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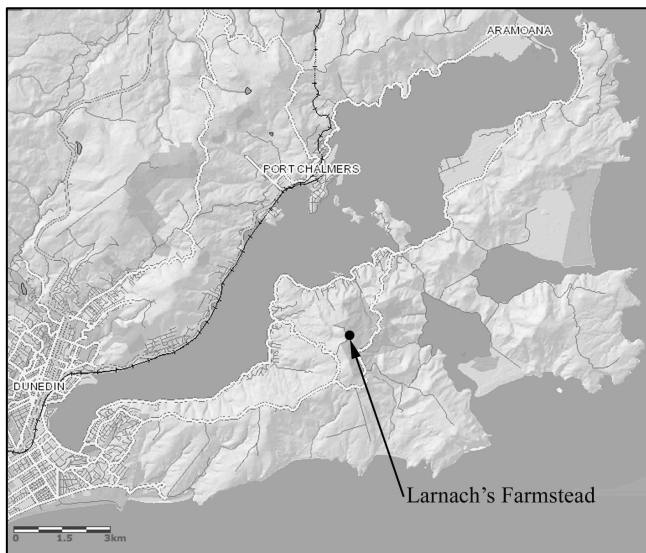
Larnach’s Farmstead Survey and Excavations, Hereweka/Harbour Cone, Otago Peninsula

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Introduction

In August 2017, members of the University of Otago Anthropology Society were invited to Larnach’s Farmstead (site 144/412) by Dr Peter Petchey and the Hereweka Harbour Cone Trust (HHCT) to clear the original floor of the cow byre, carry out drainage works to protect the byre, and to identify the original extent of the shortened barn using minimally invasive earthworks. Larnach’s Farmstead (site 144/412) is located off Camp Road at Hereweka/Harbour Cone on the Otago Peninsula (Figures 1, 2 & 3). It was first established in the 1870s by William James Maudie Larnach. Since its initial construction the site’s buildings have deteriorated significantly and only two original structures remain, the cow byre and barn. These remaining buildings and the site’s associated archaeological features are part of a large block of land currently owned by the Dunedin City Council and managed by the Hereweka Harbour Cone Trust (HHCT) for their natural, recreational, and heritage values.



*Figure 1
The location
of Larnach’s
Farmstead on
the Otago
Peninsula
(DCC
Webmap).*



Figure 2. Larnach’s Farmstead (site I44/412) on the Otago Peninsula. The cow byre is the larger building on the left.

Brief History of Larnach’s Farmstead

Larnach’s Farmstead is located within the rich archaeological landscape of Herewka/Harbour Cone and is one of many sites relating to the wider environment of historical dairy farming and community infrastructure on the Otago Peninsula. In 1844, the purchase of the 400,000 acre Otago Block by the New Zealand Company marked the beginning of permanent European activity in the area (Middleton 2012: 36). Surveys for the settlement of Dunedin were conducted in 1847, before the first European settlers arrived the following year.. However, the Otago Peninsula was not surveyed until 1863, when the land was divided into small lots to serve as grants of Crown land for farming purposes, with the largest belonging to William Larnach (Middleton 2012: 36). The majority of the land was divided into 50 acre blocks yet to be cleared of native bush, forest, rocks, or boulders, and the land proved to be difficult and time consuming to break in (Petchey 2017: 11-12). Following the clearing of the land most farmers planted crops of potatoes, turnips, oats, or grain during the first three years of operation, before permanently converting to pasture following the depletion of soil fertility (Petchey 2017: 12). The conversion to pasture saw the peninsula dairy

industry flourish with the farmsteads providing milk, cheese, and butter for the newly established city of Dunedin and nearby townships. During the latter part of the nineteenth century several co-operative dairy companies were developed in the area including the 1871 Otago Peninsula Cheese Factory Co. Ltd. and the 1884 Taieri & Peninsula Milk Supply Co. Ltd. (Petchey 2017: 14). By the end of the nineteenth century four dairy factories were in operation on the peninsula fuelled by the dozens of small household dairy farms (Middleton 2012: 38). However, industrial and technological changes during the early twentieth century saw the decline in profitability of dairy farming practices on the peninsula, resulting in the conversion to drystock.

