RESEARCH NOTES

Forging ahead at Hervey's Range in the hinterland of Townsville, North Queensland

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One of the acknowledged gaps in historical archaeological research themes is that of early Australian secondary industries, such as blacksmith shops, making any comparison to conclusions drawn from research elsewhere in the world very difficult. The classic diagnostic criteria for a stand-alone blacksmith shop was described by Light (1984) following his work at several Canadian fur trade era sites, with Hyett (2002) suggesting some reasons, such as climate, availability of local materials and transportation difficulties, as to why his findings at an early Australian blacksmith did not adhere to these strict descriptions. Recent excavation work on a heritage listed site in the Townsville hinterland has revealed a possible smith dating to the mid-1860s that also deviates from Light's criteria, hinting that other factors, such as the customer base, distance from a main town and the experience of the smithy himself, may be important for the shop's design and layout. Further research in this area could help to define a more specific set of diagnostic criteria for early Australian blacksmiths.

INTRODUCTION

The 'Range Hotel, Burial Ground and Camping Reserve' (Place ID 700003) was the third place to be registered as an archaeological place on the Queensland Heritage Register (Environmental Protection Agency 2009). The area is located about 36km southwest of Townsville and is part of an old camping ground, gazetted in 1872 to provide additional accommodation options for travellers (Thompson 1872:810). The large historic site contains the (as yet to be precisely located) remnants of the Range Hotel (1866–1884), a small cemetery containing three headstones and at least one bottle dump. The original road which went inland from Townsville to the supply town of Dalrymple, referred to in historical records as Hervey's Range Road or Dalrymple Road, also passed through this camping ground.

Primary document research has added to the understanding of the landscape by revealing that this small community also included a blacksmith shop, described simply as being 'at the foot of the Range'. The blacksmith shop was initially run by John McNeil and his wife Isabella (*Cleveland Bay Express* 14th March 1868). Blacksmith shops were extremely common during early European expansion in Australia, providing an essential service to both settlers and travellers and were often located adjacent to the hotels which quickly sprang up along each new road (Foggo 1990:18, Wright 2003:107). In fact these small hotels and blacksmiths could be described as being the equivalent of today's motorway service stations, providing food, drinks, accommodation, animal care and emergency repairs for equipment and drays.

Investigations, using both archaeological field work and historical research, are now being carried out for the heritage listed site and will form part of a PhD project looking into the cultural landscape of the area. Recent excavations in the area appear to have located the blacksmith's shop mentioned in the newspaper archives. This is an important finding as research into Australian blacksmiths from this early colonial period is poorly represented in the literature, making it difficult to judge whether Light's (1984) classic description of a blacksmiths can also be used as a workable model for early Australian

smithies. The founding history of Townsville is an important backdrop to the discussion of why and how the smithy was built, contributing to an understanding of the features uncovered during the excavations. The arrangement and layout of the fragmented remains of two structures, one of which contains a possible forge, are compared to Light's (1984:55-56) criteria, in order to see if these guidelines are directly transferable to Australia, or whether Hyett's (2002) adaptations are more applicable.

RESEARCH RATIONALE

According to recent work by Schacht (2010) one of the gaps in Australian historical archaeological research themes is secondary industries, such as blacksmith shops. The classic description for a 'stand-alone' blacksmiths (ie one not associated with a similar shop, such as a cooperage, or part of a large manufacturer, such as a shipyard) is given by Light (1984:56-62) and is based on his excavation work in Canada on a Fur Trade era shop at Fort Joseph, Ontario, combined with other research on two assemblages, two abandoned shops and two working smithies. He concluded that blacksmith shops have four basic and separate areas, which can be physically demarcated by the structural arrangement of the smithy and its artefacts: the work area, domestic area, storage area and refuse dump.

The work area would contain the stone or brick forge with a chimney and windows allowing for removal of the fumes, an anvil mounted onto a wooden stump secured into the ground and work benches located close to the windows. A separate area could also be present for larger work, such as shoeing animals or making wagons (Light 1984:55-56). The domestic area, identified by artefacts such as storage jars, ceramics, glassware and clay pipes, was a social place for people to wait whilst work was carried out and where the smith ate his meals (Light 1984:56). The storage area, identifiable by piles of new stock, raw materials and fuel, could be located either inside or outside the shop, whilst the refuse area(s) would contain scrap metal, clinker and broken glass and ceramics (Light 1984:56). Light (1984:63) also commented that although the work of a blacksmith could vary depending upon the shop's location

and customer base, this would affect the type and range of artefacts found, rather than the overall layout of the premises.

