

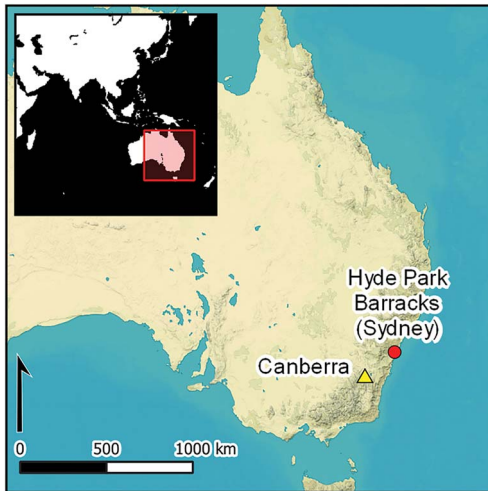


Research Article

Eating in colonial institutions: desiccated plant remains from nineteenth-century Sydney

Kimberley G. Connor* 

* Stanford Archaeology Center, Stanford University, USA (✉ kconnor@stanford.edu)



Institutional food is renowned for being monotonous and unappetising, yet the accuracy of these prescribed diets is difficult to verify archaeologically. Desiccated plant remains from beneath the floorboards at Hyde Park Barracks in Sydney offer a rare insight into the culture of food at the Female Immigration Depot (1848–1887) and the Destitute Asylum (1862–1886). Here, the author reveals the wide range of unofficial plant foods accessed by inhabitants at these two institutions—representing resources sourced from across the British Empire—and the sometimes-illicit nature of their consumption, highlighting the importance of incorporating archaeological evidence into discussions of institutional life.

Keywords: Australasia, nineteenth century AD, historical archaeology, archaeobotany, institutions, food

Introduction

Institutions (here, meaning organisations for the care, confinement and/or mobilisation of a given population which are characterised by supervision, surveillance, and physical separation from the community) of many different forms emerged as a defining feature of the modern era, regulating individuals and populations alike. In colonial Australia, founded as a series of British penal settlements, these institutions loom particularly large on the landscape and in the popular imagination (Casella & Fredericksen 2004). Following the work of social theorists such as Michel Foucault (1994, 1995, 2003) and Irving Goffman (1961), the forms and social functions of institutions, ranging from schools to workhouses, have captured the attention of historical archaeology (e.g. De Cunzio 1995; Garman 2005; Casella 2007; Piddock 2007; Beisaw & Gibb 2009).

Received: 23 March 2024; Revised: 30 July 2024; Accepted: 3 September 2024

© The Author(s), 2025. Published by Cambridge University Press on behalf of Antiquity Publications Ltd. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Drawing on the anthropological literature from contemporary institutions, it is clear that food plays a central role in daily life and is vital for building communities, enforcing hierarchies, creating and maintaining identities and resisting the totalising forces of the institution (e.g. Valentine & Longstaff 1998; Cate 2008; Earle & Phillips 2012; Carney 2013). However, accessing these facets of modern institutional life is difficult as inhabitants may conceal illicit food supplementation; reconstruction of historic diets is even more challenging as these are based almost exclusively on official documents.

Archaeology can provide access to undocumented aspects of food culture, but studies of food remains from historical institutions are in their infancy. This situation is exacerbated by a lack of publications on Australian historical archaeobotany. Yet recent investigations at Hyde Park Barracks in Sydney highlight the incredible potential of desiccated plant preservation in underfloor occupation deposits that accumulate “underneath floorboards in standing buildings due to day to day use of the structure by people” (Winter & Runciman 2021). Underfloor occupation deposits are a particular feature of Australian historical archaeology (Casey 2004; Murphy 2013; Bryant *et al.* 2020; Winter & Romano 2020; Winter *et al.* 2021) and have a rich potential for further macrobotanical study. The range of plant species found at Hyde Park Barracks, for example, challenges stereotypes of miserly institutional food, revealing unexpected plant movement and trade connections.

Hyde Park Barracks

Initially constructed between 1817 and 1819 as a barracks for male convict labourers in central Sydney (Figures 1 & 2), Hyde Park Barracks became largely vacant following the end of convict transportation to New South Wales in 1840 and in 1848 most of the main building was turned into the Female Immigration Depot. The depot functioned for nearly 40 years,



Figure 1. Map showing the modern extent of New South Wales and the location of Hyde Park Barracks on Queen's Square, Macquarie Street in central Sydney (figure by author).



Figure 2. Exterior of Hyde Park Barracks (photograph by author).

housing tens of thousands of unmarried female immigrants and children who travelled on subsidised passages. They stayed just a few days, before leaving for employment or to join their family. From 1862, the depot shared the site with a Destitute Asylum that housed women who were unable to support themselves because of age, illness or disability. Women in the asylum tended to be older and stayed for longer periods than women in the depot. Both institutions were the responsibility of a single matron and relied primarily on the labour of the inhabitants to function (Davies 2010, 2015).

In 1886 the asylum moved to new premises and the depot closed in 1887; the site became a series of law courts. Renovations to turn the site into a museum prompted salvage excavations in 1980–81, revealing extensive archaeological deposits including some 80 000 artefacts found beneath the floorboards of the main build-

ing (Davies *et al.* 2013). Not only did the dry and stable conditions of the underfloor spaces promote preservation of organic materials, but the use of a numbered joist system to record artefact contexts enables comparison between and within areas (Figure 3).

While Hyde Park Barracks has been the subject of many archaeological studies since 1980, including the Exploring the Archaeology of the Modern City Project (e.g. Davies *et al.* 2013; Murray & Crook 2019; see also Starr 2015; Connor 2021), parts of the collection remain understudied. As part of a larger study of food and dining in the Female Immigration Depot (Connor 2023), this article presents findings from the macrobotanical collection at Hyde Park Barracks.

The archaeobotanical collection

The deposits in the underfloor spaces are palimpsests formed through accidental loss, deliberate concealment, waste disposal and rodent activity (Davies *et al.* 2013: 13–14). Most items are small and fragmentary, having fallen or been swept through convict-era floorboards and retained by the ceilings of the room below. Larger items could only have been deposited by lifting the floorboards. Deposits are divided into Joist Groups (JG) and Joist Spaces (JS) (Figure 4), although these divisions exist only beneath the floorboards. There is no stratigraphy within the underfloor deposits and there are artefacts from each of the different stages of building usage but most date from the period 1848–1887 when the building was jointly occupied by the Female Immigration Depot and the Destitute Asylum (Davies *et al.* 2013: 12).



