two terraces appear to have been culturally modified by levelling, there is no clear evidence that those upslope have been culturally modified or used.

The pit is a circular depression, about 3.5 m in diameter and perhaps 500 mm deep at its deepest point. It is located about 30 m to the south-east of, and slightly upslope from, the terraces, on the upper slopes of a broad gently sloping ridge. This ridge separates the catchment in which R9/779 is located from the Dispute Cove catchment, and defines the eastern margin of the slump.

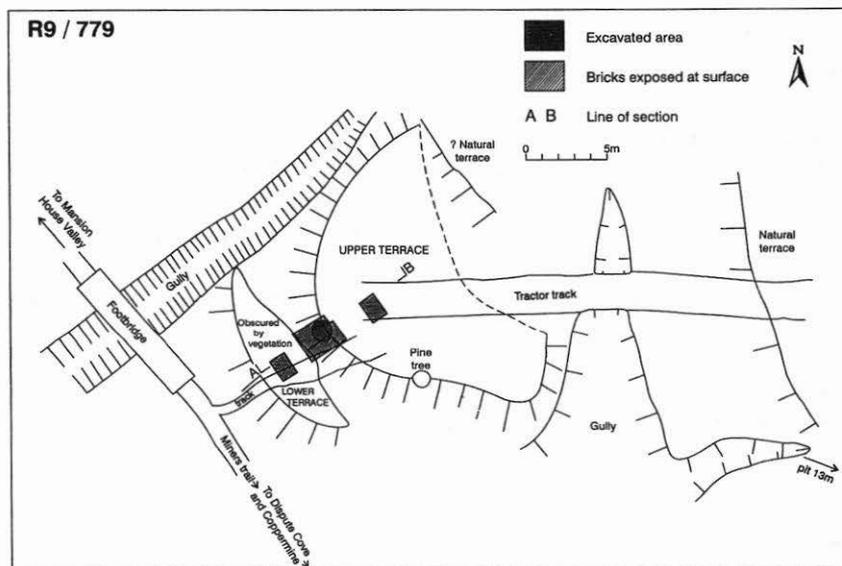


Figure 2. Site plan showing excavated areas.

Site R9/779 is close to another probable terrace, with an associated midden scatter and obsidian findspot recorded as R9/659. That site is located on the same slump block and at about the same elevation as R9/779.

Site investigation

The first clear indication that site R9/779 was not of Maori origin was uncovered during the clearance of vegetation and disturbance of the ground surface which occurred during the bridge work. This resulted in the exposure of an accumulation of bricks and charcoal at the front of the top terrace of site R9/779.

It now appeared that the terraces and probably the pit were associated with European occupation for which there was no specific historical record (see below). The purpose of the investigation was therefore to make a more detailed record of the site, to determine the extent of the damage, and to develop an understanding of what the site actually represented and when it was occupied.

The site was mapped using a plane table and electronic alidade. Three test squares, totalling 8 sq. m, were opened up on the terraces; one on the upper terrace, one on the lower terrace, and the other over the exposed bricks and scarp between the upper and lower terraces. A narrow (600 mm wide) trench was also excavated through the middle of the pit.

Results

The excavation on the lower terrace revealed a cultural deposit about 100 mm thick beneath 100 - 150 mm of redeposited clay. This deposit contained numerous beach pebbles (typically 10 - 20 mm diameter), fragments of domestic ceramics, occasional marine shell, and a small number of corroded iron nails in a clay matrix. The pebbles were concentrated at the top of the cultural layer. No postholes or other features were found.

The test square on the upper terrace also encountered beach gravel, in this case in a shallow horizon just below the surface. The pebble layer had been deformed and compressed into the ground by the wheels of the tractor where it had operated on the site. Part of what appeared to be an iron hook was recovered from this deposit. The pebble layer overlay unmodified clay subsoil. No postholes or other features were encountered.

