

14.0 The Bakehouse and Mill

14.1 Research Questions

The original research question associated with the windmill, as posed in 1998, was:

Remains relating to the mill and bakery may provide significant detail relating to many historical questions surrounding early attempts at food production in the colony. Such remains could also contribute to research into the foodways, diet and technological strategies of the first colonists.¹

The focus of the research questions has been reorganised to more easily address the archaeological evidence. The main areas to be examined are:

- How the bakehouse and mill operated as a commercial complex in colonial New South Wales? How did the political and social contexts affect the way in which this important commercial complex operated? This was the first privately owned and built mill in Sydney.

This will be explored by examining in detail the political and social contexts in which the mill operated. The role of John Palmer and his influence as Commissary is important in understanding why the mill and bakehouse came to be built and why their presence in the Domain was tolerated until 1815.

- How does the analysis of the material culture of the bakehouse remains contribute to research into the foodways, diet and technological strategies of the first colonists?

In this section the focus will be on the corpus of early lead-glazed ceramic found in the bakehouse and how they fit into the existing lead-glazed ceramic typology established by Casey (1999). The range of material culture associated with the bakehouse will be briefly discussed.

The focus of this chapter will be on addressing issues associated with the bakehouse, the archaeological remains found in association with the bakehouse occupation and the historical context for the development of the bakehouse and mills. Some of these issues were addressed in the recent PhD written by Mary Casey, *Remaking the Sydney Domain: Landscape, Archaeology and Meaning* (2002). Sections from this thesis have been included below. Please note sections of this chapter necessarily repeat some of the points made elsewhere in this report.

14.2 Background

In early Sydney the high areas above Government House were dominated by the prevailing concern of feeding the colony, as exemplified by the construction of windmills for grinding grain to make flour and to feed the colony. During the first interregnum (1793-1796) the building of grinding mills was one of the few building projects with which the colonial administration persisted. These mills were rarely successful. Governor Hunter continued with mill building and eventually completed the first windmill but it was neither efficient nor sound. He started to erect a second mill but Governor King had to complete it. The first successful and efficient windmill was Palmer's small timber mill that was part of a commercial complex with the bakehouse established on the high ground in the Government Domain (Table 14.1).

¹ Ireland 1998b:35.

This spill over of private commercial enterprise into the area of the Government Domain, as established by Governor Phillip in 1792, was part of the maintenance and survival of the colony, which as late as 1809 was suffering from flooding of the grain crops growing near the Hawkesbury River. Grain was often in short supply in the early colony. Governor King granted leases for mills and this is part of the reason why Bligh did not seek to remove the mills and bakehouse from the Domain although they were clearly a visual intrusion into the new landscape he was trying to make. It was Governor Macquarie who eventually removed the small mill and bakehouse because the area was wanted for the new government stables and because they were intrusions into the new landscape Mrs Macquarie was designing.

By 1807 the ridgelines and skyline of Sydney Cove were dominated by five working mills and the defunct first mill was now enclosed behind the newly built walls of Fort Phillip (1804) (*Figure 14.2*). The consideration and construction of defences at Sydney Cove were starting to develop greater importance. These high spaces were beginning to be used for purposes other than the feeding of the colony by becoming more involved with its defences.

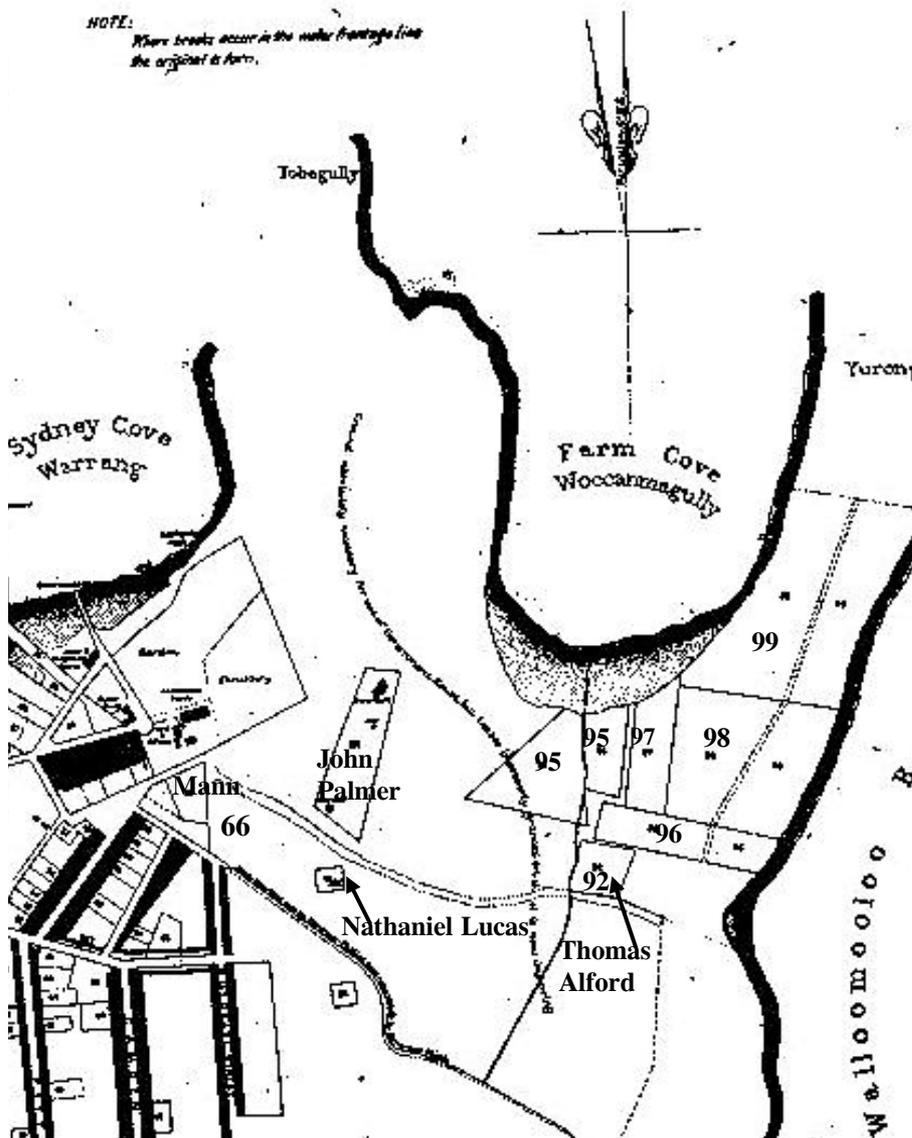


Figure 14.1:
Meehan's 1807
plan of Sydney.
Kelly & Crocker
1978:1807.