Larnach Castle is a popular tourist destination on the Otago Peninsula, but less well known is Larnach’s somewhat neglected model farm complex located to the east of the Castle. The first of Larnach’s farm buildings were built in 1872 and included a farmhouse and a large structure consisting of a stable, cow byre, and carriageway (Gosling 2009: 32). These structures were situated 300 metres southeast of the present farm site and fell into disuse during the end of the nineteenth century (Gosling 2009: 32). The second series of buildings that were constructed consisted of a cow byre, stables, barn (or implement shed), and archway to the square farmyard, as well as a farm manager’s house on an adjacent terrace (Figure 1). By the end of the nineteenth century Larnach had purchased all of the small uneconomic dairy farms of the local Hereweka/Harbour Cone area, resulting in a land-holding of over 1000 acres (Middleton 2012: 40). The purchase of these blocks led to Larnach having, what could be considered by some, a feudal role on the Peninsula, providing employment for locals via the construction of buildings on his property, the running of his dairy farms, or the staffing his household (Gosling 2009 : 9). However, following Larnach’s suicide in 1898, the farmland was divided and sold off to various landholders (Gosling 2009: 15). The turn of the twentieth century saw the land more suitably used for drystock, specifically sheep, a use which continues today. As a result, there have been numerous changes made to Larnach’s farmstead site including the conversion of the small barn/implement shed to a woolshed, extensive modifications to the footprint of the same building, the construction (and later removal) of a larger woolshed, and the deterioration and dismantling of several historic buildings. In 2008, the land was sold to the Dunedin City Council who lease the land to a local farmer and have developed a series of walking tracks through the land to allow public access to the heritage sites on the property.

Survey and Site Works

As the site and associated features had already been extensively surveyed and recorded (Gosling 2009), the purpose of the survey was to identify the original footprint of the barn, conduct drainage works around the cow byre, and reveal the cow byre’s original floor. The student volunteers were split into four groups to cover these tasks.

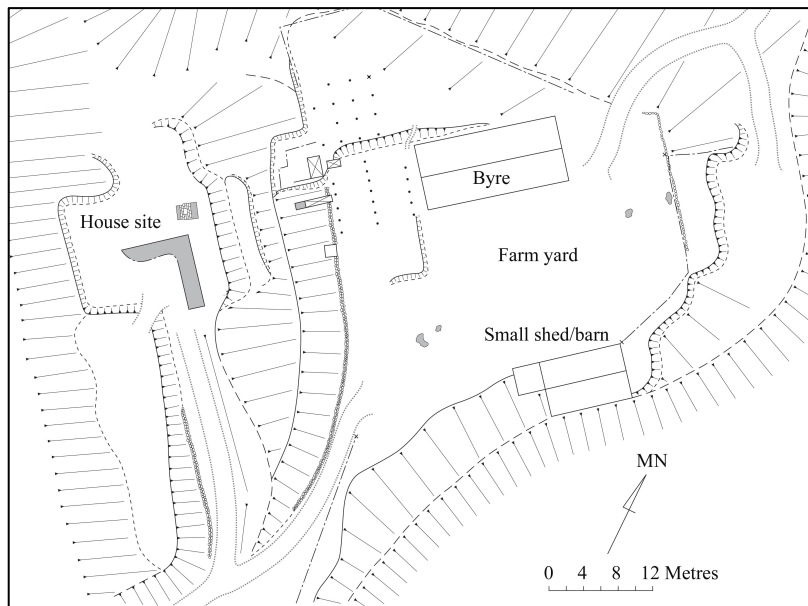


Figure 3. Plan of Larnach’s Farmstead site (courtesy Anna Gosling).