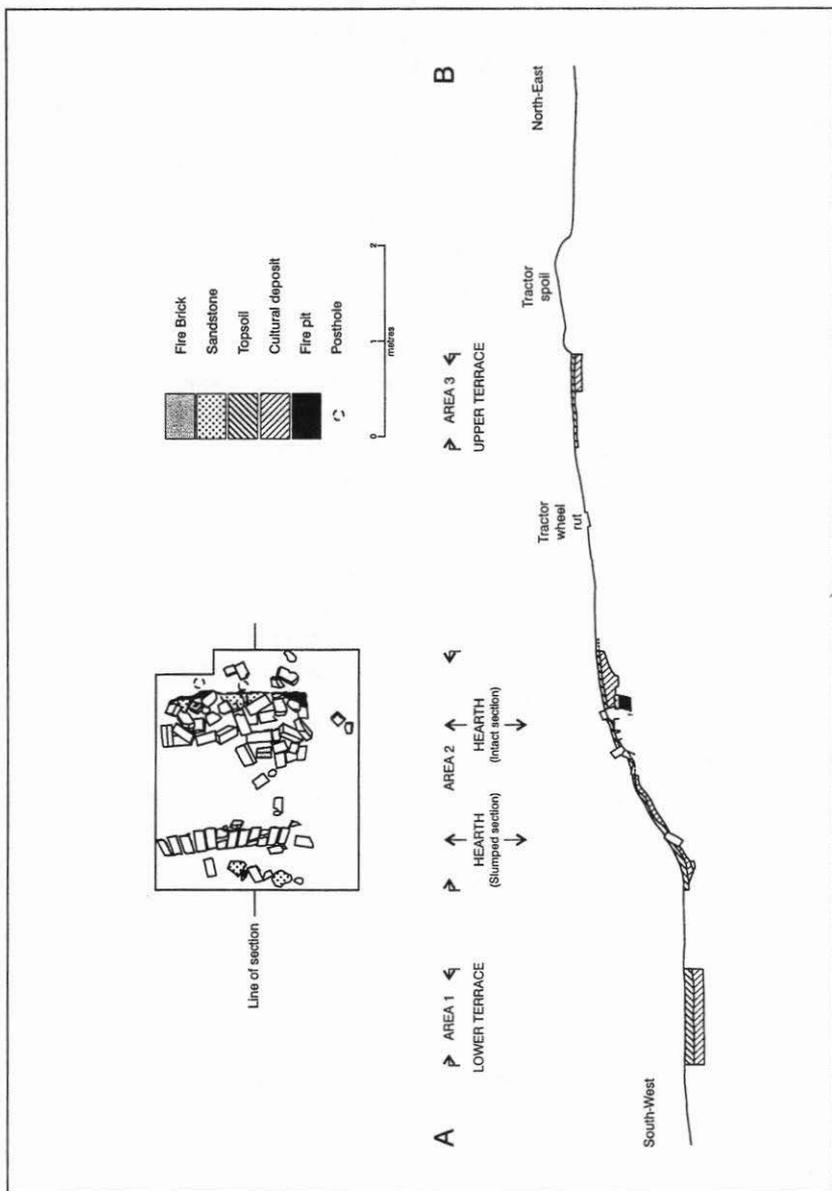


Figure 3. Plan of hearth and section through terraces.

The third test excavation revealed a jumble of whole and broken bricks, and a number of pieces of sandstone, located at and just below the surface, on the very edge of the terrace. The matrix between the bricks contained abundant charcoal, occasional nails and a few ceramic fragments. The lower layers of brickwork and sandstone were in their original placed positions (Fig. 3), and clearly represented an *in situ* hearth. The accumulation of bricks overlying this hearth were presumably once the sides of the hearth. The bricks had not been mortared.

Bricks and sandstone pieces were also found on the slope below the hearth, especially at the bottom of the scarp, at the back of the lower terrace. This included an apparently undisturbed row of 13 bricks. We had some initial difficulty interpreting this feature, but as a larger area was uncovered, it became apparent that this was part of the same fireplace which had subsided downslope from above. Subsidence had evidently taken place slowly and evenly enough for this section of bricks to stay together in a row. The open side of the hearth appeared to face the north-east, that is towards the larger upper terrace.