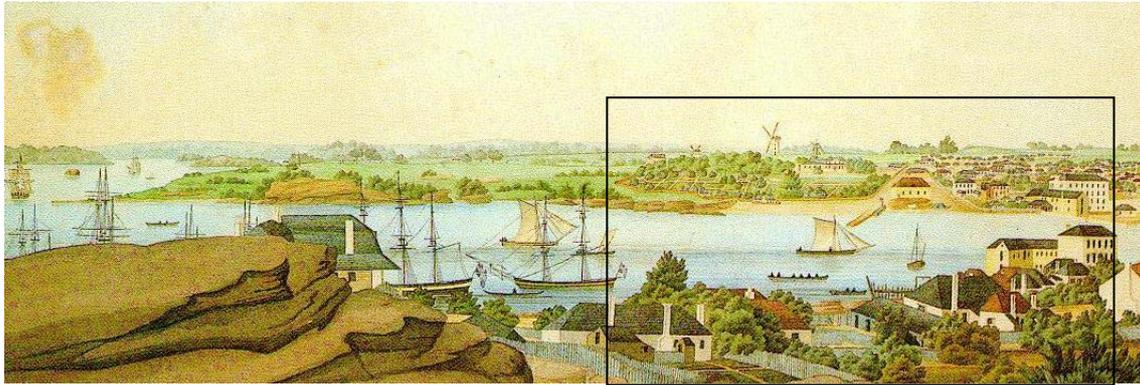
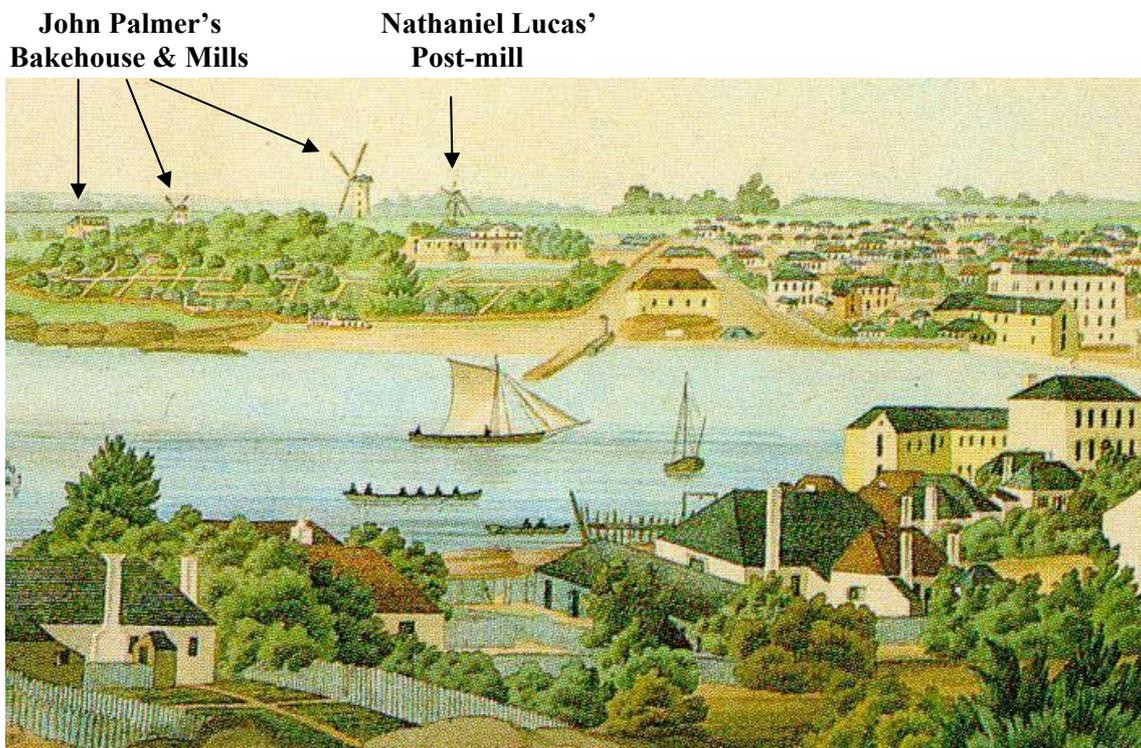


Figure 14.2: Detail from 'East View of Sydney in New South Wales', c. 1809, watercolour, unsigned, attributed to John Eyre. The bakehouse and three windmills are aligned behind government house and its garden. Compare with Figure 10.7. McCormick 1987: pl. 91, ML DL 32 (detail below).



14.2.1 Bakehouse Remains

The bakehouse remains, built in late 1800 and early 1801 and demolished in 1815, are some of the oldest surviving archaeological evidence associated with British occupation of Australia. These remains include stone footings for the northern walls of the L-shaped building, trenches from which stone footings were removed, a small circular brick well inside the bakehouse, and artefacts thought to be associated with the occupation of the bakehouse (**Map 5.1**). See Chapter 5 for detailed description and analysis of bakehouse remains.

Historic illustrations and plans indicate the bakehouse was an L-shaped building, probably single storey, with dormer windows in the longer roofline suggesting use of the attic space (**Figure 14.2-14.7**). The windmill was built in timber with four sails, a tail-pole and a moveable roof. This design allowed the sails to be redirected towards the wind and therefore made milling more

efficient (Freese 1957). Lesueur's 1802 unsurveyed plan supports the windmill as having four sails but suggests that the longer side of the L-shaped building was the eastern rather than the western half (*Figure 14.6*). Generally the historical and archaeological evidence suggests that the western part of the bakehouse was the longer part of the L-shaped building.

14.3 Leases within the Government Domain

Governor King granted four leases within the Domain land (Table 8.1, *Figure 14.1*). This was against the rules given by Governor Phillip when he established the Domain in December 1792. One of Governor Phillip's last acts, before leaving Sydney, was to declare the limits of the town boundary and the lesser limits of an area later interpreted as the Government Domain (*Figure 2.2*). On 2 December 1792 Phillip published a notice saying that no leases or grants should be made within these areas. The home government repeated this request in 1801.²

The first lease made by Governor King on Domain land was registered on 31 March 1802 to Commissary John Palmer (*Figure 14.1*). There were two entries for this date, the first granting a 14-year lease within the Domain and the second a five-year lease renewable for 21 years (Table 9.1). The lease of the Domain land was made as a swap for land Palmer gave up on the western side of the Tank Stream near the lumberyard. This was a lease he had purchased from Captain Joseph Foveaux in November 1794 and was now required as part of the government's extension of the lumberyard.³ This swapping of leases appears to have happened in 1800.