De Vore (1990:24) used Light's criteria in his investigation into the various blacksmith shops at Fort Union Trading Post, North Dakota dating from the 1850s until 1864. He concluded that the structural layout of the forge, anvil, fuel containers and associated artefacts closely resembled the work area described by Light, and although a specific domestic area could not be physically delineated, certain artefacts indicated that social activities also took place. No explanations are offered as to why there is no dedicated domestic area and why this aspect differs from Light's criteria.

Hyett (2002:93-94) tested Light's (1984) model in Australia after completing research on an blacksmith shop located in the small township of Strathbogie in the North Central Victorian highlands. This heritage listed, intact blacksmith's shop, which was established in 1894 and finally closed in 1987, was investigated and the findings specifically compared to Light's criteria, with several differences becoming apparent. The forge was constructed of wooden slabs on three sides with brick only present on the side closest to the fire and there was neither chimney nor windows through which to dissipate the fumes. There was also no evidence for an in-ground anvil block and the benches were found on interior walls, rather than below a window. There was also no evidence, either physically or by the way of artefacts, for a domestic area.

Hyett (2002:93-96) proposed three main reasons as to why these discrepancies could occur: differing materials available for construction; transportation costs; and adaptation to local social and economic conditions. In Australia locally available materials could have impacted the design by providing alternatives not readily available in other parts of the world, such as the use of a free-standing heavy block of hardwood upon which the anvil could be mounted, negating the need for a stump to be secured in the ground (Hyett 2002:94). Charcoal, which was readily available in the heavily timbered Strathbogie district, could have provided a much cleaner, locally sourced fuel than Canadian black coal, rendering a



Figure 1: Map of Queensland. 'The Range Hotel, Burial Ground and Camping Reserve' is located 36 km inland of Townsville.

chimney unnecessary (Hyett 2002:93-94). Transportation costs and favourable climatic conditions could account for the use of wooden shutters, rather than glass windows. The absence of a domestic area is explained by the blacksmith's customer base with busy farmers having little time to wait around socialising whilst work was carried out, preferring instead to send work in with neighbours or passing trades people who were visiting town (Hyett 2002:94).

EARLY HISTORY OF TOWNSVILLE

Townsville, founded in 1864 by John Melton Black and Robert Towns, is situated on the North Queensland coast and is separated from the hinterland by Hervey's Range.

In order for Townsville to become established as the primary port for the newly established Kennedy District it needed to have what neighbouring rivals Cardwell and Bowen did not – good access to the hinterland with its pastoralists and gold mines (Port Denison Times 9th November 1867, Griffin 1983). Hervey's Range Road was built by Melton Black with the help of a government subsidy and opened in late 1865 (Viator 1933:77, Port Denison Times 12th August 1865:1). The road travelled west from Townsville, climbed and crossed the steep Hervey's Range at Thornton's Gap, then continued inland to the small township of Dalrymple on the upper bank of the Burdekin River approximately 73 miles (118km) away (Pugh 1870:258). In 1869 the government erected a much maligned toll gate on the road at Thornton's Gap (Cleveland Bay Express and Cardwell Advertiser 4th January 1868), but this was forced to close in 1871 after a boycott of the road by local carriers (Ross 1868). This journey inland using bullock drays, which could only cover about 10-12 miles (17km) a day, would have taken several days with additional time and double-banking of bullocks needed to negotiate the steep and dangerous climb over the Range (Corfield 1921:42-43, Carrington 1871:207). Small roadside hotels were thus built at strategic distances along the route to service the travellers and miners and they were an essential part of the road's and hence Townsville's early success. By 1867 there were five hotels between Townsville and Dalrymple: The Alice, The Bohle, The Range, The Eureka and Plum Tree Creek. These hotels were a social hub for neighbours and provided alcohol, accommodation, meals and stabling for travellers and carriers.

