Confinement by isolation: convict mechanics and labour at Fort Dundas, Melville Island

CLAYTON FREDERICKSEN

In 1824 a military station, Fort Dundas, was formed on Melville Island in northern Australia. This represented the first attempt to establish a British presence in the northern part of the continent. Despite initial high hopes that it would become a permanent base, Fort Dundas lasted less than five years. For the duration of its brief existence this small and isolated military outpost relied on convict workers for the development and maintenance of basic infrastructure. This paper examines convict labour in the context of isolation and physical deprivation, and the resistance and social articulation that this engendered. The material manifestation of convict work is examined through evidence obtained by archaeological excavation of the site of the settlement's commissariat store. The proficiency of convict work at the store site is assessed by integrating archaeological and archival information. Comment is made on what the evidence may tell us of the level of convict craftsmanship, the competency of the control and organisation of work, and the nature of convict resistance and associated societal transformation.

INTRODUCTION

Between 1787 and 1852, 147,580 convicts were transported from Britain to New South Wales and Van Diemen's Land (Robson 1994: 4). While many were unskilled, a significant proportion were tradespeople. These convict mechanics represented a cross section of the trades in Britain at that time (Nicholas and Shergold 1988: 71) and were a valuable resource to the developing colony. A great portion of mechanics came to be employed by the Crown on public-works schemes—constructions that were intended to benefit the colony as a whole. They were gainfully engaged in the development of infrastructure, such as public buildings, roads, bridges and drainage works. One minor but nevertheless significant aspect of Crown employment was the use of mechanics as the backbone of the workforce in isolated military settlements. These were established in the 1820s and 1830s to pave the way for permanent occupation of newly opened or occupied regions of the continent. Occupation either took the form of penal stations, as at Moreton Bay, or outposts established for strategic or military reasons. The latter were most strongly promoted by the influential John Barrow, Second Secretary of the Admiralty. Barrow grasped the significance of geography and instigated a plan to ring Australia with military outposts, to ensure British dominion over the continent (Cameron 1985). These stations tended to be small. For example, Western Port in Victoria was established in 1826 by approximately 40 soldiers and convicts (Coutts 1986: 29), and in 1829 the complement of Fort Wellington in northern Australia stood at 37 soldiers and 42 civilians and 42 convicts (Mulvaney and Green 1992: 44). The strategic impetus for the founding of many military stations was often undertaken in ignorance of the economic viability of their situation. Although perhaps meeting the short-term military objective of denying a European rival a foothold in Australia, most failed to attract the traders and free settlers that the Crown hoped would pave the way for permanent habitation and relieve it of the financial burden of supporting such remote stations. In the absence of commercial interest the role of developing and maintaining these would-be forts remained with the convict labour force.

To an archaeologist concerned with examining structure, transformations and articulations of the convict system within the framework of colonial social order, military stations are ideal laboratory situations. Their sit
size, geographic isolation and brief occupancy means that fine-grained observation is possible of how the convict system operated and changed under conditions which, as Jim Allen (1973) first observed, saw the breakdown of social distinctions and the development of mutual interdependence. In this paper I examine convict labour against this backdrop of isolation and adaptation. The study is of the military settlement of Fort Dundas on Melville Island in northern Australia (Fig. 1).

**FORT DUNDAS**

On 17 February 1824, Earl Bathurst, British Secretary for War and the Colonies, conveyed the following message to the Lord Commissioners of the Admiralty:

My Lords, I am commanded to signify to you His Majesty's pleasure that a Ship of War should be dispatched without delay to the North West Coast of New Holland, for the purpose of taking formal possession, in the Name of His Majesty, of that part of the said Coast contained between the western Shore of Bathurst Island and the eastern side of Cobourg Peninsula, including the whole of Bathurst and Melville Islands, and the said Peninsula. (Historical Records of Australia, Series III, Vol. V: 759)

Bathurst's message included instructions for the establishment of a permanent settlement or settlements in the region. The impetus for this invasion originated from a heady brew of capitalist opportunism and imperialist ambition (for discussions see Cameron 1985; Marshall 1991). The force of capitalism came in the form of the East India Trade Committee of private traders, who could see the potential of a northern base would hold for circumventing Dutch and English East India Company regional trade monopolies. Committee members considered that a northern port would ultimately develop into a major entrepot, a 'second Singapore', attracting trade from throughout east Asia (Cameron 1985, 1989). The impetus from imperialism came in the form of John Barrow. Barrow was lukewarm over the commercial possibilities of a port in northern Australia but he saw that any such base would have great strategic importance in preventing an extension of Dutch and French influence in the region. Operating out of a northern port the British navy could maintain and strengthen its control over the sea lanes that connected Sydney with southern China and the islands of Indonesia and Singapore (Cameron 1989: 274).

On 24 August 1824, Captain James John Gordon Bremer, commander of His Majesty's Ship Tamar, sailed from Sydney for the northern coast of Australia, accompanied by the vessels Lady Nelson and Countess of Harcourt. Aboard was the founding population for the first British colonial outpost in the north. After assessing Cobourg Peninsula as unsuitable for settlement, Bremer arrived off Melville Island on 26 September 1824. Four days later he began construction of a settlement and fort on the western side of the island. The fort, and subsequently the settlement as a whole, was given the name Fort Dundas. On 17 November 1824, Bremer sailed for India, leaving Captain Marcus Barlow in command. Barlow was relieved by Major George Hargrave, who assumed command of the expedition, drawn from those whose time had nearly expired (HRA III, Vol. VI: 643-644). The inducement made to the convict community was the granting of a ticket-of-leave after 12 months service and good behaviour. This was no small offer as those in possession of a ticket-of-leave had the right to work for themselves and enjoyed freedom of movement, albeit within a prescribed region. For those on the expedition the prescribed region was Melville Island (HRA III, Vol. VI: 724). A ticket-of-leave constituted the next best thing to a pardon, although the ticket holder remained a convict and was kept under the scrutiny of the bench of magistrates (Dyster 1988: 130).