Close examination of the top (upper terrace) section of the hearth showed that it was built upon an earlier fire pit, infilled with charcoal and ash. This fire pit, which was some 250 mm deep, was not fully investigated, as we wished to leave the hearth undisturbed. Adjacent to the hearth were two shallow postholes, about 120 mm in diameter and 100 mm deep. It was not apparent how these related to the hearth, as they were located in front of the presumed opening. It is possible that these represent an earlier structure, perhaps even associated with pre-European Maori occupation, or else an earlier phase of construction of the building to which the hearth belonged.

The circular depression to the south-east of the terraces proved to be a European period pit. The total depth of the pit was 1.4 m, of which about 900 mm was infilled (Fig. 4). Although the depression is some 3.5 m wide at the surface, it quickly narrows to a width of about 1.2 m. At the base of the pit was a layer of charcoal and a corroded iron object. This latter object is unidentified but has the appearance of a large version of the staple part of a hasp and staple door fitting, attached to an iron plate measuring 80 x 120 mm. The pit fill consisted of a dark grey-brown clay soil, containing charcoal, small beach pebbles, and occasional pieces of pottery, glass, nails, and a very small amount of bone. Fill lines suggested progressive infilling over a period of time.

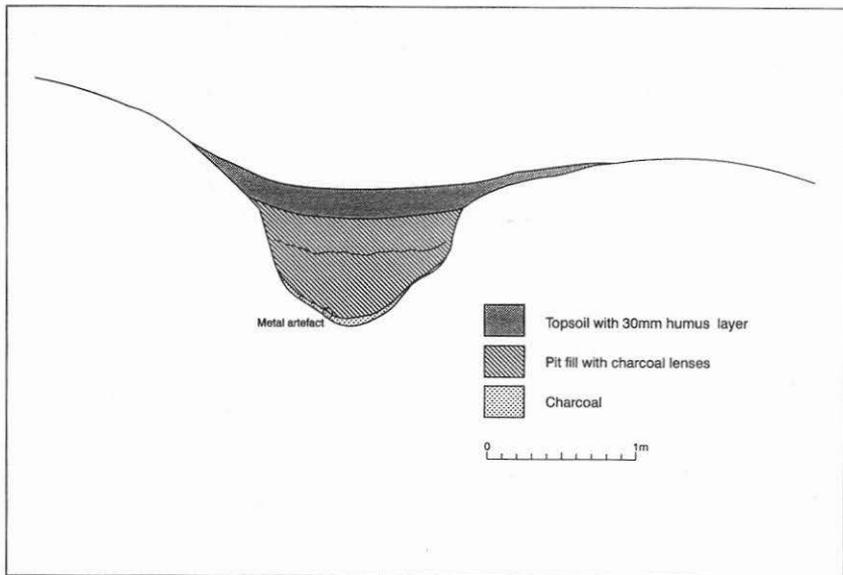


Figure 4. Section through pit.

Artefacts

A comparatively small amount of artefactual material was recovered during the excavation.

The pit produced 35 small ceramic fragments, the largest only 40 mm across. At least 16 different vessels are represented including saucers, a 'London shape' cup, plates, bowls, and possibly an egg-cup. The majority appear to be parts of blue transfer print earthenware. Two pieces of flow blue patterned earthenware are also represented, along with single examples of earthenware vessels with a brown transfer print pattern, a red and blue hand painted decoration, a blue sponge-applied pattern, and a moulded design. What appear to be fragments of a hand-painted porcelain egg-cup were also found.

Four of the transfer print fragments are decorated with the Willow Pattern: All other fragments are too small to allow the designs to be readily identified. No makers marks are present.

The other items recovered from the pit include 11 pieces of black glass from at least one cylindrical alcohol bottle and one gin or schnapps bottle fragment; 2 small pieces of window glass, 2 small pieces of mammal bone,

a large square section nail, the metal? staple referred to above; and some other small corroded iron objects, probably pieces of nails.