The Cow Byre

The cow byre is the larger and sturdier of the two remaining buildings at the farmstead, and is located on the western side of the site. While cow byres were a common feature of early farmstead sites, few remain in the vicinity of Harbour Cone and those that do are in varying condition. This highlights the need for the further recording and preservation of those examples that are still standing. Cow byres which have been recorded, restored, or otherwise investigated in the local area include those at Rogers’ Farmstead (Kelly *et al* 2016), McMeeking’s Farmstead, Landreth’s Farmstead, and Mathieson’s Farmstead (Petchey 2017), a comparison of which will be discussed later.

Kelly – Larnach’s Farmstead

Larnach’s cow byre has a corrugated iron roof and is clad with a mixture of board and batten (the original cladding) and corrugated iron. The byre has a second storey that would have originally stored hay, before it was fed into the below mangers through a gap in the floor. Since its establishment, Larnach’s cow byre has been adapted and repurposed for use as a covered sheep yard, which saw the fitting of a slatted floor. The first step towards uncovering the original floor was removing the slats and some modern fittings. Following this students shovelled out the remaining manure to reveal the concreted floor, which was more than likely originally cobbled. The clearing of the modern floor also exposed two drains which ran the length of the building along the front of the stalls. These drains were cleared out to encourage proper drainage from the building.

The cow byre had a total of 15 stalls, the majority of which had at least partial original head gates and mangers. Most of the stalls had two head gates, which indicate that the byre may have held upwards of 30 cows, a significant number for the time. Additionally, following the clearing of the floor, metal rings running down the centre of the building were exposed, which were likely used to tie the back leg of a cow during milking to prevent the cows kicking the bucket or farmer.



Figure 4. The interior of the byre after the floors were cleared.

Kelly – Larnach’s Farmstead

Approximately two thirds of the cow byre’s slatted floor and subsequent manure was removed during this trip and further work on the remainder of the cow byre is intended to be completed at a later date.

Drainage Works

The land on which the farmstead is located tends to retain a lot of water, which poses a significant threat to the foundations of the historic farm buildings. In order to avoid the rotting of foundations or further damage to the historical farm buildings, students cleared the old drains around the edges of the cow byre and towards the slope of the hill to encourage appropriate drainage at the site. This resulted in the uncovering of original cobblestones on the northern side of the byre.



Figure 5. Clearing the drain around the west wall of the byre. This view also shows the original board and batten cladding.

The Barn

The old barn (last used as a small woolshed) building is located on the eastern side of the site and is close to collapsing and falling down the slope of the hill. Due to the unsafe nature of the building it was not entered during this

Kelly – Larnach’s Farmstead

survey, however a more in-depth investigation into the structure was conducted by Gosling (2009). Since it was constructed, the barn has been shortened significantly on its southern side and may have been shortened on its northern side. A group of students conducted an excavation on the northern side of the building to further investigate the original extent of the structure, which resulted in the identification of timber posts that were part of the original foundations. These indicated that the building once extended a further metre (3 feet) in this direction. The original purpose of the building remains unclear, partly because of the many modifications carried out to it over the years.



Figure 6. Excavating to reveal the old foundation piles for the smaller building at Larnach’s Farmstead. The diggers had to work around the modern fenceline.



Figure 7. The old foundation piles exposed after excavation.

Comparative Analysis of Peninsula Cow Byres

To date there has been no comprehensive study or survey conducted encompassing all of the historical farmsteads of the Otago Peninsula (Petchey 2017: 97). As a result, the current condition of multiple farmsteads is unknown. However, the farmsteads which have been investigated, such as Rogers’, Landreth’s, Mathieson’s, and McMeeking’s Farmsteads, provide an interesting source of comparison to Larnach’s Farmstead, specifically in regard to their cow byres.