The Governor of New South Wales, Sir Thomas Brisbane, envisaged sending approximately 50 convicts to accompany the expedition, drawn from those whose time had nearly expired (HRA III, Vol. VI: 765). Convicts in the early 1800s depended for advancement on acquaintances and patronage and consequently most were reluctant to voluntarily leave Sydney and their personal networks, for remote regions (Karskens 1997: 166). Requesting volunteers from those whose time of imprisonment was nearing an end therefore seems a little curious. Nevertheless more than 40 convicts did volunteer, and many possessed skills essential for a new settlement. A list of Fort Dundas convicts compiled in 1826, and annotated thereafter, is shown in Table 1. All were sentenced between 1808 and 1824, and most (almost 70 percent) during the comparatively lenient reign of Governor Macquarie. Most convicts are shown in possession of a trade. Those in the construction industry figure prominently. Carpenters and sawyers comprised 15 percent of the work force (ten people). Stonemasons, brickmakers and bricklayers were also prominent, making up ten percent of the workers (seven people). Also involved in construction were three plasterers, two nail-makers, two cabinetmakers, one painter and glazier, and one plumber and glazier. Associated workers

**CONVICT LABOUR**

Throughout the short life of Fort Dundas the convict population provided the mainstay of the labour force, both skilled and unskilled. Importantly, those accompanying the expedition to Melville Island in 1824 were all volunteers. Convicts could not be forcibly transported to northern Australia for the simple legalistic reason that at that time the north lay outside the jurisdiction of the government of New South Wales, which was limited in the west to the 135th meridian of longitude. This situation existed until July 1825, when jurisdiction was extended 6° westward to include Cobourg Peninsula and Melville Island (Fig. 1). Consequently, when Captain Bremer sailed from Sydney in August 1824, he was accompanied by personnel who, with the exception of the soldiers and marines, were all making the journey of their own free will.

Bremer's expedition consisted of approximately 100 personnel. They included 27 Royal Marines and 24 troops of the 3rd Regiment of Foot; an Assistant Surgeon, three commissariat officers and a similar number of free mechanics; and between 41 and 45 convicts (contradictory figures are given—see Campbell 1834: 132; HRA III, Vol. V: 768, 789). The small number of free mechanics attracted to the expedition must have been a disappointment. Advertisements had been placed in New South Wales newspapers promising that any skilled free men who volunteered would have:

> Passage and Provisions found them by the Government, and be allowed Rations for six months after their arrival, provided for the half of that period they devote their Services to the Crown. (HRA III, Vol. VI: 643)

The three who were tempted were Henry Feathers (bricklayer), William Potter (nail-maker and blacksmith) and Edward Chapman (sawyer; HRA III, Vol. VI: 643–644). The inducement made to the convict community was the granting of a ticket-of-leave after 12 months service and good behaviour. This was no small offer as those in possession of a ticket-of-leave had the right to work for themselves and enjoyed freedom of movement, albeit within a prescribed region. For those on the expedition the prescribed region was Melville Island (HRA III, Vol. VI: 724). A ticket-of-leave constituted the next best thing to a pardon, although the ticket holder remained a convict and was kept under the scrutiny of the bench of magistrates (Dyster 1988: 130).

The Governor of New South Wales, Sir Thomas Brisbane, envisaged sending approximately 50 convicts to accompany the expedition, drawn from those whose time had nearly expired (HRA III, Vol. VI: 765). Convicts in the early 1800s depended for advancement on acquaintances and patronage and consequently most were reluctant to voluntarily leave Sydney, and their personal networks, for remote regions (Karskens 1997: 166). Requesting volunteers from those whose time of imprisonment was nearing an end therefore seems a little curious. Nevertheless more than 40 convicts did volunteer, and many possessed skills essential for a new settlement. A list of Fort Dundas convicts compiled in 1826, and annotated thereafter, is shown in Table 1. All were sentenced between 1808 and 1824, and most (almost 70 percent) during the comparatively lenient reign of Governor Macquarie. Most convicts are shown in possession of a trade. Those in the construction industry figure prominently. Carpenters and sawyers comprised 15 percent of the work force (ten people). Stonemasons, brickmakers and bricklayers were also prominent, making up ten percent of the workers (seven people). Also involved in construction were three plasterers, two nail-makers, two cabinetmakers, one painter and glazier, and one plumber and glazier. Associated workers

49
Table 1. Occupations of convicts at Fort Dundas (Source: Letter from Captain Barlow to Colonial Secretary's Office, 7 April 1825; State Records NSW)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of convicts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenter</td>
<td>5</td>
</tr>
<tr>
<td>Sawyer</td>
<td>5</td>
</tr>
<tr>
<td>Cooper</td>
<td>4</td>
</tr>
<tr>
<td>Labourer</td>
<td>4</td>
</tr>
<tr>
<td>Plasterer</td>
<td>3</td>
</tr>
<tr>
<td>Shoemaker</td>
<td>3</td>
</tr>
<tr>
<td>Stonemason</td>
<td>3</td>
</tr>
<tr>
<td>Tailor</td>
<td>3</td>
</tr>
<tr>
<td>Baker</td>
<td>2</td>
</tr>
<tr>
<td>Blacksmith</td>
<td>2</td>
</tr>
<tr>
<td>Bricklayer</td>
<td>2</td>
</tr>
<tr>
<td>Brickmaker</td>
<td>2</td>
</tr>
<tr>
<td>Cabinetmaker</td>
<td>2</td>
</tr>
<tr>
<td>Errand boy</td>
<td>2</td>
</tr>
<tr>
<td>Gardener</td>
<td>2</td>
</tr>
<tr>
<td>Tailor</td>
<td>2</td>
</tr>
<tr>
<td>Servant</td>
<td>2</td>
</tr>
<tr>
<td>Bandsman</td>
<td>1</td>
</tr>
<tr>
<td>Boatbuilder</td>
<td>1</td>
</tr>
<tr>
<td>Chalmaker</td>
<td>1</td>
</tr>
<tr>
<td>Collier &amp; Thief</td>
<td>1</td>
</tr>
<tr>
<td>Cook</td>
<td>1</td>
</tr>
<tr>
<td>Dyer &amp; Thief</td>
<td>1</td>
</tr>
<tr>
<td>Groom</td>
<td>1</td>
</tr>
<tr>
<td>Gunmaker</td>
<td>1</td>
</tr>
<tr>
<td>Horse shoer</td>
<td>1</td>
</tr>
<tr>
<td>Painter and glazier</td>
<td>1</td>
</tr>
<tr>
<td>Plumber and glazier</td>
<td>1</td>
</tr>
<tr>
<td>Ship's steward</td>
<td>1</td>
</tr>
<tr>
<td>Waggoner</td>
<td>1</td>
</tr>
<tr>
<td>Occupation illegible</td>
<td>6</td>
</tr>
</tbody>
</table>

included four cooper, one chairmaker and one boatbuilder. In total, 48 percent of convict workers (32 individuals) residing at Fort Dundas in April 1825 possessed skills that were in some way connected with construction. This figure may actually be higher, as six occupations are illegible on the surviving record.