Palmer, as the commissary, controlled the storage and issue of rations and was the third highest officer in the colony after the governor and lieutenant governor. Yet Palmer had already erected his mill and probably the bakehouse on this land when King made the general order in June 1801.⁴ Governor Hunter appointed convicts to help erect Palmer's mill during the end of 1800.⁵ The June order was qualified with, 'if not wanted for public purposes', perhaps suggesting that King saw the lesser area of the Domain in the same terms as the town area. Leases could therefore be made as he saw fit and the leasing of Domain lands did not require any special restraint. Palmer built a second windmill, a large stone windmill marked as new on Meehan's 1807 plan (*Figure 9.5*). In 1814 it was stated that Governor King had chosen to place Palmer's mills within Phillip's Domain because he intended to build a new government house according to Phillip's intentions in 1788, on the high ground to the west of Sydney Cove.⁶ King appears to be the only person who thought this was still a possibility.

There were three other leases that Governor King made in the Domain grounds that assist in understanding why he granted leases over ground that was not supposed to be leased. Nathaniel Lucas had been a carpenter and Superintendent of Convicts on Norfolk Island who returned to Sydney in 1805 (Table 14.1). King gave him a grant to the south of Palmer's and Lucas built the first post mill which operated for a number of years (*Figure 14.1, 14.2*):

An excellent post-mill, the first that had been erected in this settlement, is now completed by Mr Nathaniel Lucas, behind Back Row East. It was undertaken and finished within the space of six weeks, and has been several weeks at work. It is found capable of grinding, with a sufficiency of wind, upwards of six bushels per hour, which was, last week, accomplished for twelve hours successively.⁷

² Phillip's orders were published on the 1792 map, Figure 2.2; GGO 11 June 1801, HRNSW 4:402-403.

³ LTO 3/97(2).

⁴ GGO 17 May 1801, HRNSW 4:368.

⁵ HRNSW 4:280, Dec 1800.

⁶ Walker to Campbell, 20 Sept 1814, enclosure no. 6, HRA 8:347.

⁷ SG 23 June 1805:2a.

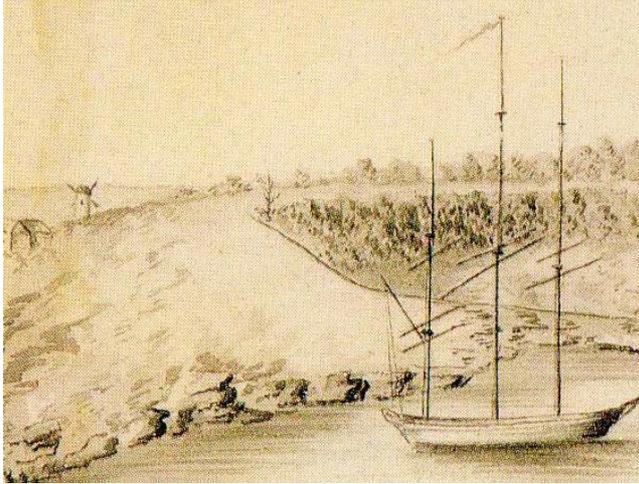


Figure 14.3: Detail from ‘View of Sydney Cove’ c. 1800-1801, attributed to Governor King. The timber windmill sits on higher ground above the stone bakehouse. While not especially accurate it does show the windmill with four sails. McCormick 1987: pl. 56.

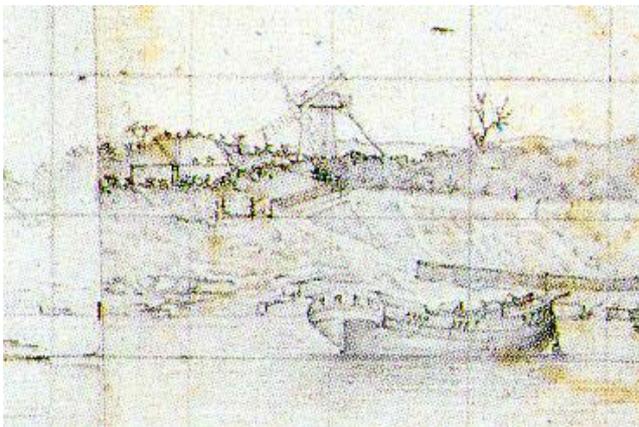


Figure 14.4: Detail from Lesueur’s sketch, ‘Partie de la baie de Port-Jackson’, 1802. The L-shape of the bakehouse is visible, with two small dormer windows in the western side of the roof and a chimney. Shrubbery is shown around the bakehouse and a fenced and gated path or road up to the mill and bakehouse. The windmill has four sails and a tail pole. McCormick 1987:pl.68.

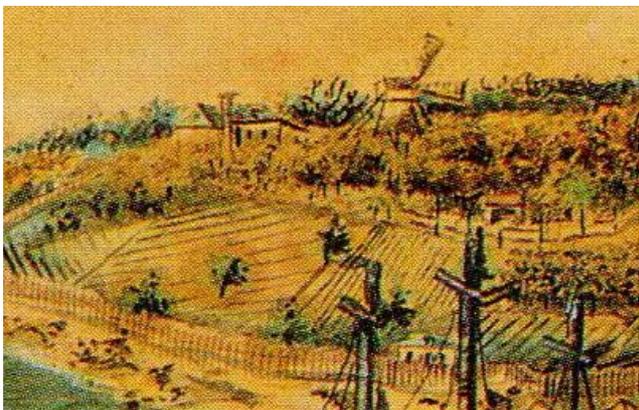


Figure 14.5: Detail from John Lancashire’s ‘View of Sydney, Port Jackson...’, 1803. Showing the L-shaped building, with a chimney on the southwest corner and possibly dormer windows in the same place as indicated by Lesueur. The sails of the windmill are facing south indicating that the roof of the windmill was moveable. McCormick 1987:pl. 113.

Governor King knew Lucas from his time as Lieutenant-Governor of Norfolk Island.⁸ The need for additional milling and the open high location on the eastern side of Sydney Cove were presumably the reasons for granting this lease and Palmer’s within the Domain. They were essential requirements for the maintenance of the colony. The conditions on Lucas’ lease were specific to its use for a windmill and was for 14 years only.⁹

⁸ ABD 2:139; King to Camden 30 April 1805, HRNSW 5:597.

⁹ LTO 3/186(1), 1 January 1806 as the date on the lease but it was occupied earlier as indicated by the 1805 notice in the *SG*.