The upper terrace produced 9 small pieces of earthenware, including part of a plate, and cup. Six pieces were decorated with blue transfer printed patterns, one with grey and one with green. None of the patterns have been identified. Also found were a piece of a stoneware blacking jar, a piece of mammal bone, corroded square section nails, and the hook referred to earlier. Apart from the hook, all of the items were recovered from the vicinity of the fireplace.

On the lower terrace were found 17 small pieces of earthenware representing at least 7 vessels including parts of 2 cups and a bowl. Eight pieces were decorated with a flow-blue pattern, probably 'Scinde'; 6 with other blue transfer print patterns; and 2 with moulded decoration. One of the transfer printed patterns is identifiable as 'Willow', another as 'Fibre' (see Warr 1996 for illustrations of these patterns). Other items recovered include nails, part of a stoneware blacking jar and another salt-glazed stoneware bottle, 4 pieces of window glass, and a piece of malachite (copper ore).

Many of the ceramic and glass fragments found at the site exhibit secondary edge damage which, together with the small size of the pieces (especially those from the pit), suggests that they have been lying around on the ground and trodden on.

The bricks comprising the hearth feature are all hand made sandstocks, some with diamond frogmarks. Two halves of a broken firebrick, with the impressed mark *T. Carr* in serif lettering, were also present amongst the red bricks. This brand was used by the firm of Thomas Carr and Son, Newcastle-on-Tyne, England. The firm was in operation from 1827 - ca 1918 (Gurke 1987:66;74).

The sandstone pieces which had also been incorporated into the fireplace were all parts of water-rolled slabs of Waitemata Group sandstone, presumably picked up from the beach below.

Discussion

It seems reasonable to conclude that the substantial brick hearth was part of a domestic dwelling which occupied what was once a single terrace. The terrace was probably originally a natural landform, subsequently modified to

create a larger level living area. Over the period since the site was occupied, the terrace has slumped and begun to separate into several smaller blocks. These smaller blocks are represented by the upper and lower terraces originally recorded as part of the site. A further, apparently natural, terrace just above the upper terrace, might also have originally been part of the same terrace at the time the site was occupied.

The house had a beach gravel floor, and gravel was also spread around the dwelling as a living surface. The size of the building, and method of construction are unknown, as it transpired that we did not excavate in locations where walls would be expected. Given the range of materials found during the excavation, it is probably reasonable to assume that the building was of timber construction with glazed window openings, and the brick/sandstone hearth. The hearth is quite substantial in relation to the size of the terrace & possible size of the building. Its orientation in relation to the terrace suggests that the fireplace was at the south-western end of the building.

Early vernacular timber buildings often had an external chimney attached to one end of the building, with the fireplace accessed through an opening in the wall. If bricks or sheet iron were not readily available the chimney would typically be made of timber slabs and constructed so that the dimensions were large enough to prevent flames coming into contact with the timber.

It is not clear how the two postholes found beside the hearth relate to the hearth and rest of the building, if at all, but one possible scenario is that the semi-detached hearth was a later addition to the building.

The apparent absence of ceramic fragments from the area interpreted as the building interior (i.e. Area 3) suggests that this area was kept clear of such refuse. The ceramic artefacts were found outside the area thought to have been occupied by the building (i.e. in Area 1), or from in and around the hearth. The only artefact found in Area 3, an iron hook, was possibly used to suspend a lamp.

The content of the fill suggests that the pit was a rubbish hole. It was initially used to burn rubbish in situ. It seems subsequently to have been used primarily to dispose of organic matter, together with hearth and house floor sweepings which included beach gravel. The hole was conceivably once completely filled to ground level, the depression visible when the site was

found resulting from decay and settling of the fill. The possibility that the hole was used as a long-drop toilet as well as a rubbish hole was considered. However this seems unlikely because the large diameter of the hole would have been difficult to span with a structure.

There are clearly strong similarities between the artefact assemblages from the pit and the terraces. In particular, the use of beach gravel as a living surface suggests a close link between the two components of the site. However the pit seems to be in the wrong position, and somewhat too far away, to be a rubbish pit directly associated with the R9/779 dwelling. A more logical position would be to the north of the dwelling, avoiding the need to cross a small gully between the terrace and the pit.