The remaining 52 percent of convict workers were either unskilled (four labourers, two errand boys and two servants) or represented a range of skilled trades. Undoubtedly some of the latter would have proven useful at Fort Dundas (blacksmith, gardener, baker, cook, gunmaker), but others must have been surplus to requirements (groom, bandsman, dyer, ship's steward). These individuals were no doubt employed as general labourers or perhaps servants to the officers.

In the only detailed study of convict labour at Fort Dundas, the historian Hazel Marshall has assembled evidence of 82 convicts in the settlement over its four-and-a-half year existence (Marshall 1991: 34). As might be expected, the majority of convicts were men, but the presence of at least two women is also recorded. One was an assigned housemaid of the Walker family which, owing to gross disobedience of the Commandant's instructions in 1828, was ordered to disembark from a visiting vessel. The other obtained permission to accompany her convict husband (the gardener John Richardson) to Melville Island. Thirteen of the 80 male prisoners were of African descent, of whom ten had migrated to Britain from their places of birth in North America or the Caribbean (Marshall 1991: 35). All appear in the 1826 census shown in Table 1. These individuals were in the main domestic servants or labourers. However, included among their number were four with special skills: a bandsman (Nicholas Battis), a cook (Thomas Williams), a tailor (James Kelly) and a plasterer (Robert Kitt). The presence of a large minority of convicts of non-European extraction probably reflects a deliberate policy on the part of the British government. Many Europeans at the time thought individuals of African descent were better adapted than whites to working and living in a tropical climate.

We have little information on the socioeconomic background of convicts at Fort Dundas. Doubtless the majority, if not all, were drawn from the 'lower orders', judging by their listed professions. Most would have possessed little formal education. In June 1828 Captain Hartley complained to Colonial Secretary Macleay of the urgent need for a clerk as:

...there is no individual either amongst the military or prison population of our little community capable of writing or making out ordinary returns even with moderate accuracy... (HRA III, Vol. VI: 732)

However some convicts were certainly literate. Hartley received a clerk in the form of William Lockwood, a prisoner of the Crown (HRA III, Vol. VI: 734). Another convict, the black cook Thomas Williams, was sufficiently literate, or had an advocate with requisite writing skills, to compose a letter to Sydney outlining an administrative error that had led to a lengthening of his sentence (HRA III, Vol. VI: 657). The same prisoner also penned a request to Sydney for a ticket-of-leave (HRA III, Vol. VI: 735). These examples show that some members of the convict population had had at least a rudimentary education, which corroborates the observation of Nicholas and Shergold (1988: 75) that three-quarters of English convict workers could read, or read and write.

**WORKING CONDITIONS OF CONVICTS**

**Organisation**

In Australia convict work gangs were initially guarded by troops, but soldiers were reluctant to act as supervisors and resisted this imposition (Nicholas 1988: 156). A system of ticket-of-leave men was therefore devised to appoint a convict of reliable disposition usually a mechanic, to the position of overseer. The overseer was essential in maintaining discipline and ensuring work was carried out proficiently. The essential role played by the person at Fort Dundas is evidenced by Major Campbell's urgent request to Sydney in June 1827 for an alternative for the overseer, who was an alcoholic for whom Campbell could find no reliable replacement among the settlement's population (HRA III, Vol. VI: 695). The request was evidently ignored for in May 1828 Major Hartley submitted the simplest of all requests (HRA III, Vol. VI: 720). In the hierarchy of convict workers the ticket-of-leave men were beneath the overseer while prisoners without tickets were at the bottom. Half-way through his period of command, in August 1825, Captain Barlow granted convicts their ticket-of-leave with 'very few exceptions' (HRA III, Vol. VI: 652). These exceptions were in the form of 17 convicts who had arrived on the ship Phoebe Dundas in February 1825 (HRA III, Vol. VI: 807). The decision undoubtedly set up an imbalance in the structure of the work hierarchy, making Major Campbell's subsequent formalisation of labour practices rather difficult to implement. Under Campbell, ticket-of-leave men monitored the work of individual projects, while the overseer was maintained in an overall supervisory capacity. Hence monies earned by convicts on government projects were dispensed to ticket-of-leave prisoners, who then paid ordinary prisoners according to the amount of surplus work they had undertaken (HRA III, Vol. VI: 674). This payment was overseen by the Regimental Engineer, no doubt to prevent any partiality or extent (HRA III, Vol. VI: 674).

Little information exists on the composition of work gangs at Fort Dundas. Elsewhere in Australia craft-specialised gangs
could be large—sawyers teams could be 24 men, bricklayers employed in groups of 5–10, and a blacksmith's workshop consisted of up to 45 men (Nicholas 1988: 159). At Fort Dundas work gangs must have been much smaller, perhaps comprising only a couple of individuals in the instance of some trades. The small numbers of convicts specialising in particular skills posed a major problem. When mechanics fell ill or were granted a return to Sydney the settlement's administration was always faced with the difficulty of replacing them. This surfaced as early as the wet season of 1824–1825 when Captain Barlow had so many ill convicts that he was forced to employ those soldiers who had requisite skills as sawyers, nail-makers and brick makers (HRA III, Vol. VI: 646). By 1828 the labour shortage was grave. Major Hartley remarked in a letter to Colonial Secretary Macleay on 30 September 1828 (HRA III, Vol. VI: 763) that he lacked the personnel required to carry out any construction whatsoever, pointing to an absence of free mechanics and a paucity of skilled convict labour.