Figure 3. Excavation of the underfloor deposits in 1980–1981 showing the system of joists beneath the floorboards (photograph courtesy of Hyde Park Barracks Collection, Museums of History NSW).

Consequently, the macrobotanical remains provide a partial record of plant-food consumption during the period of female occupation. The Immigration Depot occupied both the second and third floors from 1848 until 1862 when level 3 was taken over by the Destitute Asylum, while the matron had quarters at the western end of level 2. Separating out the items associated with each institution is difficult because of the lack of stratigraphy and because there was flexibility in the allotment of space as the number of women fluctuated.

The primary focus of this article is the edible plant species from the site, but several species that are unlikely to have been consumed as food are also included as they represent rare examples of engagement with plants in colonial Australia. Following a search of the existing catalogue and visual inspection of potentially relevant artefact bags, items were hand-sorted by taxa and recorded in a database (for a full explanation of methods, see the online supplementary material).

Plant foods at Hyde Park Barracks

The documentary records for both the Female Immigration Depot and the Destitute Asylum suggest a diet that was unlikely to leave much archaeological evidence of plant foods. In both institutions the daily ration consisted of one pound of bread, one pound of meat, one pound of vegetables or potatoes, one-quarter ounce of tea, one and one-quarter ounces of sugar, and one-half ounce of salt (*The Sydney Morning Herald* 1850; Immigration Agent 1855; Government Asylums Inquiry Board 1887). Breakfast and supper consisted of sweetened tea and

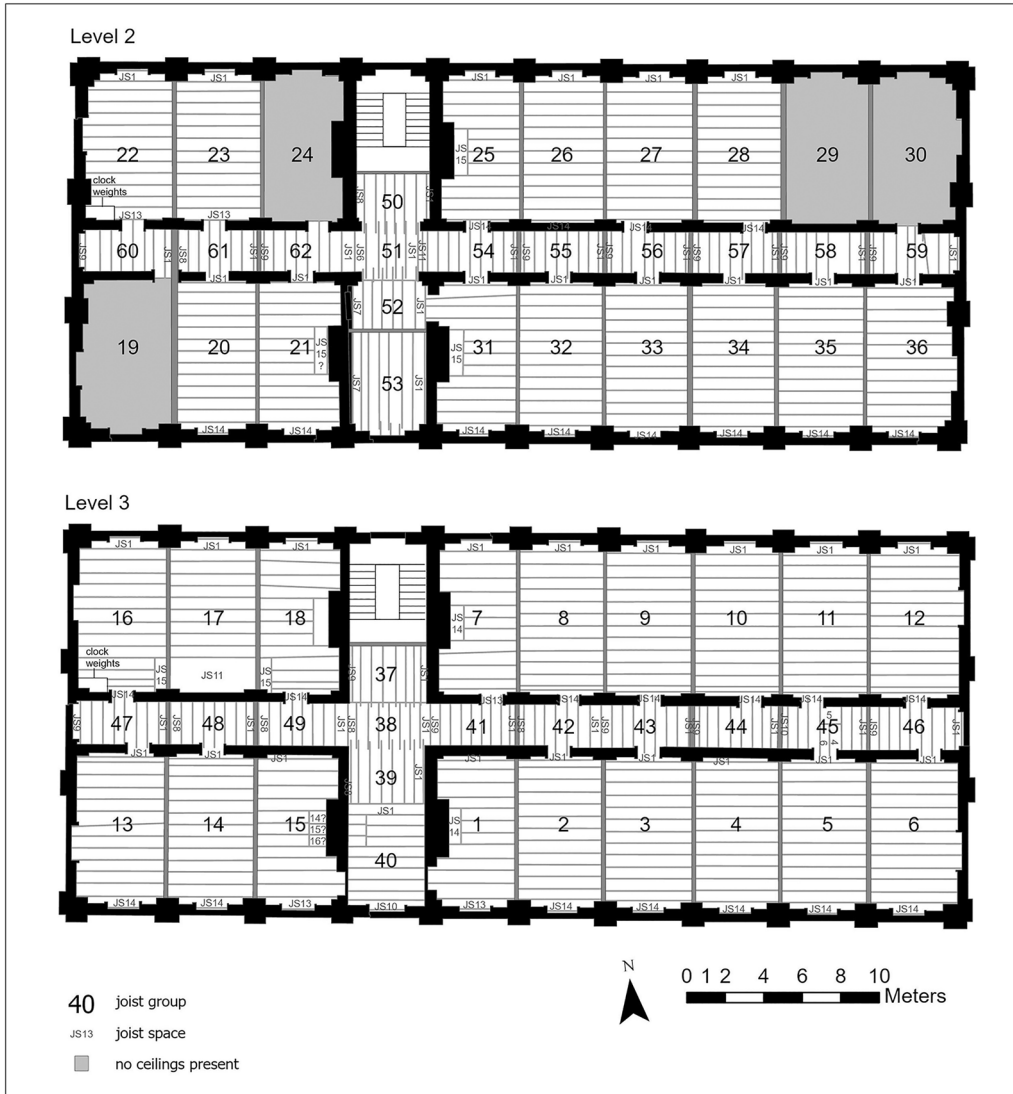


Figure 4. Layout and numbering of the underfloor spaces on levels 2 and 3 of Hyde Park Barracks (figure by author).

bread with dripping. For dinner, the main meal of the day, beef or mutton was boiled with vegetables (including carrots, turnips, pumpkins, leeks and parsnips) and herbs (such as marjoram, parsley and thyme) to make a soup, which was thickened with barley or flour and seasoned with salt and pepper (King 1863; Royal Commission on Public Charities 1874: 75; NSWLAVP 1887). At other times the meat was baked and served with roast or boiled potatoes (NSWLAVP 1887: 450, 464).

There are scattered hints in the records, however, of a variety of other plant foods consumed at the barracks. Daily reports by the matron show that sago, oatmeal, arrowroot, rice, mustard and black pepper were ordered for the sick. On special occasions, such as

Christmas, the women ate roast beef, plum pudding, cakes and fresh fruit, and were given extra tobacco (*Evening News* 1882). At an anniversary dinner in 1865: “The tables were ornamented with flowers and laden with dishes of beef, fowl, mutton, ham, and various viands, followed by plum puddings ... after that cakes, fruit, and varied dessert” (*Empire* 1865: 5). In 1885, at the “annual treat”, a donor supplied “an abundance of fruit” (*The Sydney Morning Herald* 1885: 5). Beyond these occasions, women could purchase items from hawkers, receive food as gifts, barter among themselves or work for extra tea, sugar or tobacco. The women’s movement outside the institution was restricted but not prohibited; women in the depot walked to church while women in the asylum could request leave once a month, providing opportunities to acquire food.