John McNeill and his wife Isabella built and ran the blacksmith's shop associated with the Range Hotel, moving to the area in early 1866. Originally from the Paisley and Calton areas of Glasgow, Scotland, both had worked in the cotton industry, John as a cotton yarn twiner and Isabella as a cotton spinner, prior to their emigration to Australia with their two young children (General Register Office for Scotland 1861). Although the exact travel dates are unknown, they had arrived in the newly opened Kennedy District of North Queensland by July 1864, when John gained employment as a labourer and blacksmith at Bluff Downs station owned the Hann family (Hann 1975, Registrar-General 1866). By February 1866 a new blacksmith had been employed at the station (Hann 1975) and the McNeills had taken residence closer to Townsville along the newly constructed Hervey's Range Road close to the Range Hotel, which had recently been built by James Mead and his partner William Freer (Cleveland Bay Express and Northern Advertiser 22nd December 1866). The blacksmith's shop was offered for sale as a 'First-class opportunity' in 1868 (Cleveland Bay Express 14th March 1868), but it is not known whether a sale eventuated or not. However, the McNeills remained in the area with John working various jobs, including that of tollgate keeper at Thornton's Gap (Registrar-General 1869) and he may have continued at the blacksmith as needed if it remained unsold.

EXCAVATION WORK

Site Description

The gazetted camping reserve is a relatively flat area bordered on its western side by the steep Hervey's Range and traversed by a myriad of small rivers and creeks. As well as the remnants of the original road, which is now referred to as Page Road, the area is also transected to the south by the new Hervey Range Development Road, opened in 1975, and by a row of high voltage power lines. The main native vegetation is open woodland and includes a variety of Eucalyptus trees, including Iron Barks, along with Black spear grass, Kangaroo grass and Cocky apple (*Planchonia careya*). Also present, especially around the excavation area and cemetery, are introduced species such as Lantana and Agave. There are a number of small farms and houses in the area, although none are visible from the site itself.

Methodology

The first excavation work in the area, done essentially to determine the site's archaeological potential, was undertaken by JCU Honours students under the supervision of Dr Nigel Chang in 2008. This work, which uncovered a bottle dump, was part of the assessment undertaken for the site's listing on the Queensland Heritage Register. Field surveys were then carried out in an area about 800 metres to the east of the original excavation in a place previously identified by Hatte (2000) as a possible location for the Range Hotel. Here surface artefacts, such as fragments of glass, ceramic and metal, were

found intermingled with several clumps of non-native Agave plants and two surface stone features. The first feature consisted of two rows of stones, each only one stone wide and approximately 3–4m in length, running roughly parallel to each other 2m apart, whilst the second was a raised circular-looking stone arrangement covered in sand located at the end of one of the rows.

Excavation work in this area commenced in August 2010 under the supervision of Dr Nigel Chang and with help from JCU archaeology students. To gain as much information as possible about the nature of the stone features in the short time available for the work we excavated two trenches, designed to cut across both stone features and running at right angles to each other. The soil was removed in 1x1m squares using 5–20cm spits until a hard red layer was reached at a depth of 15–30cm. All of the excavated soil was sieved with any artefacts collected and bagged. The stones were left in-situ. In total sixteen squares were excavated and this was increased to thirty seven during a second excavation in May 2011, when most of the area between the initial trenches was removed to uncover the majority of the stone features.

Results

The excavations revealed two possible structures. The first was a raised platform made from large flat stones and measuring approximately 2x1.5m. It had been constructed on a slight slope and in order to make the platform level had been built up on the southern, western and eastern edges by at least three rows of stones which had now collapsed outwards (Figures 2 and 3).

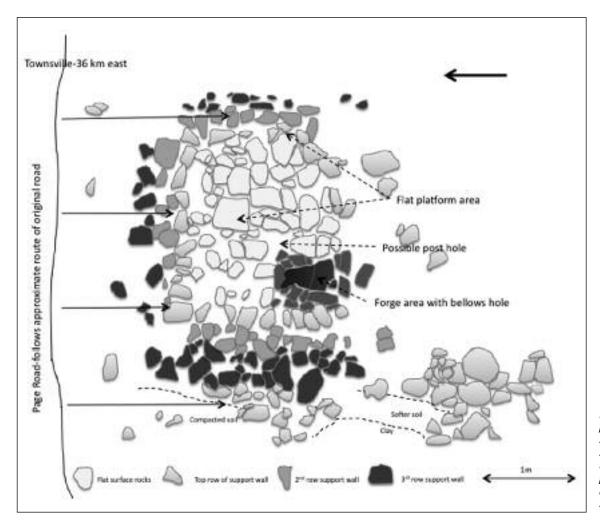


Figure 2: Sketch plan of site showing the first stone feature. This included a flat platform originally built up on three sides and a forge.



Figure 3: Looking north showing the platform to the right with the 'forge' to the southwest corner. A possible post hole can be seen to the top right of the forge.