The second commandant, Major Campbell, codified the amount of work to be undertaken by convicts. A prisoner without a ticket-of-leave employed as a sawyer was expected to produce between 200 and 250 feet of timber per week (depending on the wood; HRA III, Vol. VI: 674). By comparison the quota for a team of convict sawyers in New South Wales in 1828 was 750 feet of timber per week (Nicholas 1988: 159) or 375 feet each person. Production at Fort Dundas was therefore less than demanded elsewhere. Other regulations by Campbell (HRA III, Vol. VI: 675–676) set daily quotas for the number of slabs produced by a pair of convict slab splitters (60), posts morticed by each man (40), and post fence panels prepared by a two-man team (13), fence posts and slabs to be carried by two men (140 slabs and 37 posts) and hand carts of earth to be filled and emptied by a free-man team (one every 30 minutes if a distance of one quarter of a mile was involved, one every 40 minutes for between one-quarter and one-half a mile, and an additional ten minutes for every additional quarter mile). Clearly, monitoring will have involved considerable effort and personnel in itself.

The daily routine of convict work was also highly organised. In his 'Local Regulation for Workmen' of October 1826 (HRA III, Vol. VI: 673–674), Campbell regulated working hours as from sunrise to 8.00 a.m., from 8.30 a.m. to 11.00 a.m., and from 3.00 p.m. to sunset. By comparison convicts elsewhere in New South Wales at this time laboured from sunrise to sunset in summertime and from 8.00 a.m. to sunset in winter (Nicholas 1988: 187). Thus at Fort Dundas a dispensation was given for the climate and the hottest hours of the day were avoided. Prisoners were expected to work only in dry weather, continuing the regulation set by Captain Barlow (HRA III, Vol. VI: 649). This may have been of much comfort to convict workers however as the northern Australian wet season the inter-rain period of the day is when conditions are at their most humid and demanding.

Allowances
The authorities at Fort Dundas, as elsewhere in the colonies, dispensed regular payments to prisoners in return for their labour. Payments were in the form of both money and commodities. At Fort Dundas the frequency of payment varied between commandants. Under Captain Barlow payment was dispensed according to a quarterly system. Six months' worth of commodities was distributed to every convict in each of the first and third quarters of the year, but no cash payment was made in these months. Payment was restricted to the second and fourth quarters, for which convicts had two options. They could choose to receive two shillings a day, part of which could be used for the purchase of food and other items from the commissariat store. Alternatively, convicts had the option of receiving payment of only one shilling a day but with the addition of a daily quota of rations and commodities (HRA III, Vol. VI: 665).

Upon taking command Major Campbell enacted changes that saw ticket-of-leave prisoners provided with rations every day of the year, plus one shilling a day on days when they were engaged in government work. On those days when they were not so employed Campbell charged them one shilling a day for their rations (HRA III, Vol. VI: 665). This was obviously a more equitable system as the failure to develop productive gardens (Calley 1998: 22ff) meant that commissariat rations were often the only source of sustenance available. Ticket-of-leave men were employed by Campbell on a three-monthly basis, contrasting the agreement with free men, who were contracted on a weekly basis (HRA III, Vol. VI: 674). The wages for these two groups appears to have been the same, certainly when they were employed as sawyers (HRA III, Vol. VI 674). Ordinary convicts engaged as sawyers were paid half that of ticket-of-leave and free men, but only then after achieving their allotted production quota (HRA III, Vol. VI: 674).

Unlike the situation in other settlements, ticket-of-leave men at Fort Dundas were not afforded an opportunity to supplement their government allowance with monies derived from private sources. The reason was that there was simply no industry or trade to which they might offer their labour and skills, other than grog smuggling. Indeed alcohol seems to have quickly become a form of illicit currency, with Captain Barlow complaining as early as May 1825 that the trader William Barnes was illegally and against instructions supplying alcohol to convicts in return for their labour (HRA III, Vol. VI: 649). The paucity of their income and hopelessness of their situation became a source of deep discontent among convicts.

CONVICT RESISTANCE
Fort Dundas' convict population quickly came to realise that obtaining a ticket-of-leave conveyed few advantages. The limited freedom they acquired meant nothing if they could not prosper. A return to Sydney, and consequent loss of a ticket-of-leave, was their only escape from harsh living conditions, widespread illness and Tiwi raids that characterised life in the settlement. The infrequency of shipping and the difficulty of replacing skilled labour meant this escape route was unlikely for most. For those who had not served their term the only prospect of leaving was either by special circumstance, such as informing on the illegal activities of fellow prisoners (HRA III, Vol. VI: 723), or as a result of life-threatening illness (HRA III, Vol. VI: 724). The latter was an ever-present possibility.

For much of the settlement's existence the population was in an exceedingly poor state of health. This was caused by a combination of unfamiliar tropical ailments and poor diet (Reid 1995). The failure of gardens and the infrequency of shipping meant malnutrition afflicted all, with scurvy particularly widespread at times. Hardest hit by sickness and disease was the convict population. This took hold as early as the wet season of 1824–1825. Between November 1824 and April 1825, 46 convicts were listed as ill at one time or another (HRA III, Vol. VI: 651). By May 1825 three prisoners had been lost to scurvy (HRA III, Vol. VI: 645). Sickness continued to take its toll, even under the comparatively competent management of Major Campbell. On 20 June 1828, Campbell requested that eight prisoners be shipped to Sydney on the recommendation of the settlement surgeon, who advised that seven would not last the next wet season (HRA III, Vol. VI: 723–724, 728). Barely five months after
taking up his command, the sickly Major Hartley made the melancholy observation that the settlement would 'only prove to British Subjects an infirmary for one portion of its population, a cemetery for the other' (HRA III, Vol. VI: 758).

In other circumstances absconding would have been the choice of many. However, there was little point in attempting, and even less chance of surviving, an overland escape. Records reveal one escape attempt by sea in April 1828, which was thwarted by informers who alerted Campbell to the location of the crude boat before it was completed (HRA III, Vol. VI: 747 ff). At least one escape attempt was made by stowing aboard a visiting ship (HRA III, Vol. VI: 727). Fort Dundas effectively became a prison without walls for the ticket-of-leave and other convicts. With no hope of advancing their situation, as the ticket-of-leave was designed to do, convicts turned to various forms of resistance.

**Forms of Resistance**

The historian Alan Atkinson (1979) has identified four types of convict protest in early colonial Australia: physical or verbal attacks, appeals to authority, the withdrawal of labour and the application of their own devised code of punishment for compensatory retribution. The first three are represented at Fort Dundas.