In contrast to the timber Larnach’s byre, the byres at Landreth’s and Mathieson’s farmsteads are built of bluestone masonry with whitewashed interiors (Petchey 2017: 92). But in common with Larnach’s byre, Landreth’s byre has many original stalls and a concreted floor that was likely originally cobbled (Petchey 2017: 92). Mathieson’s byre is currently used as a covered woolshed, however evidence relating to its use as a cow byre include central rail lines used to transport vessels full of milk, the intact hay loft, and some remains of the cow stalls (Petchey 2017: 92). Comparable to Larnach’s farmstead, Mathieson’s Farmstead was considered to be a leading example of dairying in the colony, with a commodious cow byre (*Otago Witness* 1 April

1882: 7). Therefore, the historical farmsteads on the Otago Peninsula in some cases served as a national exemplar of dairying ideals.

An interesting Farmstead of the Hereweke/Harbour cone area is Rogers’ Farmstead. Probably established in the late 1860s, the farmstead’s cow byre is constructed from pit-sawn timbers, rather than circular-sawn timbers which are common at other sites (Petchey 2017: 94). The byre currently has its original brick floor, drains, and a single intact stall, complete with headgate and manger (Kelly *et al* 2016). The brick floor does not extend fully into the stalls, leaving an earthen floor for the cows to have kneeled on. The original floor is a significant feature, as many farmsteads on the Otago Peninsula do not exhibit their original floors, and have instead been concreted. As observed at many farmsteads of the area, Rogers’ Farmstead has been heavily modified for the purposes of later farming practices. The cow byre has been shortened, added to, and modified to serve as a chicken run since its original establishment (Kelly *et al* 2016).

Another cow byre which has been significantly adapted since its original construction is the cow byre at McMeeking’s Farmstead. The cow byre at this farmstead consists of an amalgamation of four buildings (Petchey 2017: 49). The two historical buildings were built from circular-sawn timber, weatherboarding, and likely had cobbled floors (Petchey 2017: 49). The original building initially had seven double stalls on the south-eastern side, indicating the housing of 14 cows, although one stall was converted to a doorway (Petchey 2017: 52). The second historical building had six double stalls and two single stalls, again indicating the housing of 14 cows, meaning that a maximum of 28 cows could have been housed (Petchey 2017: 57). Both historical buildings have a hay loft and various original fittings remaining, such as the attachments for halter connections to the mangers, rings for the tethering of a cow’s leg, and concreted mangers, which were originally wooden (Petchey 2017). The 1950s saw the addition of a concrete milking shed and an infill building connecting the modern milking shed to the historical byre buildings (Petchey 2017: 50).

The cow byres of the historical farmsteads on the Otago Peninsula exhibit a variability in design and manufacture, but while they exhibit differences in material, shape, and size, the byres do have comparable features such as the stalls, hay lofts, drains, and other original fittings. The basic form and function of the byres indicates a degree of standardisation (particularly in features such as the mangers, head stalls, drain location and securing rings in the floors), but with the variation due to the different skills, requirements, affluence and access to materials of the farmers involved. Further

investigation into farmsteads which have not yet been studied has the potential to identify additional similarities or differences in design, adding to our collective knowledge of historical cow byres and farmsteads of the Otago Peninsula landscape.

Conclusions

The work conducted at Larnach’s Farmstead has provided further information about the remaining historical buildings while decreasing their risk of water damage. The excavations conducted at the barn have led to a better understanding of the original extent of the building, and the removal of the modern slatted floor and manure in the cow byre has contributed further information about the original structure. The surveying and earthworks provided an excellent learning opportunity for students, giving an insight into local historical archaeology and heritage management. Lastly, the comparison of historical cow byres in the Otago Peninsula landscape has discussed the similarities and differences of cow byres in the local vicinity, and highlighted the need for more extensive investigation of the area.



Figure 8. The Otago University Anthropology Society members in Larnach’s byre at the end of the day.

Acknowledgements

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