While this suggests that a wider range of plant foods was consumed at Hyde Park Barracks than initially thought, boiled root vegetables and ground spices are unlikely to preserve archaeologically. Furthermore, the most likely locations for finding macrobotanical remains, the kitchen and the privies, were not excavated at the site. Despite this, reanalysis of material from the main building revealed 3543 desiccated macrobotanical specimens from at least 34 plant types, including 28 named taxa (Table 1). These are organised below under vernacular food categories rather than botanical classifications, for the purposes of assessing how food was commonly experienced.

Fruit

The most abundant macrobotanical remains are stones from fruit including peaches/nectarines, cherries, plums and apricots (Figure 5). These fruits grew well in the Australian climate, with peaches growing feral in creek beds (Karskens 2020: 244, 249). There are also small quantities of seeds from apples or pears, as well as grape seeds and pedicel (stem), citrus peel and date seeds. A receipt for purchases for the Immigration Depot shows that grapes were purchased in the form of raisins and currants around Christmastime, probably for making seasonal British desserts such as plum pudding, fruit cake or mincemeat (Immigration Agent 1867). However, the presence of the grape stem may suggest that grapes were also eaten fresh. Similarly, while candied or grated citrus peel could have been used in cooking, the large fragments of dried citrus peel suggest that they were removed from fresh fruit.

The 119 fragments of desiccated citrus peel represent a rare find, the first of their kind reported in Australia (for an Egyptian example, see Bouchaud *et al.* 2018). While definitive identification of the type of citrus has not been possible, some are more likely than others. Australia’s native citrus fruits are too small and their peel too thin to be a good match. Similarly, dried lime peel is thinner, while larger types of citrus including citron, pomelo and grapefruit can be excluded because they are too big. The faint orange colour and torn edges (indicating the rind was peeled off the fruit) suggest that oranges or mandarins are plausible candidates.

Stone and citrus fruits would have been familiar to immigrants from the British Isles, other fruits available in Sydney might have seemed more unusual. Watermelon grew abundantly in New South Wales and was appreciated for its sweet juiciness. One writer praised the “beautiful peaches and delicious water-melons that we ate, on first landing in the town of Sydney, made us forget the imprisonment of a seven months’ voyage” (*The Monthly Magazine*

Table 1. Number and weight of macrobotanical specimens from Hyde Park Barracks underfloor collections.

Species name	Common name (plant part studied)	No. of identified specimens	Weight (g)
cf. <i>Allium</i> sp.	cf. onion/garlic (skin)	18	1.6
<i>Annona</i> (genus)	cherimoya/soursop/sugar apple (seed)	19	7.9
<i>Arachis hypogaea</i>	peanut (shell)	68	12.9
<i>Archontophoenix</i> sp.	palm (seed)	2	0
Arecaceae	palm (nutlet)	1	2
<i>Bertholletia excelsa</i>	Brazil nut (shell)	1	0.9
<i>Callistemon</i> (genus)	bottlebrush (capsules)	1	0
<i>Capsicum</i> (genus)	chili pepper (fruit and seed)	1	0.5
<i>Cocos nucifera</i>	coconut (shell)	1	6.1
<i>Citrullus lanatus</i>	watermelon (seed)	5	0.3
<i>Citrus</i> (genus)	citrus (skin)	119	80
<i>Corylus avellana</i>	hazelnut (shell)	101	35.3
<i>Cucurbita</i> sp.	pumpkin/gourd/squash (seed)	4	0
Cucurbitaceae	cucurbit (seed)	6	0
<i>Juglans regia</i>	walnut (shell)	31	42
<i>Leptospermum</i> (genus)	tea tree (capsule)	29	0
<i>Macadamia integrifolia</i>	macadamia (shell)	1	0.9
<i>Malus/pyrus domestica</i>	apple/pear (seed)	6	0
<i>Musa</i> (genus)	banana or plantain (skin)	13	7.4
cf. <i>Nicotiana tabacum</i>	cf. tobacco (leaf)	36	11.6
<i>Phoenix dactylifera</i>	date (seed)	29	20
cf. <i>Pinus</i> sp.	cf. pine (seed)	1	0.8
<i>Prunus</i> (genus)	stone fruit (pit)	110	118.4
<i>Prunus armeniaca</i>	apricot (pit)	172	238.3
cf. <i>P. armeniaca</i>	cf. apricot (pit)	28	37
<i>Prunus avium/cerasus</i>	sweet/sour cherry (pit and stem)	823	129.8
<i>Prunus domestica/cerasifera</i>	plum/cherry plum (pit)	336	221.3
cf. <i>P. domestica/cerasifera</i>	cf. plum/cherry plum (pit)	27	18.4
<i>Prunus dulcis</i>	almond (shell)	6	3.8
<i>Prunus persica</i>	peach/nectarine (pit)	1469	4927.4
cf. <i>P. persica</i>	cf. peach/nectarine (pit)	1	0.4
<i>Quercus</i> (genus)	acorn (cupule)	1	0.6
<i>Rosa</i> (genus)	rose (flower, stem and leaf)	3	0
<i>Santalum acuminatum</i>	quandong (seed)	1	2.6
<i>Sapindaceae</i> cf. <i>Litchi chinensis</i>	cf. lychee (skin)	6	0.1
<i>Vitis vinifera</i>	grape (seed and stem)	12	0.4
<i>Xylomelum pyriforme</i>	woody pear (seed and follicle)	2	21.2
<i>Zea mays</i>	corn (cob)	6	15.9
Unidentified		87	8
Total		3583	5973.8