**Attacks**

Discipline and convict morale quickly deteriorated within the first few months of the settlement's establishment. No specific mention of physical attacks on officials is recorded but drunkenness and consequent disorderly conduct appear to have been common. For example, in 1827 the illegal landing and sale of alcohol from a visiting ship resulted in general drunkenness among the population (HRA III, Vol. VI: 697–698). Major Campbell apparently could not mete out punishment as, unsurprisingly, no one was willing to come forward to provide evidence (HRA III, Vol. VI: 698). Perhaps the most serious incident of alcohol-related violence occurred during the first six months of Major Hartley's command, toward the end of the life of the settlement. This took the form of a drunken melee by both convicts and soldiers in September 1828 that, in Hartley's words, 'soon converted the whole Settlement into one general scene of riot, tumult and intemperance' (HRA III, Vol. VI: 759). Hartley was less restrained in his punishment than his predecessors and subjected the offenders to 'floggings, imprisonment, suspension and deprivation of tickets of leave' (HRA III, Vol. VI: 759). No doubt commandants realised that overuse of flogging and consequent incapacitation would have been detrimental to the settlement, which relied so heavily on convict labour.

Instances of verbal attack occasionally appear in official records. For instance, in June 1827 John Richardson, the gardener, abused a sentry he accused of being placed to prevent him (Richardson) obtaining alcohol from a visiting vessel (HRA III, VI: 697–698). For this act of verbal abuse Richardson received no direct punishment. Instead his unfortunate wife had her permission to return to Sydney (HRA III, VI: 698). Richardson was the only gardener in the settlement, and dependence on his expertise may provide the explanation for this rather odd punishment by proxy.

**Appeals to authority**

Numerous petitions composed by, and on behalf of, convicts were sent to Sydney. These invariably outline some perceived injustice, accompanied by a plea to be relieved from the settlement. Petitions were forwarded as attachments to the settlement commandant's official correspondence (e.g. HRA III, Vol. VI: 657, 691) and were sometimes accompanied by a statement from the commandant himself. Commandants were also occasionally petitioned directly. For example, convicts shipped to the settlement aboard the Sir Philip Dundas in 1825 are recorded two years later formally requesting Major Campbell for a granting of their tickets-of-leave (HRA III, Vol. V: 807). Formal petitions were probably unnecessary for alerting commandants to the convicts' plight. Living in such close proximity to prisoners it would have been hard for commandants to escape notice of verbal expressions of discontent. Even Major Hartley, who spent much of his time bed-ridden, was not blind to the chorus of complaints writing in June 1828:

...those who have been longest on the island appear to be the most deeply tainted with discontent; they are perpetually indulging in the language of complaint and are constantly alluding to promises made, pledges given, and hopes excited on their originally volunteering to embark for this settlement; and they then point to their present situation and future expectations, and ask whether the former is not of great privation and suffering and the latter clouded with dismal dispondency [sic]... (HRA III, Vol. VI: 729)

Most appeals to authority were likely to have taken this route, and constitute one form of protest.

**Withdrawal of labour**

By the later years of the settlement's existence a reluctance to embrace government work had become widespread. In 1828 Hartley wrote of 'lanquor [sic], reluctance and sulky acquiescence' among the convict labour force (HRA III, Vol. VI: 730), with many 'indisposed to work for government' and preferring to instead subsist on the 'small boards' they had accumulated (HRA III, Vol. VI: 729). This is the first direct mention of a deliberate withholding of convict labour. But it's likely that withdrawal of labour was practised earlier, perhaps disguised as illness. While sickness was certainly prevalent in the settlement, as outlined above, it remains possible that some convict labourers exaggerated their sickness to avoid work, as well as to attempt to gain passage back to Sydney.

![Figure 2. Archaeological survey plan of the western part of the Fort Dundas settlement (Adapted from Crosby 1978).](image-url)
ARCHAEOLOGY OF CONVICT LABOUR

Convict labour at Fort Dundas was directed to public works projects. Today little remains as testimony to this labour, with the notable exception of the fort itself. Eleanor Crosby mapped this in 1975 and found a largely intact rectangular earthwork redoubt with perimeter defensive bank and ditch, and two prominent gun bastions on the western (seaward) side (Fig. 2). The eastern and western sides of the fort are approximately 70 m long, and the northern and southern sides about 55 m long (Crosby 1978: 11). From test excavation through a section of the ditch Crosby discovered that this feature was originally 3.5 m deep and that the exterior face of the rampart was lined with logs (Crosby 1978: 22-23). These bank and ditch dimensions closely match those given by contemporary commentators (Ennis 1825: 22; HRA III, Vol. V: 772). Six-hundred metres south-east of the fort are the only other clearly visible reminders of convict labour. Here the remains of three 50 cm thick walls testify to the former presence of a stone building, which Crosby allocated the code number S62 (Fig. 3). Their orientation and layout suggests an original building of 8 m by 6 m. The walls are of quarried stone that has rudimentary facing and, less frequently, shaping. The blocks have been mortared in place. An attempt at couring is evident, achieved by the addition of small pieces of stone to vertically align larger irregular blocks. The purpose of this building remains unknown. Suggested functions have included a church (Searcy 1909: 227) and a magazine or armory (Crosby 1978: 15).

Buildings and structures made for Crown purposes provide the evidence from which we might expect to glean information on the skill of convict workers and the effectiveness of the organisation of their labour (Karskens 1986). Toward the end of October 1824, work had commenced on a magazine (Ennis 1825: 17), while construction of the fort began on 3 October 1824 and was substantially complete by 21 October (Ennis 1825: 13-14). Erection of the fort and the S62 stone building involved a considerable degree of effort and organisation. Crosby (1978: 11) found less than a five-metre difference in the length of opposing ditches of the fort, a discrepancy that could be due to erosion over 150 years. More than 900 cubic metres of spoil was removed from the encircling ditch, an estimate based on the figures provided by Crosby (1978: 11, 22). Stone for the S62 building was probably obtained from the western edge of the settlement. A quarry was first identified here by Crosby (1978: 13), but re-examination by Colin De La Rue in 1999 uncovered a more likely site 150 m north of Crosby's original identified location. Here an access path has been hewn through outcropping stone and leads down to a level area displaying worked stone blocks in situ in the cliff face. To cart stone from the quarry to the S62 building would have involved traversing a distance of more than 700 m, or an approximately 1.5 km round trip. These projects relied on a convict labour force of not much more than 40. This is clearly an inadequate number for such large undertakings carried out over such a short period of time. Indeed, the labour shortage was so dire that convicts seem to have been supplemented with personnel drawn from the military detachments and the ships' crews (Ennis 1825: 13–14, 22). Yet, according to Ennis (1825: 13), work was carried out with 'wonderful celerity' in an atmosphere in which military and convicts alike laboured in racing to complete their allotted tasks. This is all the more remarkable because of the time of year in which construction took place. The annual 'build up' months before the December rains are extremely taxing for physical activity.