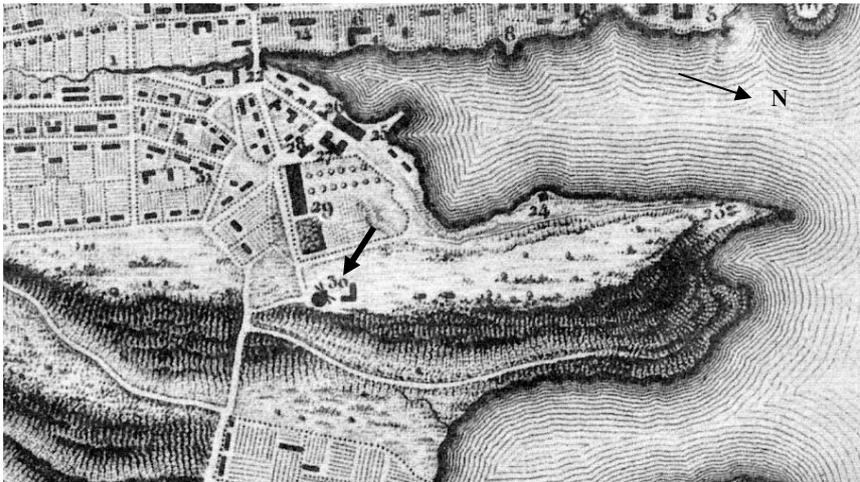


Figure 14.6: Lesueur's 1802 plan, showing the windmill with four sails and the L-shaped bakehouse but with the longer side to the north. 'Plan de la ville de Sydney Capital des Colonies Anglaises, aux Terres Australes', Kelly & Crocker 1978:10.

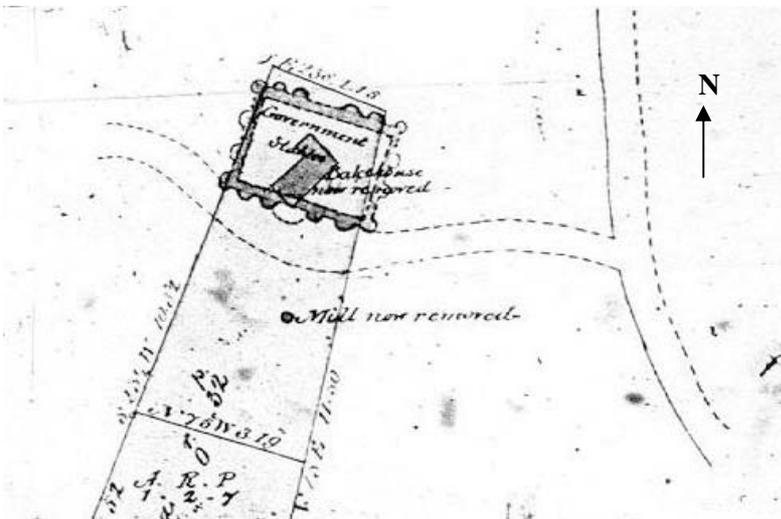


Figure 14.7: Detail from sketches of the mill lease prepared from an earlier map showing the approximate position of the bakehouse and mill in relation to the stables. The western part of the bakehouse is shown as the longer section. There are a few versions of this map. SR, Colonial Secretary, Special Bundles 2/8021.2.

The lease to David Dickinson Mann (66) was behind government house (*Figure 14.1*). Mann was a convict given an absolute pardon by Governor King. He was King's chief clerk and commissary when the commissary was absent. In May 1804 he was referred to as under-secretary to the governor and appears to have held a number of administrative posts.¹⁰ Mann built a house and other buildings on his lease valued at £400 by 1808 (Ritchie 1988:364). According to Mann, 'It was at the particular insistence of Gov. King that I had built there, because it was handy to him, and he had a back gate which opened immediately on my place'.¹¹

Lot 92 was leased to Thomas Alford. It was to the east of the creek at Farm Cove and south of the lot granted to Nathaniel Franklin by Hunter (Table 10.1). Alford was the government gardener for King as well as later and earlier governors. He had sailed on the *Atlantic* and was free by servitude; his term having expired, and in 1801 he no longer received a government ration. This lease was his only property and he lived there with his "wife" and a convict labourer, William

¹⁰ Fletcher 1979:1; Cramer 2000:35; Ritchie 1988: 366, 367.

¹¹ Ritchie 1988:367.

Wilson. His only stock were three hogs.¹² The southern part of the cultivation and buildings shown to the east of the mill and bakehouse (*Figure 14.6*) may have been within his lease. Colonel Paterson extended Alford's lease in 1809 during the second interregnum and following the rebellion against Governor Bligh.

The four leases made by Governor King within the Domain were all to people directly connected to him and who had provided services to the governor, as gardener, clerk, commissary, and carpenter. Two were for windmills, which needed to be placed on high ground and close to the delivery and distribution centres at Sydney Cove and the high ground on the western side of the cove was extensively occupied by this stage and connected with the military barracks and their soldiers who lived nearby. Therefore the eastern side of the cove was the best place for milling as it was close to river shipping from the Hawkesbury and Parramatta and the distribution centre of the commissariat stores. The other two were presumably a return for services and for purposes of convenience. The making of these leases appear to be for practical reasons and following to some extent Governor Hunter's practices. King may have seen these leases as being made for "public purposes" which appears to have included the convenience of the governors.

14.4 Palmer's Bakehouse and Mills

Commissary John Palmer's timber windmill and stone and brick bakehouse were built by May 1801 and construction appears to have been undertaken over a four-month period at the end of 1800, probably commencing shortly after Palmer returned to the colony from England in late 1800 (Table 9.1). It was one of three windmills built between 1800 and 1807, aligned along the spine of the eastern side of Sydney Cove (*Figure 14.2*). John Palmer built two of these mills and Nathaniel Lucas built the southern post-mill in 1805. The 1800 map (*Figure 2.3*) identifies the small mill as "Boston's" but extensive research has not found any basis for this assertion.¹³ It was later stated that Palmer's two mills, bakehouse and dwelling house cost 'upwards of 5,000 pounds' although the later mill was a large stone mill and more expensive and would have constituted more than half this amount.¹⁴

Surgeon John Harris, James Wilshire, deputy commissary, and Major Johnston all claimed Commissary John Palmer - or Little Jack to his detractors - was deliberately defrauding quantities of grain and flour from the government through his mill and bakehouse enterprise during Governor Bligh's administration. Under Bligh, Palmer had full direction of the government windmills, as well as his private mills, and the government stores and granaries. This produced a conflict of interest in his financial dealings and with no one to look over his shoulder he seems to have taken advantage of his opportunities. He reportedly used an alias, Christopher Palmer, to hide some of his dealings.¹⁵

The land containing the bakehouse and small timber mill was resumed by Governor Macquarie on 31 March 1815.¹⁶ From 1813 Macquarie had requested the new owners, Palmer's assignees, Messers Fairlie & Co. represented by William Walker, to remove the mill for the purposes of erecting new offices. Initially Macquarie proposed the bakehouse would be kept and form part of

¹² Baxter 1988, 1989.