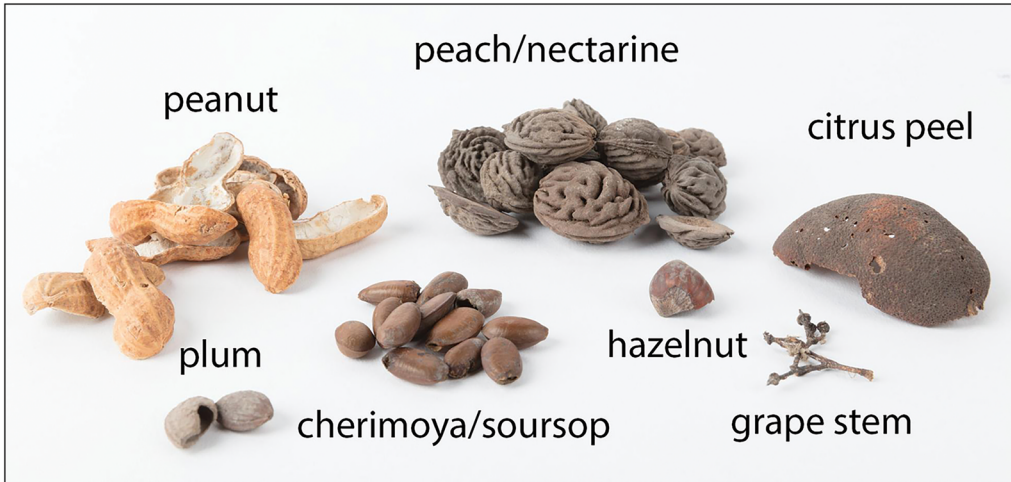


Figure 5. Selection of plant remains recovered during the excavation of underfloor deposits, including fruit stones, nut shells and dried citrus peel (photograph by Jamie North, courtesy of Hyde Park Barracks Collection, Museums of History NSW).

1827: 254). Watermelon seeds found at the western end of the level 2 hallway suggest that they were also appreciated at the barracks.

Thirteen fragments of dried plant membrane (Figure 6) from the level 3 landing compare favourably to banana, demonstrating a fibrous pedicel and longitudinal bundles on the outer skin (van der Veen 2011: 99). If these are banana peel, this will be only the second example of desiccated macro-remains from cultivated banana reported worldwide (van der Veen 2011: 98).

Six fragments of fruit peel found on the level 3 landing have a distinctive scale pattern consistent with fruit from the soapberry family, probably lychee. These fragments add to the single lychee seed identified from excavations of nineteenth-century housing at Mountain Street (Fairbairn 2007), providing evidence for the consumption of this Southeast Asian fruit in nineteenth-century Sydney. Although lychees were grown in tropical parts of Australia, boxes of lychees and lychee-nuts (dried lychees) mentioned in shipping records suggest that they were largely imported from Hong Kong (*Daily Telegraph* 1886: 4; *The Sydney Morning Herald* 1889).



Figure 6. Dried plant membrane, possibly banana skin, from JG39 and JS8 (figure by author).

While the lychee highlights connections between Sydney and Asia, 19 dark-brown seeds point to movement in a different direction, towards Central or South America. These seeds come from what was probably a single annonaceous fruit

such as a cherimoya, a soursop or a sugar/custard apple. Although these fruits have been identified in Peru (Pozorski & Pozorski 1997; Bonavia *et al.* 2004) and India (Pokharia *et al.* 2009), this appears to be the first archaeological evidence of annonaceous fruit in Australia.

Vegetables

Both the lychee and cherimoya-like fruit reveal that the range of species consumed at Hyde Park Barracks went far beyond familiar fruits from the Old World. This also extends to the desiccated vegetable remains, which include corn cobs and pumpkin seeds—taxa from the Americas. Maize was introduced to Sydney via the Dutch Cape Colony by the first settlers in 1788 and became strongly associated with convict rations (Cushing 2007). Ground maize was eaten at Hyde Park Barracks, but official records do not mention corn cobs. The cobs come from level 3 contexts that also contain convict artefacts (e.g. government-issued convict clothing, coins, datable clay pipes and bottles) (Starr 2015), so it is possible that they date back to the original use of the site as a barracks for male convicts. Working on the garden to the north-east of the barracks or around the city would have given convicts access to corn while it was growing, and the small size of the cobs may represent illicit harvesting of under-mature corn.

Several examples of cucurbit seeds were found at the site and those that can be more readily identified are more like pumpkin, gourd, marrow or squash rather than melon or cucumber. Pumpkin was probably one of the vegetables used in the soup at Hyde Park Barracks (King 1863) and, as with corn, pumpkin is a product of the Americas that was not eaten extensively in the UK, but which became an important part of the Australian diet (Santich 2012: 3–12). The cucurbit seeds came from the matron's quarters (JG19–24, JG60–62) on the second floor, which is consistent with the matron's family eating meals cooked in their private kitchen. Cooking in this area is also supported by the presence of 18 fragments of monocotyledon skin (Figure 7a). Although ornamental species of bulbs cannot be excluded, these fragments are consistent with the skin of alliums such as onion or garlic.

Nuts

Hyde Park Barracks has evidence of almonds, hazelnuts, walnuts, coconuts, Brazil nuts, peanuts and macadamia. Consumption of almonds, hazelnuts, walnuts



Figure 7. Monocotyledon skin, possibly an allium such as onion or garlic (a), and a desiccated chili pepper and seeds (b) recovered from underfloor deposits on level 2 (figure by author, photograph of chili pepper courtesy of Hyde Park Barracks Collection, Museums of History NSW).

and coconuts is well documented historically in Australia, but evidence for Brazil nuts and peanuts at Hyde Park Barracks—and elsewhere in Australia (e.g. Simons & Maitri 2006; Carmichael 2019; Runciman 2021)—may hint at more widespread consumption in the nineteenth century than previously known. As late as 1872 one Australian newspaper said peanuts were “as yet ... not known” (*Australian Town and Country Journal* 1872: 396), and another in 1928 reported that peanuts were “Forty years ago unknown, and twenty years ago looked upon as of little consequence” (*Sydney Mail* 1928: 38).

While there is evidence of engagement with native plants at the site (see below), only the single fragment of a macadamia shell is likely to reflect consumption of a native plant. As with peanuts, macadamia cultivation was small-scale in late nineteenth century Australia and did not become widespread until the twentieth century. If the macadamia from Hyde Park Barracks came from the period of female occupation it would be a remarkably early example, but a later date cannot be ruled out.

Spices

Pepper and herbs in the soup as well as spices for baking are attested in the documentary record at Hyde Park Barracks, but these were presumably present in the kitchen rather than the dormitories. Both because of its find location (JG31, level 2) and the general blandness of the official diet, the presence of a nearly complete chili (Figure 7b) in the underfloor collection was unexpected. Ground cayenne pepper is often found in Australian cookbooks, and newspapers gave instructions for growing chillis but exactly why this specimen was present in the dormitories remains unclear.

Smoking

There is extensive evidence for smoking at the barracks across all periods of occupation, including thousands of matches and fragments of clay pipes, some of which still have tobacco in their bowls (not included in this study) (Davies 2011). An additional 34 fragments of plant material are visually consistent with tobacco based on similarity to the samples in the pipes and the presence of charring and/or twisting as for ropes or twists of tobacco (see Porter *et al.* 2021; Runciman 2021 for other examples).