Commissariat Store

One of the first public buildings constructed was the commissariat storehouse. Work commenced on the store on 6 October 1824 (one week after the arrival of the expedition). An area measuring 60 feet long by 18 feet wide (18.3 m by 5.5 m) was laid out for construction (Ennis 1825: 13). At more than 1 000 square feet (100 m²) this seems large for a store in a pioneer military settlement. For example, Coutts (1983: 109) gives areas of only 288 and 528 square feet for the first storehouses in the contemporaneous settlement of Western Port in Victoria. Nevertheless, with an eye on Asian trade it is not implausible that an exceptionally large store was constructed at Fort Dundas. Alternatively two stores may have been constructed on the site, a possibility that is examined below. In early November the storehouse was brought into service with Miller, the senior Commissariat Officer, recording the transfer of upwards of 12 months supply of provisions from the Countess of Harcourt to the store (HRA III, Vol. V: 768). The building itself was made of heavy timber with a thatched roof (HRA III, Vol. V: 773). A watercolour of Fort Dundas executed more than 20 years after the settlement's abandonment, and hence probably a rendition of an earlier depiction, shows a building near the pier that may
be the commissariat storehouse (Fig. 4). It is illustrated as a large structure with a door at one end. In this depiction the building, if it is the store, is incorrectly oriented; the store was in fact positioned with its long axis parallel to the shoreline, as discussed below. The storehouse was apparently a rather temporary structure, with Captain Bremer observing that it would suffice until ‘a more regular and Substantial one can be built’ (HRA III, Vol. V: 773). It was probably severely damaged in mid-1827 by a cyclone that swept away the pine and unroofed all buildings in the settlement (HRA III, Vol. V: 803). After this event the store may have been reconstructed. It was certainly remodelled in early 1825, when...
soldiers constructed an addition to hold the 'wet provisions' (HRA Ill, Vol. VI: 649).

The only surviving contemporary plan of Fort Dundas is one compiled in April 1827 (Fig. 5). This depicts two buildings (marked 'A') near the shoreline, overlooking King Cove. The site is clearly identifiable today by a level terrace just above high water mark, 110 m north-west of the fort (Fig. 2). Terrace dimensions (7 m by 18 m) closely match the store measurements given by Ennis in 1824. The possibility of the existence of two structures on the terrace is raised by the 1821 plan. Although Crosby (1978: 10) dismissed this as unlikely, it cannot be altogether ruled out. We may be dealing with a storehouse and an ancillary store, perhaps in the form of the 1825 addition built to house the wet provisions.

Today a partially collapsed drystone retaining wall fronts the seaward side of the terrace. This is composed of irregularly sized stone blocks, most of which are roughly shaped. Some are water rounded and probably come from the tidal area but others are angular and were likely to have been transported from elsewhere. Ennis (1825: 22) commented that stone available for construction in the settlement was a 'soft sandstone' that was said to be easily cut into blocks of any size and which hardened after exposure to the sun. No doubt this was obtained from the quarry, approximately 150 m to the south. Numerous artefacts were surface collected by Crosby and in the vicinity of the terrace. Many were fragments of ceramic and glass, but in addition, a large number of pieces of roofing slate were retrieved along the tide line in front of the terrace and the vicinity of the nearby wharf site (Crosby 1978: 23). This may show that at some stage the original roof thatching of the store was replaced with slate.

Convict labour constructed the commissariat storehouse, and no doubt included individuals who possessed skills in the carpentry and brick and stone working trades (Table 1). It was an immensely important building as it afforded protection for the settlement's stores which, in the face of an almost entire absence of locally procurable foodstuffs and the long distance to supply ports, were vital for the survival of the population. Additionally, the store was built early in the settlement's history, before recorded sickness, despondency and ill-discipline had set in. For these reasons the design and construction of the commissariat store should be a good indicator of the expertise of the convict mechanics, as well as a barometer of the degree of organisation and control over the workforce by military authority. Moreover, information from the store site stands in comparison to the visible surface evidence of convict labour represented by the fort and the S62 building.

**Excavation of the Store Site**

In September 1999 a team from Northern Territory University excavated a sample area of the store site. Three localities on the terrace were selected for investigation, comprising an area of almost 15 m² (Fig. 6). Area A consisted of a 2 m by 3 m square, with a 0.5 m wide test trench extending perpendicular to the square. Areas B and C were 0.5 m wide trenches laid out along both edges of the store terrace. Their positioning was determined according to the terrace edges, identified by the presence of alignments of stone blocks visibly protruding through the soil and sand deposit that covered the site.

**Area A**

Excavation of Area A proceeded down to a layer of compacted cobbles comprising angular pieces of sandstone ranging in size from 5 cm to 15 cm (Fig. 7). This was obviously a floor that had been deliberately laid down and compacted to form a level surface. Between 5 cm and 10 cm of sandy soil, representing 175 years of deposition, overlaid the cobbled layer. A square cornerstone was identified in the
south-east corner of Area A. This is probably a rear corner of the storehouse but no evidence of a posthole or post footing was discovered. The method of supporting the storehouse was entirely different to that employed at Port Essington, where the store was constructed on high wooden piles later enclosed in stone foundations (Allen 1969: 66). One possible explanation for the absence of postholes or foundations in Area A is that posts, rather than being dug into the ground, were positioned on wooden plates. At least one store at Western Port was constructed in this manner (Coutts 1983: 109). It does seem however an unlikely solution for tropical Australia, where a combination of climate and white ants cause rapid deterioration of most timber (although Crosby [1978: 21] describes the preservation of ironwood logs in the ramparts of the fort).