¹³ Chapter 2, this report.

¹⁴ Fairlie, Clark, Jones & Co to Goderich 15 March 1833.

¹⁵ Harris to King 25 October 1807, HRNSW 6:340-42; Harris to Mrs King 25 October 1807, HRNSW 6:343-47; Examinations after Bligh's arrest, HRNSW 6: 447-448, 450, 590; Erskine and King to Treasury, 3 August 1811, HRNSW 7:569-570.

¹⁶ Macquarie to Bathurst 7 October 1814, HRA 8:341, 348-9

the new proposed offices but eventually he requested its demolition as part of the resumption.¹⁷ The larger stone mill was allowed to remain for the time being because it was considered to be a more expensive building.¹⁸ This was not the end of the range of litigation over Palmer's windmill lease. Attempts to reclaim this lease and the stone mill continued into the 1830s when various governors had to deal with these issues and litigation.¹⁹ The removal of the two windmills would not have posed any problems for grinding of grain as John Dickson was establishing his new steam mill, including one for grinding grain, on Darling Harbour in April 1814 and other mills continued to operate.²⁰ Perhaps the demolition of the windmills was as much the product of changing technology as issues over land ownership.

14.4.1 A Commercial Complex - Bakehouse and Mill

Limited information is available on how the Palmer's mill and bakehouse operated. They generally appear to have been used as a linked commercial complex with the mill grinding grain for flour and the bakehouse baking bread and ships biscuits. Until 1808 they were operated for John Palmer by his employees. Palmer's small bakehouse provided sea biscuits, an important ships' supply. In 1802, according to the Péron, a naturalist on the French expedition led by Nicholas Baudin:

Beyond the government garden, on the other side of a neighbouring hill, is the windmill, the bakehouse, and the state ovens, that are used for making sea biscuit: these are capable of furnishing from fifteen to eighteen hundred pounds per day.²¹

The discussion of the windmill and bakehouse underlines Baudin's keenness to acquire fresh stores and the priority on his request list given to biscuits and flour.²²

There are no records of Palmer employing or being assigned a miller or baker in the 1801–1802 muster.²³ Around 1801 there were between eight to ten millers and one or two bakers in the colony.²⁴ Among his known employees in 1806 were Roger Teeling, a miller, William Grosvenor, a millwright and Charles Hermitage, a baker.²⁵ Andrew Frazier (Frazer) was on a list of 15 official bakers to whom people could apply for their bread ration in 1806.²⁶ In January 1808 Frazier was employed by John Palmer. Frazier was examined by the rebel government shortly after Bligh's arrest and gave a number of answers that incriminated Palmer in corrupt practices, one of which was:

I am directed and do mix, by order of my master, Mr Commissary Palmer, a certain proportion of maize or barley, the private property of Mr Palmer, and issue for the Government use a quantity of biscuit equal to the weight the wheat would have produced. This has been the custom since Governor Bligh's command.²⁷

This practice did not happen under Governor King. Frazier appears to have been working for Palmer at the bakehouse during King's administration and may have been there for some years.

¹⁷ Campbell to Waker, 2nd November 1813, enclosure 3, HRA 8:344; Campbell to Walker 16 September 1814, HRA 346.

¹⁸ Macquarie to Bathurst 7 October 1814, HRA 340.

¹⁹ Governors' dispatches, Mitchell Library.

²⁰ Macquarie to Bathurst, 28 April 1814, HRA 8:159; Bougainville 1999:79-80.

²¹ Péron 1809:385-389.

²² HRNSW 4:948.

²³ Baxter 1988.

²⁴ Baxter 1988:193-195.

²⁵ Baxter 1989:A4276, A1627 & A1836.

²⁶ SG 13 April 1806:1c.

²⁷ HRNSW 6:450.

The custom described by Frazier allowed Palmer to pass off the biscuits as being made from wheat when they were a mix of barley and maize and charge the same price as for wheat biscuits. He was therefore being paid for wheat biscuits and provided an inferior cheaper product, doubtlessly for a considerable profit. Presumably because the biscuits were for sea-going ships they were usually eaten on the high seas and were not identified at Sydney as an inferior product. Because Palmer controlled all stages of the process, distribution of grain, grinding, making, baking and distribution of finished product through the Commissariat he could easily take corrupt advantage of the system.

By early 1808 the mill, bakehouse and residence were leased to Andrew Frazer from March 1808 to March 1809 for £600. There is another undated lease of the small mill to Andrew Frazer and Robert Reid at £175 for two years.²⁸ In 1806 Robert Reid had been a clerk to Mr Palmer.²⁹ By March 1808 Frazier and Reid were no longer “employed” by Palmer. They had become his tenants in the mill and bakehouse, suggesting that the rebellion against Governor Bligh and Palmer’s support for Bligh and Palmer’s consequent arrest and removal from the position of commissary required some rearrangement of his business affairs. Andrew Frazier and Jane Toon(e), whom Frazier lived with in 1806, probably resided in the bakehouse.³⁰ Frazier was apparently still in occupation in 1814 when the house and bakery were valued for the purchase by government.³¹

During archaeological work in 1998 no remains of the small timber windmill were found within the area of excavation. The site of the mill was expected to be near the southern boundary of the redevelopment site but this area was quarried in c. 1818 and therefore its remains were probably removed at this time (*Figure 14.7*). The mill could have been located further to the south and outside the Conservatorium redevelopment area. However, in June and July 1999 bakehouse footings and associated deposits were found underneath the floor of Verbrugghen Hall, formerly the government stables courtyard. The remains of the bakehouse have been preserved *in situ* underneath the new floor of Verbrugghen Hall (See Chapter 5).