Landscape plants

The macrobotanical collection at Hyde Park Barracks also provides evidence for a range of plants, both native and imported, that were probably not eaten at the site including palm seeds, a rose, an acorn, sprigs of bottlebrush and tea tree. A seed from a quandong is also present in the collection; this was an historically important foodstuff for Aboriginal people in southern Australia (Pardoe *et al.* 2019). While settlers did use the fruit for cooking, the stones were also used for toys and jewellery. Eaten or not, this quandong must have travelled a long distance from an area west of the Great Dividing Range.

Another species of note is the woody pear, which, despite its name, is not edible. The woody pear is a shrub or small tree native to the east coast of Australia. This specimen (Figure 8) is labelled in ink with the botanical name of the plant—*Xylomelum pyriforme*.



Figure 8. Woody pear inked *Xylomelum pyriforme*, approximately 50mm long (figure by author).

Although it is not possible to know who took the time to identify and label this woody pear, it is a very tangible example of the encounters that all new arrivals in Australia must have had with unfamiliar plants.

Snacking in the dormitories

The 34 plant types found in the under-floor collection from Hyde Park Barracks reveal a rich range of species encountered by the inhabitants, and the distribution of these remains is equally informative.

By mapping the joist groups and joist spaces where botanical remains were found, it is possible to visualise activities taking place in different parts of the building. Mapping makes it clear that, rather than reflecting formal cooking and dining in the kitchens or dining rooms, the data presented here result from snacking in the dormitories and hallways along with some cooking in the matron's quarters.

Overall, the distribution of the botanical remains shown in Figures 9 and 10 reflects the taphonomic processes which produce underfloor occupation deposits. Experimental work has shown that artefacts are likely to cluster around the edges of rooms and near doorways as a result of sweeping (Winter *et al.* 2021), and the resulting concentration of artefacts along walls and near doorways is clear at Hyde Park Barracks. These areas of increased deposition may also result from caching behaviours as the ends of floorboards are easier to lift (Davies *et al.* 2013: 14).

Other areas of increased deposition seem to relate to the functioning of spaces within the building. For example, Davies and colleagues (2013: 18–19) suggest that the third-floor landing (JG37 and JG39) was a space for smoking and socialisation in the asylum based on the presence of the large number of pipes, matches and newspaper fragments in the underfloor spaces. The botanical results support this interpretation, finding both loose tobacco (also in JG18 JS15) and extensive evidence of food consumption in this area.

In the dormitories, most of the botanical remains are from fruit or nuts; items that could be eaten raw. This includes what appear to be individual deposition events. In the middle of the level 2 dormitories, for example, citrus peel was found in two discrete groupings (in JG27 JS8 and JG33 JS5), as if someone had peeled a fruit and stuffed the peel through a gap in the floor. Similarly, the annonaceous fruit seeds were in a group in JG32 JS13; this is the only place that these seeds were found so it is likely that they came from a single fruit. By contrast, apart from the corn cobs, the remains of vegetables that are more typically cooked prior to consumption, including cucurbits and possibly allium, were largely found at the western end of the second-floor corridor. These specimens are likely to represent the cooking that the matron and her family did within their quarters.

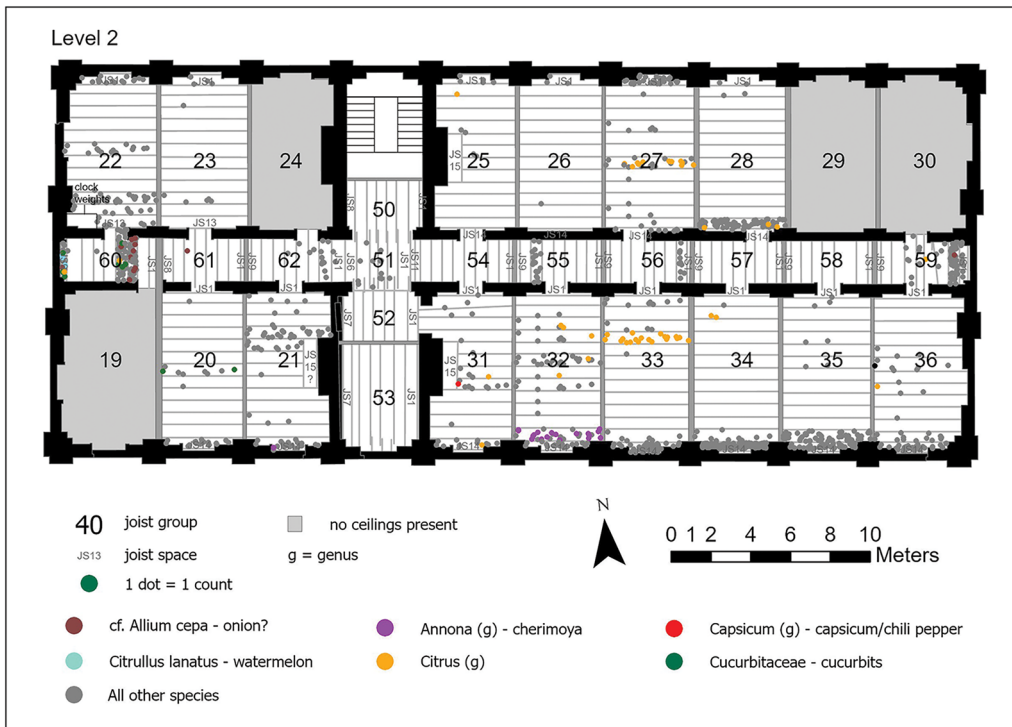


Figure 9. Distribution of botanical specimens in the underfloor spaces on level 2 with some unusual species highlighted in colour (figure by author).

Discussion

The Hyde Park Barracks macrobotanical collection is broadly consistent with those of other historical sites in Australia (e.g. Simons & Maitri 2006; Fairbairn 2007; Carmichael 2019), where most species are plants originally domesticated in Europe and West Asia supplemented with small numbers of plants/food products originating in America or East Asia. This archaeological evidence supports the historical argument that plant transfers were not a unidirectional movement from Europe to colonial ‘neo-Europes’ in the Americas and Australasia (Crosby 1986) but were instead complex and multi-directional exchanges (Beinart & Middleton 2004; Pawson 2008; Rangan *et al.* 2012). The presence of plant foods imported from America (tobacco, chilli pepper, corn, pumpkin, Brazil nuts and the annonaceous fruit) and Asia (lychee) points to the importance of inter- and intra-imperial plant exchanges that cut across the Colombian exchange (when plants were transferred from Europe and Africa to the Americas and *vice versa* as part of the process of European colonisation).