A well-constructed stone 'forge' was revealed towards the southwest corner. This had a base made from one large flat rock, cracked into two pieces, which sloped down to a charcoal-filled hole at a depth of 20 centimetres. Multiple small metal fragments were also mixed in with the charcoal. The low walls surrounding this base were built up using

rectangular shaped stones so that they were higher than the platform. There was a second concentrated charcoal deposit at the front edge of this feature and there was a possible post hole to the top right of the forge (Figure 3).

The second stone feature (Figure 4) was located to the southwest of the platform and appeared to be composed of one



Figure 4: Looking south showing the layout of the whole site with the platform and forge to the front and the second stone feature in the upper right corner.

stone wall base with a second area of stones located about 2 metres to the west. These stones appeared to be more randomly arranged than those in the wall base and could have been the remnants of a collapsed wall or even an attempt to create a floor. Two post holes 1 metre apart were found about 50 centimetres away to the west, running parallel to these stones (not visible on the photograph).

Artefacts

The recovered artefacts were associated with both stone features and were categorised according to function: domestic/social, structural and commercial.

Table 1: Type, function and number of artefacts fragments found across the two stone features.

Artefact Type	Function	Number
Glass	Social/Alcohol	487
	Domestic	306
Ceramic	Domestic	60
Metal	Commercial	57
	Structural	60
	Other	13
Miscellaneous	Domestic	5

Unfortunately the majority of the fragments were too small for dating purposes and no makers marks were found on the ceramic pieces. Domestic items included variously patterned ceramic fragments from plates and bowls, the base of a small white vase and a delicate porcelain teacup handle. Lamp glass, glass from a jar, small fragments of blue glass, two buttons, a spoon fragment and a small piece of clay pipe were also found, as was a small, beautifully crafted, gold pendant (9 or 14 carat).

Alcohol related items included a complete green bottle neck with applied ring finish (dated from the 1880s to the mid-20th century), thick black glass from bottle bases and finishes



Figure 5: A small gold pendant.

and many other small fragments varying in colour from light to dark green. Structural items such as roofing nails were found around both features, whilst work related items including horseshoe nails, metal fragments, charcoal and two joined metal rings were discovered around the forge area.

DISCUSSION

The excavation exposed two separate, but related stone features, which appear to be part of John McNeill's blacksmith shop mentioned in the archival records. Although the site has probably not been completely uncovered and very little of the shop's structure now remains, knowing its function, location and the early history of Townsville provides enough evidence to attempt a comparison to Light's (1984) classic criteria. Any differences to this will be assessed to see if Hyett's (2002:95) explanations are also applicable here or whether other factors can be postulated.

Townsville was only just becoming established in 1866 and was an arduous three or four days journey away by bullock dray, meaning that supplies, such as glass for windows or bricks for the forge, chimney and walls would have been hard to come by and expensive to transport. In fact up until 1868 the majority of buildings in and around Townsville were constructed of weatherboard with bush timber and bark shingles as bricks had to be imported from the south until 1870 when the first brickworks opened in Townsville. Even though brick buildings appeared a year later in 1871, they remained very much in the minority until the end of the century (Sumner 1978:15, Gibson-Wilde 1984:45, Gray 1868: 15, Sundowner 1954:7). Thus, as also concluded by Hyett (2002) locally available material would have had to suffice for the construction of both the building and the forge.

The work area(s)

The structure for the work area and forge is located alongside Page Road, which is believed to follow the route of the original Hervey's Range Road. The likely structure of the blacksmith's shop would have been simple and could have been composed of a half wall of stones and/or wood with wooden shutters and a shingle or later metal roof. There is no evidence for a chimney to take the smoke and fumes out of the building, but a simple open nature to the building and the use of charcoal as a fuel would negate the need for both this and for windows as additional ventilation in the tropical heat. The forge itself was constructed of shaped rocks and originally the sides may have been built higher. A grate/fuel container would have been put across the top onto which charcoal was placed and burnt. The bellows used to increase the heat would be inserted into the opening below the grate. Rusted, metal fragments, small curved pieces of metal and horseshoe nails were found around and on the platform, whilst other metal fragments were mixed in with charcoal located in the forge.

The flat platform of stones would have provided a stable, level area on which to work and created a solid support for the quenching tub and anvil. The anvil was likely mounted on a large block of Australian hardwood (Hyett 2002:93-94), which may or may not have been secured into the ground (possibly into the post hole located in the platform – see Figure 3). There is no remaining evidence for the bellows or the work benches and it is likely that all movable equipment was removed and recycled once the blacksmiths closed down and the Range Hotel was abandoned in the mid-1880s.