14.5 Bread

The provision of flour and bread was an important part of feeding the early colony. The composition of the bread itself was a significant concern to the inhabitants of Sydney Cove. Since 1801 the constituent parts of bread had been the subject of government orders. There was a scarcity of grain in May 1801 when a standard for making bread was established. This standard consisted of 100 pounds of meal, made of 24 pounds of bran and 76 pounds of wheat flour. Bread made for ships was to be half Indian corn and half wheat meal. Penalties would be imposed for disobeying these orders.³² A week later orders for the size of a standard bread loaf were issued: when new it should weigh 2 pounds 1 ounce and when one day old it should weigh 2 pounds.³³

Two days later the deputy commissary and the quartermaster undertook an experiment to determine or confirm the appropriate proportions of wheat and flour at the milling and the baking stages. For this experiment the flour was to be ground at Palmer’s mill and probably baked in his adjacent bakehouse. While the loaves were baking they were to be guarded by a sentinel and a constable.³⁴ This allowed the government to prove that a ration of 3 pounds of wheat was sufficient to make a

²⁸ RG 4/258(6).

²⁹ Baxter 1989.

³⁰ Baxter 1987, 1988.

³¹ Governors’ Dispatches, Hay to Bourke, 22 April 1833.

³² GGO 8 May 1801 HRNSW 4:364.

³³ GGO 14 May 1801 HRNSW 4:367.

³⁴ GGO 17 May 1801, HRNSW 4:368.

2-pound loaf of bread.³⁵ In July 1802 the bakers were identified as charging more for baking bread than the charge for the equivalent quantity of wheat, producing a profit of 6 shillings and 7½ pence on a bushel of wheat valued at 8 shillings. To stop this practice the price of wheat was pegged at 8 shillings per bushel and maize at 4 shillings per bushel.³⁶ In 1804 the charge for grinding wheat into flour was to be no more than £1 per bushel. Therefore to maintain an acceptable price for bread under a situation of scarcity the price of grain and for grinding grain were regulated as well as the constituent parts and weight of a loaf of bread.³⁷ The government was involved in the most basic level of control in the society – fixing the price of food and the making and baking of bread.

King complained about the lack of public ovens for baking bread and criticised how baking added the equivalent price of one pound of flour on each full weekly ration of 9½ pounds of bread or nearly five loaves. At that time King reported that 8 pounds of flour would make 10 pounds of bread. King chose not to build public ovens because it would have only limited savings. Privately-run commercial bread ovens were therefore the only source of bread for the whole colony unless of course a private individual had an oven suitable for baking their own bread.³⁸

In April 1806, following floods in the Hawkesbury and devastation of the grain crop, attempts were made to restrict consumption of bread by licensing the bakers, thereby controlling who could be a baker. Each licensed baker had to find two people to provide sureties of 50 pounds each and had to supply a list of their customers to the magistrates each week. Further rules included making 27 loaves of 2 pound 2 ounces each from a bushel of wheat, with 56 pounds of wheat to the bushel. Prices were set for both barter and money sales. Prohibitions were instituted on baking ‘any cakes, biscuit, nor any kind of pastry whatever’.³⁹

These stringent regulations established by public experiments were clearly deigned to make the public see the government was trying to look after their interests. This suggests there was a high likelihood that bakers or their employers were trying to take advantage and charge people for an inferior product. This type of practice also defrauded the government as bread was frequently purchased as part of the people’s government ration.

³⁵ GGO 19 May 1801, HRNSW 4:368.

³⁶ GGO 2 July 1803, HRNSW 4:796-797.

³⁷ GGO 17 February 1804 HRNSW 5:310.

³⁸ King to Hobart 1 March 1804, HRNSW 5:322.

³⁹ GGO 5 April 1806, HRNSW 6:57-58, 64.

Table 14.1: Development of windmills in early Sydney.

Date	Ref	General	Large Stone Windmill	Second or military Windmill	Palmer's Small Timber Windmill	Third Windmill	Lucas' Windmill	Palmer's 2nd windmill
Jan 1793	Collins 1798:221	Thorpe engaged as master millwright						
October 1793	Collins 1798:266	James Wilkinson's walking mill. Construction of works underway.						
12 Oct. 1793	HRNSW 2:69	Mill completed capable of grinding as much corn as wanted.						
December 1793	Collins 1798:272	Wilkinson preparing new mill. John Baughan to build another mill. To be assisted by the artificers of the regiment. Both to be erected on the open spot of ground formerly the parade ground for the marines.						
December 1793	Collins 1798:277	Both Wilkinson and Baughan had the frames and roofs of their mills up and were preparing the wood-work of their mills while waiting for the roofing tiles to be burnt.						
February 1794	Collins 1798:293	Baughan's mill-house covered in tiles.						
March 1794	Collins 1798:300	Buffin (Baughan) new windmill completed. Maybe large stone windmill.						
April 1794	Collins 1798:305	Wilkinson's grinding mill operating. Had operating problems. Need 6 men to work it. Eventually dismantled. Baughan's mill required 9 men but was considered more successful. Asked to build another mill.						
1 May	HRNSW	Hunter requests government						

1794	2:215	to send out components of windmill. Mentions using mill plans and pack from Nathaniel Stedman of Chatham. Makes models and mills. Mentions a post mill as well as a wind mill.						
July 1794	Collins 1798:316	Baughan completed the second mill. Considered better than the first mill.						
Sept 1795	Collins 1798:359	Principal parts of a large wind mill arrived on a store ship.						
June 1796	Collins 1798:399		Irish convict from <i>Marquis Cornwallis</i> started erecting a windmill on the summit on the western side of the cove. Saw pits were dug and artificers hired and work commenced.					
Aug. 1796	Hunter's administration HRNSW 3:79-80	Windmill on list of buildings "much wanted".						
20 Sept 1796	HRNSW 3:137	Endeavouring to erect 2 windmills. Need to use free men – all artificers are free men.						
12 Nov 1796	HRNSW 3:175		"Erecting on high ground over Sydney a strong substantial and well-built windmill with a stone tower which will last for two hundred years"					