A channel 5–10 cm deep was identified along the southern (upslope) edge of the terrace, immediately outside the cobble floor layer. The channel was difficult to detect, in places identifiable only by a discoloured band of grey sediment. The presence of a large amount of broken bottle glass (predominantly case gin) provided the main evidence of this feature. This discoloured band had the highest density of glass of anywhere in Area A. It seems likely that bottles accidentally broken inside the storehouse were swept to the rear of the structure, where pieces accumulated against the inside back wall. After destruction or removal of the store in 1829 all that remained was a glass-filled channel, which perhaps represents a shallow bedding trench for the timber cladding of the rear wall.

Areas B and C

Excavation of Areas B and C proceeded by carefully spading out 0.5 m wide trenches to remove sandy sediment that had built up against the sides of the store terrace. This exposed two drystone retaining walls (Figs. 8 and 9). No stratigraphy was evident, and artefacts were recovered at the level of the base of both retaining walls. The two walls were in remarkably good condition (no doubt due to their burial). However, some disturbance had occurred since Crosby’s survey, most notably in Area C where bulldozing for an unknown purpose had displaced some of the top course of stones. (This activity had also moved and partially buried one of Crosby’s survey pegs.) Owing to sloping topography the number of courses and hence height of each wall varied. Two to three courses were present, with walls attaining a maximum height of 70 cm at the seaward end. Unlike the house walls in the later Port Essington settlement (Allen 1969: 47), stone blocks were not set into the ground but instead rested upon the natural ground surface. Footings, which are normally wider than the overlying stones, were not found. The method of construction was similar to that employed on the walls of S62, major differences being that stones were less uniformly dressed and mortar had not been used. Similarities in construction include the use of shaped blocks, and jointing and coursing achieved by adding smaller stone pieces to level and align large blocks. Generally, the blocks themselves were of a relatively standard size, no doubt easily formed during quarrying and splitting the internally soft sandstone that characterises Melville Island. Most blocks were 30–40 cm long, 10–20 cm thick and 10–20 cm deep. The maximum size was approximately 50 cm long by 20 cm thick by 20 cm deep.

The reason for construction of drystone walling on the front and either side of the terrace was to retain spoil that had been deposited to level out the natural slope of the terrain in this part of the settlement. Deposited spoil consisted of broken sandstone basement rock rammed and intermixed with sandy soil and sandstone fragments. No stratigraphic evidence was found for excavation into the hillside, so the source of the

---

Figure 8. Area B drystone retaining wall exposed in trench section.

Figure 9. Area C drystone retaining wall exposed in trench section.
Artefacts

Table 2 sets out the number of artefacts recovered from each excavation area. Most were found on and immediately above the cobbled floor of Area A and in Areas B and C at the same level as the bottom course of stone of the retaining walls. Numerically most artefacts were from Area A, a sector of the excavation that possessed an unusually dense concentration of broken glass. Glass here and in Areas B and C was mainly derived from dark-green bottles. A large percentage of this is from case-gin bottles, of which necks and square bases were found. Other bottle glass is amber, light green and clear. The amber is intrusive, modern beer-bottle glass, testimony to continued use of the locality by recreational fishermen. A small proportion of glass, although unidentifiable, is from vessels other than bottles. Some pieces may be window glass.

As described above, many glass fragments from Area A were associated with what is likely to have been the rear wall of the store. Much glass had been subjected to intense heat, as evidence by partial melting and discolouration. Bush fires go through the settlement site nearly every second year but it remains problematic whether they could account for the extreme molten state exhibited by glass pieces. However, this may have occurred if for some reason an unusually high fuel load accumulated over a number of years, leading to an intensely hot fire in one season. Alternatively, deliberate burning of the store upon abandonment of the settlement in 1829 may have caused this pattern, although we lack archival evidence of destruction in this or any other manner.

Nail fragments were the second-most common find. These constitute the predominant artefact type in Areas B and C. Nails are of various forms. Iron ones, some of which are in a remarkable state of preservation, are all square to rectangular in section. Some have been pre-stamped from sheet but others have hammering on the head and were probably hand made in the settlement from imported nail rod (see Wells 1998: 82). This was the duty of a nail-maker, two of whom were listed among the convict mechanics (Table 1). Some fragments are too large to be simply described as nails and should be more properly classified as spikes. Their use would have been in holding together large pieces of timber framing. Copper nails, normally used in boatbuilding, were restricted to Area B. Some are unused. They may have been lost or discarded during construction on this sector of the storehouse.

The relatively small numbers of other artefacts include barrel-hoop iron, clay-pipe pieces, ceramic sherds and small metal items (of which the only diagnostic pieces are two perforated diamond shaped pieces and a small brass barrel with internal thread). Slate was rare in the excavated areas. If used as a roofing material, this paucity is unusual. One explanation is that most was removed in 1829 for use at Fort Wellington.

Table 2. List of artefacts recovered from excavation of the store site, 1999

<table>
<thead>
<tr>
<th>Artefact Type</th>
<th>Area A</th>
<th>Area B</th>
<th>Area C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous nail fragments</td>
<td>162</td>
<td>250</td>
<td>60</td>
</tr>
<tr>
<td>Copper nails</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrous misc.</td>
<td>16</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Copper misc.</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Brass misc.</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lead misc.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Glass fragments</td>
<td>737</td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td>Porcelain fragments</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stoneware fragments</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Clay pipe fragments</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>924</strong></td>
<td><strong>318</strong></td>
<td><strong>116</strong></td>
</tr>
</tbody>
</table>
Construction of the store terrace would have involved both skilled and unskilled convict labour: unskilled labour to lay and compact spoil and transport stone blocks from the quarry, and skilled labour to quarry stone. Only semi-skilled labour was used to lay the drystone retaining walls, based on evidence of the wall construction. Similar techniques of coursing and block preparation were applied to the store and the S62 building. These regularities in design suggest that the same convict worker, or workers (three ‘stonemasons’ accompanied the expedition, see Table 1), was involved in constructing the terrace and S62. The stone walls of both exhibit a knowledge of stoneworking that produced walls similar to those described by Karskens (1986: 23) as Type 2a, i.e. walls composed of roughly squared stones with some attempt at coursing and joining. Evidence from both the store terrace and S62 reflect that some convicts transported to Fort Dundas in 1824 and identified as stonemasons held at least a rudimentary knowledge of this craft. Significantly, this knowledge is not evident in the later addition of an apron or ramp to the north-eastern side of the terrace, for which no walling was attempted.