The second stone feature could have been another work area for larger work, such as repairs to drays or shoeing of animals. The rough jumbled base of rocks could have provided a dry, firm foundation for heavier items or for animals to stand on. This would have avoided overly damaging the ground through repeated use and reduced the risk of the area becoming a quagmire in the wet season. There is evidence for at least two post holes to the western edge, which could have been either structural or used for tethering animals.

Domestic area

Alcohol-related glass fragments were found across both stone structures, whilst ceramic fragments from cups, plates and bowls were particularly evident around the forge. A small piece of clay pipe was also found to the eastern side of the stone platform. However, other definitely domestic items were also located in and around the second stone feature: ceramics, a spoon, two buttons, lamp glass, blue glass, and a small piece of gold jewellery. The distribution of artefacts seems to indicate that social activity was an integral part of the shop's activities, but does not point to a dedicated domestic area. These findings are similar to those described by De Vore (1990:12), but differ from Hyett's Strathbogie shop, which had no evidence of any domestic area.

Storage and refuse areas

No evidence was found in the excavated area for any type of storage area. However, pieces of metal artefacts and bits of broken ceramic found on the ground on the opposite side of Page Road, point to a possible location for the refuse dump.

CONCLUSIONS

This study would seem to support Hyett's assertions that blacksmith shops varied more widely than Light's criteria suggest. However, although it seems that the availability of local materials, transportation costs and economic constraints were important determining factors in how early Australian blacksmiths were designed, this study also highlights other possibilities that may have had an impact upon their layout: the main function of the shop; its distance from the nearest town; and the background and experience of the blacksmith.

John McNeill's blacksmith shop was built at about the same time as the Range Hotel in early 1866 to service the local carriers, travellers and pastoralists of the new Kennedy District, North Queensland. In order to establish Townsville as the primary port for the area a road inland, passable by bullock drays, was an essential requirement. Hotels and camping grounds fulfilled the accommodation and social requirements for people, whilst the associated blacksmith shop provided a farrier service and could also cater for emergency repairs to wagons, bridles, drays and other equipment. The blacksmiths in these road side locations, which were often several days travel from the closest town, were unlikely to be doing intricate iron work, lock smithing or making household objects or tools from scratch; local customers did not need this type of work and both supplies and the finished products would be difficult and expensive to transport to and from town. Thus the shop would need a work area with a small forge with another area set aside for larger repair work to drays. A separate domestic area was unlikely to be needed if a hotel was located close by, although with a drink in hand men may well have stood around whilst the smith worked, catching up on the local news or gossip.

The experience of the blacksmith may also have dictated both the layout and size of the shop as well as where he chose to work. If properly apprenticed with a wide range of skills a blacksmith was an important member of the community, but to use his skills to the fullest he would have needed to be in a town, close to both suppliers and customers. A less skilled operator, such as John McNeill with his background in the cotton industry of Glasgow, may have been unable to cope with the competition in the towns and thus may have chosen to work in a more remote location performing a necessary, but more limited variety of work. The fact that he tried to sell the shop just as the toll gate was established and boycotts of the road were being organised, gives added weight to the idea that his customer base was heavily reliant on the passing carriers and that his income was threatened by developments beyond his control.

This work adds weight to Hyett's conclusions that further research is needed before any definitive criteria can be established for early blacksmith's shops in Australia. The location of the shop and its customer base would seem to play an integral part in determining how the shop was designed and functioned. Even for 'stand-alone blacksmiths' it may be more appropriate to see the shop as being part of a community complex, intricately connected to and affected by both its neighbouring businesses and customers.