Date	Ref	General	Large Stone Windmill	Second or military Windmill	Palmer's Small Timber Windmill	Third Windmill	Lucas' Windmill	Palmer's 2nd windmill
Oct 1796	HRNSW 3:220		Records windmill built and now operating.					
1 June 1797	HRNSW 3:213		Sails stolen from mill and could not work.					
25 June 1797	HRA 2:31	Sacked main millwright on salary of £105.	Irish convict completed the mill and paid £ 25.					
Dec 1797	HRNSW 3:336		Wheels for the windmill					
Dec 1797	HRNSW 3:338		Employed a millwright, a disabled man "superintending the building of the windmill"					
	HRNSW 3:338		1 miller and 1 assistant "attending the windmill, grinding wheat for the store"					
Dec 1798	HRNSW 3:521			"Began the building of a windmill upon a much larger scale than the former"				
Dec 1798	HRNSW 3:523		1 miller and 1 assistant "attending the windmill, grinding wheat for the store"					
Dec 1798	HRNSW 3:523		Employed a millwright, a disabled man "superintending the building of the new windmill"					
7 June 1799	HRNSW 3:670			A large storm causes damage. "A large substantial windmill tower of stone, the				

				second I have attempted to erect, was rais'd to its full height, and we were employed in getting it off the roof, but not being yet clos'd in, or sufficiently shelt'd from the storm, it was laid down to the ground;				
Dec 1799	3:750	"took down the materials of the old mill, that was worked by men to forward the building of the windmill"						
	3:752		1 miller and 1 assistant "attending the windmill, grinding wheat for ye store"					
	3:523			Employed a millwright, a disabled man "superintending the building of the new w'mill"				
Dec 1800	HRNSW 4:280				Lent 2 men 4 months to assist the building of the new windmill.			
Dec 1800	HRNSW 4:282		1 miller and 1 assistant "attending the windmill, grinding wheat for the store, &c"					
	HRNSW 4:283		Employed a millwright, "a disabled man, superintending the building of the new windmill"					
15 May	HRNSW				Meal received from			

1801	4:368				Mr Palmer's mill for bread experiment.			
November 1802	Péron 1809 4:385-389				Beyond the government garden, on the other side of a neighbouring hill, is the windmill, the bakehouse, and the state ovens, that are used for making sea biscuit: these are capable of furnishing from fifteen to eighteen hundred pounds per day.			
31 December 1803	HRNSW 5:294	There are three wind-mills, all situated at Sydney, two of them built by Government; but the one that has lately been finished cannot be worked and the other is but good for little. The one that is private property is said to answer well. (George Caley)						
Date	Ref	General	Large Stone Windmill	Second or military Windmill	Palmer's Small Timber Windmill	Third Windmill	Lucas' Windmill	Palmer's 2nd windmill
1 March 1804	HRNSW 5:321	Only one windmill working when King took command.		Only 15 feet high in 1800. No machinery ready except for wood work of cog-wheel. Not completed until end of 1802. Now works two pair of stones.				
30 April 1805	HRNSW 5:597						Received materials for dismantled post mill from Norfolk Island. Should help resolve the mill shortage. Nathaniel Lucas returning with these materials.	
17 March 1805	SG 17 March 1805:2c						Passenger on <i>Investigator</i> and had permission to bring property from Norfolk Island "the wood-work for a wind-mill, which will probably be erected at Farm Cove. He brought also several pairs of capital mill-	

							stones, those of Norfolk being allowed superior in point of durability to any that can be procured here".	
23 June 1805	SG 23 June 1805: 2a.						Lucas' mill was in working order by May or early June 1805.	
13 August 1806	HRNSW 6:164		Useless	Wants new plastering, whitewashing, and repegging the woodwork.		Not finished.		
Late 1805/early 1806	Meehan's 1807 plan							Palmer's large mill was in operation.
24 March 1819	HRA 10:1 27-131			Windmill used by military.				

14.6 Bakehouse Ceramics

Early lead-glazed ceramics are a significant archaeological resource and are the focus of interest not only in the field of archaeology but also in the study of Australian ceramics generally. The lead-glazed ceramics from the bakehouse phase fit into two broad categories, coarse lead-glazed earthenwares and fine lead-glazed earthenwares. Many of these would have been locally made, probably in the Brickfields or perhaps in Pitt Street at Skinner's pottery.⁴⁰

The aim of this section is the analysis of how the bakehouse artefacts contribute to the research question:

- How the analysis of the material culture of the bakehouse remains contributes to research into the foodways, diet and technological strategies of the first colonists?

To this end a ceramic typology has been created to act as an analytical and interpretative framework for the local ceramics.

14.6.1 Discussion of Lead-Glazed Ceramic Typology

Summary total of recognisable vessels from archaeological deposits associated with the bakehouse occupation and which are included in the Bakehouse Ceramic Typology. For profile drawings of the vessels under discussion see the following section (Appendix 14.6). Most of the lead-glazed ceramics discussed in this section came from the archaeological deposits in Verbrugghen Hall that are considered to be associated with the bakehouse occupation (see 6.1.3). Four lead-glazed artefacts found in the Northwest Lobby appear to be in deposits related to the bakehouse and have been included in this typology and discussion.

Pan-1	L-G	5	B8, Y14, Y7, Y17
Pan-1, small	L-G	1	B6
Pan-3	L-G	1	B1
Pan-2/Deep Bowl	L-G	1	B2
Dish 1	L-G	1	M1
Plate 1	L-G	3	Y3, Y16, B5
Basin/bowl-1	L-G	3	Y2, Y8, Y13
Basin/bowl-2	L-G	1	B12,
Pot-1	L-G	1	B4
Pot-2	L-G	1	B11
Jar-1, large	L-G	2	Y20, Y6
Jar-2, small	L-G	1	Y12
Lid-1, glz	L-G	1	B10
Lid-1, ss	SS	2	SS1, SS2
Lid-2, glz	L-G	1	Y18
Base, small	L-G	2	B7, B13
Rim, small	L-G	1	B14
Bowl, small	FW	3	Y11, Y1, Y19
Jar, medium, rounded	FW	1	Y4
Lid	FW	1	Y5
Base, small	FW	1	Y9
		33	

L-G: lead-glazed; FW: fine ware

⁴⁰ Casey 1999.

Pan-1

There are four examples of Pan 1 type as defined by Casey 1999. The main range of characteristics for this group is the truncated cone shape with either rolled or knife cut rim. The rim diameters range from 270 to 400 mm, base diameters fall between 170 to 260 mm, with the height typically between 109 to 170 mm and the angle of the outer body falling between 118 to 145 degrees. Of the four examples associated with the bakehouse deposits two were bases (Y7, Y17) and two others had evidence for the base and rim (B1, B8). Y7 appears to be the largest Pan 1 form and may have had a rim as wide as 400 to 440 mm.⁴¹ All vessels have interior glazes and a slip on the exterior. This form is typically associated with the manufacture of bread-making and dairying.⁴² This form is commonly found on seventeenth- and eighteenth-century British sites as well as sites in the United States.⁴³

Vessel Y14, a rim, has a diameter of 276 mm and is straight sided suggesting it fits into Pan-1 shape.

These vessels are usually considered to be used for the preparation of food. In the case of the bakehouse, this would be for the making of bread.