The architecture of the structure, or structures, built on the terrace remains largely unknown. It was certainly wooden and probably manufactured from local materials. The only record of prefabricated buildings shipped to Fort Dundas is of two houses for the officers (Ennis 1825: 13). Store construction consequently would have involved the labour of convict sawyers, as well as carpenters. Sawn-timber production required a great deal of effort, owing to the resiliency of the wood of many Melville Island tree species. Those that were used for timber scantling included Eucalyptus, Acacia (‘Teak’ and ‘Blood Wood’), Eugenia (‘Swamp Ash’) and Callitris (Blue Gum; Calhoun 1998: 32). Sawn timber was so arduous that Major Campbell, in correspondence to Sydney in 1827, suggested that any future settlers be provided with prefabricated dwelling frames (HRA III, Vol. V: 779). Although we can make the assessment that producing timber for the store required considerable labour, too little physical evidence of the building itself remains to enable any measure of the labour and design involved in construction. Nevertheless, an absence of postholes or foundations does point to the adoption of some economy measures. This is backed up by a description of the store in 1824 as a temporary structure (above). On the evidence of the admittedly limited excavation, no moves were made during the life of the settlement to erect a robust building designed for long-term use. An exception is the possible addition of a slate roof, which would have been better suited to withstanding tropical storms than the original thatch one.

This picture of a rather impennant storehouse may tie in with written descriptions of the general architecture of the settlement. Soon after assuming command on 20 September 1826, Major Campbell complained of the standard of the officers’ quarters. They were, he wrote, ‘extremely small and uncomfortable, being only temporary and hasty erections’ (HRA III, Vol. VI: 666). He extended his complaint to other buildings. Dwellings and storehouses were said to have been erected using ‘unsubstantial’ materials (HRA III, Vol. VI: 679–680), and Campbell had many demolished or repaired. He placed the blame for this state of affairs squarely on the resident convict workforce. In October 1826 he wrote to Colonial Secretary Macleay stressing the urgent need for ‘good house carpenters and joiners’ (HRA III, Vol. VI: 666). An implicit criticism of the capabilities of those convict mechanics already resident in the settlement is clear in this request. Whether the shabby, inadequate construction observed by Campbell was the result of inept craftsmanship, an absence of leadership and control, a form of convict resistance, or a combination of all three, is something that cannot be determined at this juncture. It is important to note however that although these observations may possibly receive support from the absence of archaeological evidence of a permanent storehouse, they are at variance with other archaeological and physical evidence of construction carried out during the first few months of the settlement’s existence.

CONCLUSION

Convict work at Fort Dundas in late 1824 was undertaken in a well organised manner by individuals who probably had at least some knowledge of their identified trade. It can be characterised as of ‘average’ competency, if stoneworking was used as a measure of overall craftsmanship and if the work in contemporary New South Wales convict road gangs is used for a comparison. Importantly, early labour was carried out at Fort Dundas in an atmosphere of hope. The convict labour force could look forward to their tickets-of-leave and the associated privilege this entailed of earning an income by hiring out their skills to free traders who, some anticipated, would be attracted to Fort Dundas. The physical remains of the commissioned store terrace and other early structures mirror the atmosphere of this initial period: construction was labour intensive, well organised and planned, and although certainly not of the highest standard, nevertheless executed with a reasonable degree of proficiency.

Reading the archival evidence we are presented with a picture of hope rapidly transforming to despondency, across all sections of the settlement’s society. From 1825 societal controls began to weaken and instances of disorder and resistance rose. The extent to which declining morale impacted upon the configuration of the society, in terms of shifting power relations and social boundaries, unsurprisingly not addressed in official correspondence. Archaeology can shed light on these kinds of issues, and two phases of stonework at the commissariat store may be small, material example of this readjustment, represented by shift from ordered construction to ad hoc modifications. Whether this merely represents a widespread decline in work as written accounts indicate, or a more fundamental change in how the convict workers interpreted their place in the new and isolated society, are questions of some importance.

Ongoing archaeological investigation at Fort Dundas is directed to addressing this and other aspects of social change in this sample of colonial convict society transposed to tropical Australia.

ACKNOWLEDGEMENTS

The Tiwi Land Council and Pirlangimpi Community Government Council gave consent for the investigation at Fort Dundas. I thank members of both organisations for their support and particularly Cyril Rioli (snr) who has shown special interest in the project. Investigation of the storehouse site was facilitated by a Northern Territory University Peter Grant and a Northern Territory History Award. The excavation, which by elegant coincidence began on the day of the 175th anniversary of the British arrival, was undertaken by Malene Bjornskov, Colin De La Rue, Tania Stellini and the author. Colin De La Rue and Wayne Johnson provided useful comments on an earlier draft of this paper. Any faults or omissions are my own.

NOTES

1. Sixty-seven names are on the list. It includes 17 convicts who arrived aboard the Sir Philip Dundas in February 1825. If this number is added to the figure of 41+ convicts in the first expedition, there remain five totals.
extra convicts unaccounted for. This discrepancy remains to be explained.

2. Other brief references are made in official correspondence to women as partners and perhaps siblings of government personnel (HRA III, Vol. VI: 709, 714).

3. An 1824 sketch, with a perspective almost identical to the watercolour, shows a smaller building west of the 'storehouse', correctly oriented parallel to the shore. Although seemingly too small for the commissariat store, it must nevertheless be another candidate for this building, or perhaps a related store. The sketch is published in Powell (2000: plate 14).

BIBLIOGRAPHY


CAMERON, J. M. R. 1998. The British meet the Tiwi: Melville Island, 1824', in T. Austin and S. Parry (eds), Canberra Archaeological Society, Northern Australia; with some observations on the northern Australia; with some observations on the

CAMPBELL, J. 1834. 'Geographical memoir of Melville Island and Port Essington, on the Cobourg Peninsula, northern Australia; with some observations on the settlements which have been established on the north coast of New Holland'. Journal of the Royal Geographical Society 4: 129-181.


ENNIS, H. 1825. Remarks on Board His Majesty's Ship Tenar: in a voyage from England to Port Praya, Cape of Good Hope, New South Wales, etc, Richard Griffin, London.