Among these global exchanges, the number of native Australian plants at the site is notable. There is a long-standing debate about the extent to which colonists consumed native foods (for an overview see Newling 2011; Santich 2011; Craw 2012). Grace Karskens (2003: 46) suggests that “[t]he lower orders were especially conservative in their attitude towards native foods because of their already precarious social position”. Yet at Hyde Park Barracks, there is evidence of quandongs and macadamias being transported over long

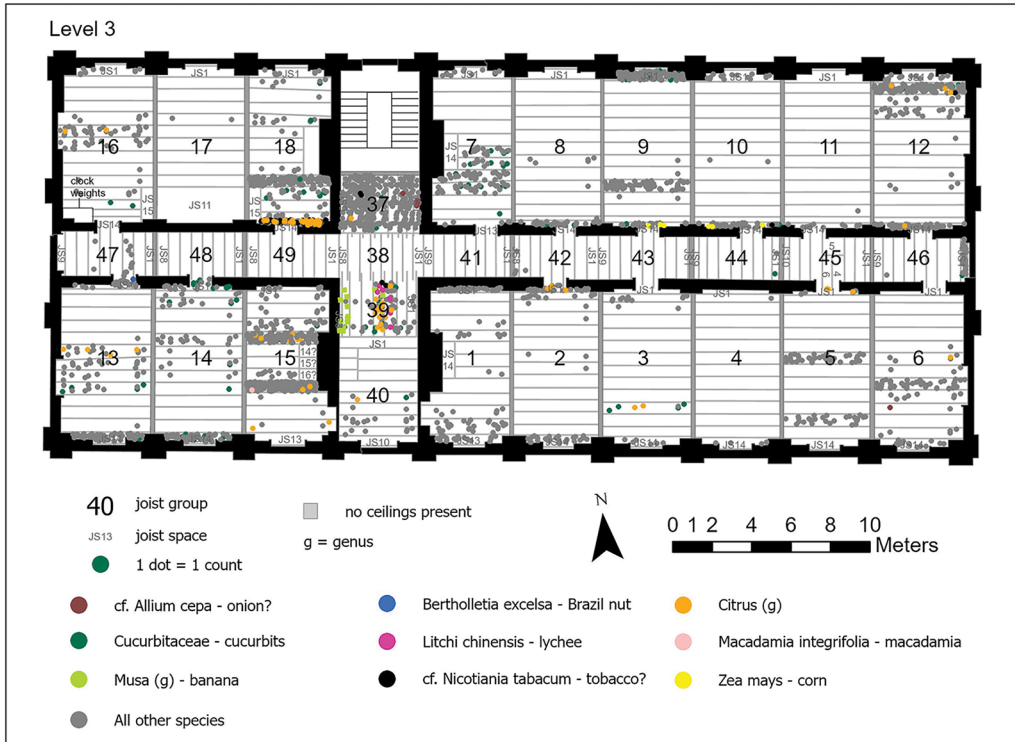


Figure 10. Distribution of botanical specimens in the underfloor spaces on level 3 with some unusual species identified by different colours (figure by author).

distances to institutions for working-class women. Not only does this emphasise the need for greater integration of culinary history and historical archaeology, but it points towards the importance of everyday consumption in global plant transfers.

Ultimately, the plant remains from Hyde Park Barracks enrich our understanding of food consumption within the Female Immigration Depot and the Destitute Asylum by highlighting practices of self-provisioning and snacking. As with contemporary studies of institutional food, at Hyde Park Barracks we see the tension between the official diet—which enculturated immigrants in an idealised British diet of bread and meat—and unofficial food practices of the inhabitants, who supplemented their meals with fresh fruit and nuts. This must have provided sensorial relief after months of shipboard rations but may also have been a way to resist the totalising discipline of the institution. In a system of identical meals served en masse at set times, self-provisioning would have allowed women to choose what, when, where and with whom they wanted to eat. A handful of peanuts, shared covertly in the dormitories, or an orange snuck in after church enabled women to hold onto the individual and the relational in an environment of uniformity.

Conclusion

Despite growing bodies of literature on the archaeology of institutions and on food in anthropological and historical accounts of institutions, the potential for historical

archaeological studies of institutional food remains has yet to be fully explored. Remarkable preservation of desiccated plant remains at Hyde Park Barracks reveals not just the range of species available but a system of food acquisition and consumption that is almost completely absent from the historical record. While the nutritional contribution of these items is difficult to quantify, they highlight the importance of ground-truthing archival reports of institutional diets. At Hyde Park Barracks at least, the abundance of peach pits, peanut shells and citrus peel testifies to the ability of inhabitants to acquire food from outside the institution and to consume it, perhaps illicitly, in parts of the building not marked for food consumption.

More broadly, the range of species present at Hyde Park Barracks—representing foods introduced from the Americas, Asia and Europe alongside native plants—speaks to the complex movement of plants around the nineteenth-century world. Yet there is a clear need for comparative case studies from Sydney and further afield to understand the timing of these movements and the extent to which the diversity of species at Hyde Park Barracks is typical of colonial Australia. The relatively high availability of underfloor occupation deposits in Australia provides a key opportunity for understanding historic plant use.

Acknowledgements

I want to extend my deepest appreciation to the staff from Museums of History New South Wales who made this research possible, as well as to my mentors, especially Barbara L. Voss and James Flexner. My botanical identifications benefitted from consultations with many people, especially Merit Hondelink and Andrew Fairbairn.

Funding statement

This work was produced with funding and support from the Stanford Department of Anthropology, Stanford Archaeology Center, Stanford Center for Spatial and Textual Analysis, the Ric Weiland Graduate Fellowship, Graduate Research Opportunity Funds for Modern British History and Culture, and the Stanford Center on Global Poverty and Development.

Data availability statement

The author confirms that the data from this study are available upon reasonable request.

Online supplementary material (OSM)

To view supplementary material for this article, please visit <https://doi.org/10.15184/aqy.2024.215> and select the supplementary materials tab.