Closer examination of the area in the vicinity of the pit during the mapping of the site revealed the presence of terracing on the ridgeline above and about 15 m to the southeast of the pit. This ridgeline forms the backdrop to Dispute Cove, and the terracing overlooks the flat and beach. It is likely that this terracing represents the site of another dwelling. The presence of this terracing is significant because it suggests that at some point in time there was a dwelling nearer to the pit than the dwelling that once occupied the R9/779 terrace. The proximity of the pit to this other probable house site on the Dispute Cove ridgeline suggests that the pit relates to the occupation of the latter.

Where does site R9/779 fit into the sequence of European occupation on Kawau Island?

The history of Kawau Island is reasonably well known at a general level. While there is no specific archival record of occupation at site R9/779, it would seem likely that the site was associated with either the Kawau copper industry, or with the period 1862 - 1888, when the island was owned by Sir George Grey. The location of the site and archaeological evidence points to the former.

The Kawau copper mine commenced operation in late 1844. It operated until 1851, when problems with flooding resulted in closure of the workings. The mine was briefly brought back into operation in 1854-5, and there was a further small scale reopening attempt again in 1900.

Although no accurately dateable artefacts were recovered from either feature

at site R9/779, the frog-marked bricks that make up the hearth are typical of those in use during the 1840s-50s period at the Kawau smelting works, and the Carr fire brick is identical to others used in the Kawau copper industry. In fact substantial hearths made of the same mixture of bricks and sandstone slabs and securely dated to this period were uncovered by excavation at nearby Miners Bay (Sewell n.d.). Many of the miners employed at Kawau originated from Cornwall & it is interesting that Blainey (1993:123) notes that wide fireplaces were a cultural trait associated with Cornish miners in Australia.

The ceramics and glass are consistent with an 1840s or 50s date and lack any elements that would suggest a later period of occupation. Although the small size of the ceramic fragments makes identification of patterns difficult, it would appear that there is a variety of different designs present, mostly blue transfer prints. The assemblage shares many stylistic similarities with the much larger assemblage of ceramic fragments recovered from the Miners Bay village site (see Warr 1996).

Care needs to be taken with interpreting the evidence of the bricks, as there is widespread documentary and physical evidence of the re-use of building materials on Kawau. However, the location of the site within easy access of and on the path to the mine, and the fact that the building apparently did not have a floor or a mortared brick chimney, suggests that it dates from the 1840s or 50s rather than the Grey period, when buildings were of a more sophisticated design. Another piece of evidence points to an association with the copper industry. This is the use of fine beach gravel as a living surface in and around dwellings. There is very clear evidence of this practice at known mine period village sites at Miners Bay (Sewell n.d.: 5) and in nearby Dispute Cove.

When the Kawau copper mine was fully operational there was probably a total of between 2-300 people living on Kawau (McDonald 1865: 25). The mine company provided housing for workers in several settlements. The principal settlement was in Mansion House Valley. Other settlements were located at Dispute Cove, Miners Bay, Sunny Bay, and Smelting Works Bay.

These mine settlements appear on two early plans which show parts of parts of Kawau Island. One of these, drawn by Captain James Ninnis and dated 1848, shows Dispute Cove (then Blackwoods Bay), the coppermine area and Miners Bay. The other plan, signed by Surveyor-General Charles Ligar,

depicts a much wider area, including Bon Accord Harbour, Dispute Cove, and South Cove. Although signed by Ligar on 5 March 1848, the date of the survey upon which it is based is not noted.

Both plans include a considerable amount of detail regarding the locations of constructed features (Ligar even shows what appear to be outhouses), and there is a high degree of consistency between the two. The Ninnis plan shows 6 buildings (2 semi-detached) at Dispute Cove, as well as a 'Path leading from Blackwood's Momona and Bon Accord Bays'. Unfortunately the R9/779 site location is just off the edge of the plan. The Ligar plan also shows the buildings at Dispute Cove (these are annotated 'Miners houses and huts'), but no building at site R9/779. It is probably reasonable to conclude that the cottage that occupied the site was built after the Ligar plan was drawn. The terracing near the pit probably also post-dates both plans, since there is no building shown in this location. This would not be unexpected, since the workforce was probably largest in 1848-9, when mining was at its peak and a smelting works was being constructed and brought into operation on the island.