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REFERENCES

- CARRINGTON, G. 1871 Colonial Adventures and Experiences by a University Man, London, Bell and Dalby, London.
- CLEVELAND BAY EXPRESS 1868 'First-Class Opportunity', *The Cleveland Bay Express*, 14th March 1868.
- CLEVELAND BAY EXPRESS AND CARDWELL ADVERTISER. 1868 'Turnpike Regulations to Be at the Gates Established at Thornton's Gap', Cleveland Bay Express and Cardwell Advertiser, 4th January 1868.
- CLEVELAND BAY EXPRESS AND NORTHERN ADVERTISER. 1866 'Notice', Cleveland Bay Express and Northern Advertiser, 22nd December 1868.
- CORFIELD, W.H. 1921 Reminiscences of Queensland 1862–1899, Brisbane, A.H. Frater, Brisbane.
- DE VORE, S.L. 1990 'Fur Trade Era Blacksmith Shops at Fort Union Trading Post National Historic Site, North Dakota'. *Historical Archaeology*, 24 (3):1-23.
- ENVIRONMENTAL PROTECTION AGENCY 2009. Range Hotel, Burial Ground and Camping Reserve. *In:* Queensland Heritage Register (ed.). The Queensland Government.
- FOGGO, C. 1990 *Inns and Hotels, 1825–1900: Some Hunter Valley Innkeepers*, Sydney, Harfield Publications.
- GENERAL REGISTER OFFICE FOR SCOTLAND. 1861. Parish: Glasgow St John: ED: 18; Page: 3; Lines 1 & 2; Roll: CSSCT1861_100. 1861 Scottish Census [Online]. Edinburgh: Ancestry.com. Operation Inc, 2006.

- GIBSON-WILDE, D. 1984. Gateway to a Golden Land: Townsville to 1884. Townsville: History Department James Cook University, Townsville.
- GRAY, L. 1868 'Diary of Journeys and Life in North Queensland 1868–1872'. *Queensland Heritage*, 1 (1):11-18.
- GRIFFIN, H. 1983. Frontier Town: The Early History of Townsville and Its Hinterland 1864–1884. BA Honours, James Cook University, Townsville.
- HANN, J. 1975 *Joseph Hann and Family: Settlement in North Qld*, Townsville, James Cook University, Townsville.
- HATTE, E. 2000. Addendum Report: A Cultural Heritage Assessment of a Realignment to a Proposed Optic Fibre Cable, Cable and Wireless Optus Project, Townsville to Hervey Range, North Queensland. Townsville: Northern Archaeology Consultancies Pty Ltd, Townsville.
- HYETT, J. 2002 'Variation on a Theme: The Archaeology of an Australian Blacksmith's Shop'. *Australasian Historical Archaeology*, 20:92-95.
- LIGHT, J.D. 1984 'The Archaeological Investigation of Blacksmith Shops'. *Industrial Archaeology*, 10 (1):55-68.
- PORT DENISON TIMES. 1865 'Opening of the Road to Cleveland Bay', *Port Denison Times*, 12th August 1865.
- PORT DENISON TIMES. 1867 'Cleveland Bay (from the Express)', *Port Denison Times*, Saturday 9th November.
- PUGH, T.P. 1870. Country Directory. *Pugh's Almanac*. Brisbane.
- REGISTRAR-GENERAL 1866. Queensland Birth Certificate

- 1866/149. Brisbane: Department of Births, Deaths and Marriages, Brisbane.
- REGISTRAR-GENERAL 1869. Queensland Birth Certificate 1869/2964. Brisbane: Department of Births, Deaths and Marriages, Brisbane.
- ROSS, W.A. 1868 'To the Editor of the Cleveland Bay Express', *Cleveland Bay Express* and *Cape River Mining News*, 30th May 1868.
- SCHACHT, I. 2010 'Towards a Thematic Research Framework for Australian Historical Archaeology'. *Australasian Historical Archaeology*, 28:61-76.
- SUMNER, R. 1978 'Urban and Social Geography. The Entrepot of North Queensland: Development of the Townsville Area to 1900', in D. Hopley (ed.) *Geographic Studies of the Townsville Area*. Townsville, James Cook University, pp. 115-120.
- SUNDOWNER. 1954 'Around the Camp Fire', *Townsville Daily Bulletin*, 18th May 1954.
- THOMPSON, J.M. 1872 'Reserve for Camping Ground on the Road from Townsville to Gilberton. At the Foot of Hervey's Range', *Queensland Government Gazette*, p. 810.
- VIATOR 1933. The Hervey Range Road (New Construction). *Cummins & Campbell's Monthly Magazine*. Townsville: R.C. Andison, Townsville.
- WRIGHT, C. 2003 Beyond the Ladies Lounge. Australia's Female Publicans, Carlton, Melbourne University Press, Carlton.

Notes on Contributors

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Susan Lampard completed her PhD, entitled 'Portonian Respectability', in 2005. Susan used three assemblages determine whether the working-class were demonstrating respectability through the material culture associated with dining, drinking, smoking, as well as with women and children. Since completing her studies Susan has worked for the NSW Heritage Office, and is currently employed by the consulting firm AECOM. She is also a Research Associate at Flinders University.

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