References

- Australian Town and Country Journal*. 1872. Culture of the ground-nut, 28 September 1872: 396. Available at: <https://trove.nla.gov.au/newspaper/page/4771987> (accessed 8 September 2021).
- BEINART, W. & K. MIDDLETON. 2004. Plant transfers in historical perspective: a review article. *Environment and History* 10: 3–29. <https://doi.org/10.3197/096734004772444397>
- BEISAW, A.M. & J.G. GIBB (ed.). 2009. *The archaeology of institutional life*. Tuscaloosa: The University of Alabama Press.
- BONAVIA, D., C.M. OCHOA, S. ÓSCAR TOVAR & R.C. PALOMINO. 2004. Archaeological evidence of

- cherimoya (*Annona Cherimolia* Mill.) and Guanabana (*Annona Muricata* L.) in ancient Peru. *Economic Botany* 58: 509–22. [https://doi.org/10.1663/0013-0001\(2004\)058\[0509:AEOCAC\]2.0.CO;2](https://doi.org/10.1663/0013-0001(2004)058[0509:AEOCAC]2.0.CO;2)
- BOUCHAUD, C., J. MORALES, V. SCHRAM & M. VAN DER VEEN. 2018. The earliest evidence for citrus in Egypt, in G. Fiorentino & V. Zech-Matterne (ed.) *AGRUMED: archaeology and history of citrus fruit in the Mediterranean: acclimatization, diversifications, uses*: 54–83. Naples: Centre Jean Bérard. <https://doi.org/10.4000/books.pcbj.2179>
- BRYANT, L., H. BURKE, T. IRELAND, L.A. WALLIS & C. WIGHT. 2020. Secret and safe: the underlife of concealed objects from the Royal Derwent Hospital, New Norfolk, Tasmania. *Journal of Social Archaeology* 20: 166–88. <https://doi.org/10.1177/1469605320903577>
- CARMICHAEL, J. 2019. ‘Vegetable treasures’: the archaeobotanical remains from the former Carlton and United Brewery phase 2 excavations in Melbourne, in C. Spry *et al.* (ed.) *Excavations, surveys and heritage management in Victoria*, volume 8: 7–15. Bundoora: Archaeology Program, La Trobe University. <https://doi.org/10.26181/22255804.v1>
- CARNEY, M.A. 2013. Border meals: detention center feeding practices, migrant subjectivity, and questions on trauma. *Gastronomica: The Journal of Critical Food Studies* 13: 32–46. <https://doi.org/10.1525/gfc.2013.13.4.32>
- CASELLA, E.C. 2007. *The archaeology of institutional confinement*. Gainesville: University Press of Florida.
- CASELLA, E.C. & C. FREDERICKSEN. 2004. Legacy of the ‘Fatal Shore’: the heritage and archaeology of confinement in Post-colonial Australia. *Journal of Social Archaeology* 4: 99–125. <https://doi.org/10.1177/1469605304039852>
- CASEY, M. 2004. Falling through the cracks: method and practice at the CSR site, Pymont. *Australasian Historical Archaeology* 22: 27–43.
- CATE, S. 2008. “Breaking Bread with a Spread” in a San Francisco County Jail. *Gastronomica: The Journal of Critical Food Studies* 8(3): 17–24. <https://doi.org/10.1525/gfc.2008.8.3.17>
- CONNOR, K.G. 2021. ‘To make the emigrant a better colonist’: transforming women in the Female Immigration Depot, Hyde Park Barracks. *World Archaeology* 53: 451–68. <https://doi.org/10.1080/00438243.2022.2037454>
- 2023. From immigrant to settler: food and dining in a nineteenth-century institution of immigration. Unpublished PhD dissertation, Stanford University.
- CRAW, C. 2012. Gustatory redemption? Colonial appetites, historical tales and the contemporary consumption of Australian native foods. *International Journal of Critical Indigenous Studies* 5: 13–24. <https://doi.org/10.5204/ijcis.v5i2.87>
- CROSBY, A.W. 1986. *Ecological imperialism: the biological expansion of Europe, 900–1900*. Cambridge: Cambridge University Press.
- CUSHING, N. 2007. The mysterious disappearance of maize: food compulsion and food choice in colonial New South Wales. *Food, Culture & Society* 10: 109–31. <https://doi.org/10.2752/155280107780154060>
- Daily Telegraph. 1886. Shipping, 3 May 1886: 2. Available at: <https://trove.nla.gov.au/newspaper/article/237292203> (accessed 14 April 2022).
- DAVIES, P. 2010. Women and work at the Hyde Park Barracks Destitute Asylum, Sydney. *Australasian Historical Archaeology* 28: 13–23.
- 2011. Destitute women and smoking at the Hyde Park Barracks, Sydney, Australia. *International Journal of Historical Archaeology* 15: 82–101. <https://doi.org/10.1007/s10761-010-0134-6>
- 2015. Mistress of her domain: Matron Hicks and the Hyde Park Destitute Asylum, Sydney, Australia. *International Journal of Historical Archaeology* 19: 552–67. <https://doi.org/10.1007/s10761-015-0298-1>
- DAVIES, P., P. CROOK & T. MURRAY. 2013. *An archaeology of institutional confinement: the Hyde Park Barracks, 1848–1886*. Sydney: Sydney University Press.
- DE CUNZO, L.A. 1995. Reform, respite, ritual: an archaeology of institutions; the Magdalen Society of Philadelphia, 1800–1850. *Historical Archaeology* 29: 1–168.
- EARLE, R. & C. PHILLIPS. 2012. Digesting men? Ethnicity, gender and food: perspectives from a ‘prison ethnography’. *Theoretical Criminology* 16: 141–56. <https://doi.org/10.1177/1362480612441121>
- Empire. 1865. Anniversary dinner at the Benevolent Asylum. 27 January 1865: 5. Available at:

- <https://trove.nla.gov.au/newspaper/article/60564832> (accessed 20 September 2016).
- Evening News. 1882. The Hyde Park Asylum. 27 December 1882: 2. Available at <https://trove.nla.gov.au/newspaper/article/107995054> (accessed 4 December 2016).
- FAIRBAIRN, A. 2007. Seeds from the slums: archaeobotanical investigations at Mountain Street, Ultimo, Sydney, New South Wales. *Australian Archaeology*. 64: 1–8. <https://doi.org/10.1080/03122417.2007.11681843>
- FOUCAULT, M. 1994. *The birth of the clinic: an archaeology of medical perception*. Translated by A.M. Sheridan. New York: Vintage.
- 1995. *Discipline & punish: the birth of the prison*. Translated by A. Sheridan. New York: Vintage.
- 2003. *Society must be defended: lectures at the Collège de France, 1975–76*. Translated by D. Macey. New York: Picador.
- GARMAN, J.C. 2005. *Detention castles of stone and steel: landscape, labor, and the urban penitentiary*. Knoxville: University of Tennessee Press.
- GOFFMAN, E. 1961. *Asylums: essays on the social situation of mental patients and other inmates*. Garden City: Anchor.
- Immigration Agent. 1855. Requesting information as to the management of immigration depot. NRS 5239, Immigration Agent Letters Received, [9/6208], Letter 55/4684. New South Wales State Archives.
- Immigration Agent 1867. Bill for daily rations from H.W. Johnson. NRS 5239, Immigration Agent Letters Received, [9/6252], Letter 67/1891 with Letter 69/65. New South Wales State Archives.
- KARSKENS, G. 2003. Revisiting the worldview: the archaeology of convict households in Sydney's Rocks Neighborhood. *Historical Archaeology* 37: 34–55. <https://doi.org/10.1007/BF03376591>
- 2020. *People of the river: lost worlds of early Australia: Australia's earliest settlers*. Sydney: Allen & Unwin.
- KING, F. 1863. Contracts for the government asylums at Sydney and Parramatta. NSW Government Gazette, 30 January 1863, no. 15: 238–39.
- MURPHY, K. 2013. Under the boards: archaeological site formation processes at the Commissariat Store, Brisbane. *International Journal of Historical Archaeology* 17: 546–68. <https://doi.org/10.1007/s10761-013-0230-5>
- MURRAY, T. & P. CROOK. 2019. *Exploring the archaeology of the modern city in nineteenth-century Australia*. Cham: Springer International. <https://doi.org/10.1007/978-3-030-27169-5>
- NEWLING, J. 2011. Dining with strangeness: European foodways on the Eora Frontier. *Journal of Australian Colonial History* 13: 27–48.
- NSWLAVP (New South Wales Legislative Assembly Votes and Proceedings). 1887. Report of the Government Asylums Inquiry Board; together with minutes of evidence and appendices. Sydney: NSWLAVP.
- PARDOE, C., R. FULLAGAR & E. HAYES. 2019. Quandong stones: a specialised Australian nut-cracking tool. *PLoS ONE* 14. <https://doi.org/10.1371/journal.pone.0222680>
- PAWSON, E. 2008. Plants, mobilities and landscapes: environmental histories of botanical exchange. *Geography Compass* 2: 1464–77. <https://doi.org/10.1111/j.1749-8198.2008.00153.x>
- PIDDOCK, S. 2007. *A space of their own: the archaeology of nineteenth century lunatic asylums in Britain, South Australia and Tasmania*. New York: Springer. <https://doi.org/10.1007/978-0-387-73386-9>
- POKHARIA, A.K., B. SEKAR, J. PAL & A. SRIVASTAVA. 2009. Possible evidence of pre-Columbian transoceanic voyages based on conventional LSC and AMS ¹⁴C dating of associated charcoal and a carbonized seed of custard apple (*Annona squamosa* L.). *Radiocarbon* 51: 923–30. <https://doi.org/10.1017/S0033822200033993>
- PORTER, J., C. DE ROCHEFORT, A. FAIRBAIRN & M. GOULDING. 2021. Melbourne's mini-Pompeii – an 1855 Grocer's assemblage. Paper presented at the Australian Society for Historical Archaeology Conference, Melbourne, 18–22 October 2021.
- POZORSKI, T. & S. POZORSKI. 1997. Cherimoya and guanabana in the archaeological record of Peru. *Journal of Ethnobiology* 17: 235–48.
- RANGAN, H., J. CARNEY & T. DENHAM. 2012. Environmental history of botanical exchanges in the Indian Ocean World. *Environment and History* 18: 311–42. <https://doi.org/10.3197/096734012X13400389809256>
- Royal Commission on Public Charities. 1874. *Second report of the commission appointed to inquire into and report upon the working and*

- management of the public charities of the colony.* Sydney: Thomas Richards.
- RUNCIMAN, H. 2021. A colonial garden? Archaeobotanical and documentary research at the Artillery Drill Hall, Fremantle, Western Australia. Unpublished Honours dissertation, University of Western Australia.
- SANTICH, B. 2011. Nineteenth-century experimentation and the role of indigenous foods in Australian food culture. *Australian Humanities Review* 51: 1–8.
- 2012. *Bold palates: Australia's gastronomic heritage.* Adelaide: Wakefield.
- SIMONS, A. & M. MAITRI. 2006. The food remains from Casselden Place, Melbourne, Australia. *International Journal of Historical Archaeology* 10: 357–73.
<https://doi.org/10.1007/s10761-006-0019-x>
- STARR, F. 2015. An archaeology of improvisation: convict artefacts from Hyde Park Barracks, Sydney, 1819–1848. *Australasian Historical Archaeology* 33: 37–54.
- Sydney Mail.* 1928. Among the exhibits, 28 November 1928: 38. Available at <https://trove.nla.gov.au/newspaper/article/158403584> (accessed 27 April 2022).
- The Monthly Magazine. 1827. Terra Incognita. June 1827. 3: 251–61.
- The Sydney Morning Herald.* 1850 Orphan Immigrants, 13 August 1850: 3. Available at <http://nla.gov.au/nla.news-article28646033> (accessed 5 June 2016).
- The Sydney Morning Herald. 1885. Hyde Park Benevolent Asylum, 15 May 1885: 5. Available at <http://nla.gov.au/nla.news-article28361784> (accessed 12 April 2016).
- 1889. Shipping, 4 October 1889: 6. Available at <http://nla.gov.au/nla.news-article13728631> (accessed 14 April 2022).
- VALENTINE, G. & B. LONGSTAFF. 1998. Doing porridge: food and social relations in a male prison. *Journal of Material Culture* 3: 131–52.
<https://doi.org/10.1177/135918359800300201>
- VAN DER VEEN, M. 2011. *Consumption, trade and innovation.* Frankfurt: Africa Magna.
- WINTER, S. & B. ROMANO. 2020. Archaeology, heritage and performance in the Perth popular music scene. *Journal of Contemporary Archaeology* 6: 322–46. <https://doi.org/10.1558/JCA.36005>
- WINTER, S. & H. RUNCIMAN. 2021. The Archaeology of underfloor occupation deposits. Session organised at the Australian Society for Historical Archaeology Conference, Melbourne, 18–22 October 2021.
- WINTER, S., J. GREEN, K. BENFIELD-CONSTABLE, B. ROMANO & M. DRUMMOND-WILSON. 2021. Investigating underfloor and between floor deposits in standing buildings in colonial Australia. *International Journal of Historical Archaeology* 25: 170–91.
<https://doi.org/10.1007/s10761-020-00551-x>