One employee who commenced employment at around this time was an engineer, Mr T. Evans. Mr Evans and his wife Emma are thought to have arrived on Kawau early in 1848. Mrs Evans kept the school at Kawau, which during this period was at Miners Bay, about 600 m to the south-east of site R9/779. The Evans joined the Wesleyan Society at Kawau and Mr Evans became an active lay preacher. McDonald (1865:31) describes him as '...a real tiger an out and [out] dealer in fire and brimstone'. Evans was renowned for his dramatic effect on the congregations, causing women 'to fall down in some kind of fit' during their conversion to Christianity.

On 22 August 1848, Emma Evans wrote to her father describing how her husband had been permitted to build his own house on land made available by the mine company. The following is an excerpt from Mrs Evans letter:

When he was dissapointed in a house, he got a spot of land from the Cappt. of the mines to build in if he liked. To show them he cared not for their house and that I should have a good one - he built a fine house 37 feet long - one kitchen - a sitting room and two bedrooms - no less than 56 panes of glass in the house, also an outhouse and a nice garden. He put up a fence in the chinese plan which is admired by everyone that comes here....

Evans 1848

The Evans called the dwelling Prospect Cottage. Mrs Evans was justifiably proud of the generous dimensions of her cottage: contemporary plans and illustrations and later photographs of other mine period buildings indicate that at 37 feet (11.3 m) long, Prospect Cottage was significantly larger than the dwellings of other mine company employees, and almost as long as the two storey residence of the mine superintendent, since incorporated as the 'Mine Manager's wing' of Mansion House.

There are few clues as to the location of Prospect Cottage. However it is likely that it was within easy walking distance of the mine and school, and had enough flat land to accommodate the house and garden.

There are, however, only very limited areas of flat land on Kawau, and the plans referred to above indicate that by about 1848, most of the beach flats in the vicinity of the mines were already occupied by buildings. The only exceptions are Two House Bay, about 1.5 km to the north-east of the mines, and Schoolhouse Bay on Bon Accord Harbour, about 1.2 km to the north. Little is known of the early (i.e. pre-Grey period) history or archaeology of either location.

The southern part of Kawau Island has otherwise been intensively surveyed by archaeologists. There are no recorded archaeological sites, other than R9/779, that are obvious candidates for the site of the Evan's house. Prior to post-abandonment slumping the terrace at R9/779 would easily have been large enough to have accommodated the building and garden.

The lack of fragments of alcohol bottles or clay tobacco pipes in the assemblage around the site of the dwelling at R9/779 is consistent with what is known of the Evan's staunch Wesleyan lifestyle. It would be unwise, however, to place too much emphasis on this evidence: a Kawau Total Abstinence Society was formed in 1847, and by 1848 there were 82 members on the island. Many of these appear to have managed to adhere to 'the pledge', if the society's records can be believed (*New Zealander* 22 July 1848:2/3-4), and thus alcohol bottle fragments are likely to be absent from many mine period site assemblages.

Conclusions

The terracing at site R9/779 has resulted from post-abandonment slumping of a larger terraced area that was probably a modified natural slump feature. Archaeological evidence found during the investigation of the terrace area is consistent with the interpretation of this part of the terrace as the site of a

dwelling associated with the Kawau copper industry and dating from the period 1844 - 51. Although our brief investigation produced insufficient information to be able to reach the conclusion that this was the site of Prospect Cottage, built by the Evans family in 1848, there is a strong possibility that it was. The contemporary description of the cottage is detailed enough to allow this to be confirmed by further excavation if desired.

The pit feature recorded at R9/779 is a rubbish hole which dates from the same period. It seems likely that it is related to a dwelling that was a late (post 1848) addition to the Dispute Cove village, rather than to the occupation of the R9/779 terrace(s).

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