Pan-1, small

Vessel B6 has all of the characteristics of this class but is smaller. It has the truncated cone shape. Its base is at the minimum diameter for Pan-1 vessels but its rim is considerably smaller. The rim to height ratio is 1:3 which is typical. Probably used for food preparation.

Pan-2/Deep Bowl

B2 has a rolled thickened rim with a diameter of 250 mm, base diameter 132 mm and a height of 132 mm with steep sides (110°). It has an exterior slip and a strong glossy brown glaze on the interior. It is similar in form to Pan-2 type but is smaller in diameter and overall dimensions.⁴⁴ It is very close in general dimensions to a Deep Bowl, Type 1 in Fryer & Shelley and is similar in size and form to Higginbotham.⁴⁵ It is also similar to a vessel in Beaudry *et al.* top right.⁴⁶ The body of this vessel flares wider than Y6. This is clearly a relatively common shape on both sides of the Atlantic. Its use at the bakehouse site possibly relates to the baking of bread.

Dish 1

Due to its shallowness vessel M1 does not fit easily into the Pan-1 or plate group. It has a rim diameter of 270 and a base of 155 mm with a height to rim ration of approximately 1:5. The rim is everted and almost flanged. According to Pearce this vessel would be termed a 'dish'.⁴⁷ Within the Potomac system it also fits into the 'dish' category because its diameter is larger than 10 inches and would have been used as a serving vessel.⁴⁸ No examples of this shape were published in Casey 1999. Probably used for serving food but may be multi-purpose.

⁴¹ Casey 1999:18, Fig.17.1

⁴² Casey 1999.

⁴³ Pearce 1997; Beaudry *et al* 1988.

⁴⁴ Casey 1999.

⁴⁵ Fryer & Shelley 1997:172, Fig. 17.7; Higginbotham 1987:10, fig.6.7.

⁴⁶ 1988:65, pan/pudding, pastry etc.

⁴⁷ Pearce 1997:9.

⁴⁸ Beaudry *et al.*1988:63.

Plate 1

There are two decorated examples of Plate 1 – Y3 and Y16 and a glazed one B5. Sherds of Y16 are on display in Foyer Display 1 at the Conservatorium of Music. Both examples have a bright yellow glaze with a wavy decoration in bottle green and chocolate brown. Their diameter is 200-210 mm, no bases survived and depth is uncertain. There are no clear parallels for the plates. Beaudry *et al.* 1988 has a similar type of plate which falls between 7 to 10 inches (180-250 mm) in diameter (1988:63). Decoration and size suggest these were tablewares and used in the consumption of food.

Basin/bowl-1

There are two examples of this from the bakehouse deposits, Y2 and Y8. Y2 has a rolled rim, continuous incurving line to the outer body and is steep sided and shallow (about 60 mm). It has a pale orange pink fabric with a brown-yellow interior glaze. Y8 has straighter sides and a cut of rim but generally the dimensions and the main elements are similar enough to place them both in the same group. There are no direct comparisons with the major reference sources used for producing the lead-glazed typology. Using the Potomac typology this vessel would be classed as ‘bowl’ and which would typically be used in the kitchen or dairy.⁴⁹ The difficulty with using this term is that where we have names for this form of vessel in the context of colonial NSW, ‘bowl’ is not a known term used for coarse earthenwares during the early period.⁵⁰ This may reflect the problem of using advertisements as the main source of data for names for vessels but there are few other sources. The difficulty is that once a vessel has convex sides the common terms become ‘bowl’ or ‘basin’. The decision made in Casey 1999 is continued here and the term basin/bowl is used until further information can be obtained to define the real differences or local practices. The ceramic types in Casey 1999 had base diameter ranging between 180 to 200 mm with a fabric thickness between 9 to 16 mm. There were no rims associated with this type of vessel which means the type attribution were inconclusive. It is only through gathering more knowledge of vessel forms that we will begin to understand the full range and form of vessels. The rims of Y2 and Y8 would suggest that rim diameters fall around 270 to 280 mm and could easily be larger or smaller. The rim to height ration of Y8 is 1:3 suggesting this is probably fairly typical for a basin/bowl form. This form was probably used for food preparation.

It is likely that Y13, a rim of a concave vessel, with a rim diameter of 250 mm, also fits into basin/bowl-1.

Basin/bowl-2

B12 is a small basin/bowl with a rim diameter of 205 mm and a base diameter of 115 mm and is 71 mm high. This produces a rim to height ratio of approximately 1:3. Glazed on the inside and slipped on the exterior. It is generally smaller than the Basin/bowl-1 group. This form was probably used for food preparation.

Pot-1

B4 fits into this category as defined by Casey 1999 (Figure 8.6, 12). This group have concave bodies with everted rims and ledge for resting a lid on. The rim diameter ranges between 255 to 300 mm and the body thickness between 7 to 10 mm. They were probably made with matching lids. Probably used for storage, possibly of dry food.

⁴⁹ Beaudry *et al.* 1988:63.

⁵⁰ Casey 1999:30f, Appendix 2.

Pot-2

This is similar in form to pot-1 but there is no ridge or ledge for a lid. The only example from the bakehouse was B11, the rim of a large pot with a diameter of 350 mm. This was the largest rim diameter of any vessel associated with the bakehouse occupation. This is probably a convex-sided vessel. This pot was similar to 'pot' forms identified by Beaudry *et al.*⁵¹ This form was probably used for food/liquid storage.

Jars

Jar-1, large

One definite large storage jar (Y10) and the base of another possible jar (Y6) were found in remains associated with the bakehouse. The Y10 jar had a rounded, everted rim, wider at shoulder and tapering to the base. The height was more than twice the diameter of the base and the diameter of the mouth was wider than the base. This was more typical of older style wide-mouthed jars.⁵² May have had lug handles at the shoulders. The bases of the two jars are 130 mm (5 inches) and 153 mm (6 inches) in diameter perhaps suggesting some level of regular increase in gradation for the two jars with the Y6 jar being a larger version of the Y10 vessel. Associated with food preparation and storage.

Jar-2, small

A single small storage jar (Y12) with a bulbous body was found. It possibly had a handle at the top of the shoulder. May have been designed to hold liquid. Shoulders are wider than the base. Shoulders are located high in the body, on the upper one third. The glaze and fabric of Y12 is very similar to Y14, the neck of a larger vessel. Associated with food preparation, storage and possibly with serving.

Lids

A total of four lids were found, three were lids to storage vessels and the fourth was for a smaller yellow glazed vessel. All had the same form. Greer describes these as a 'hanging two process lid'.⁵³ It is made with a shallow bowl form with a 'flat projecting exterior edge or lip as well as one or two centimetre tall vertical projection up from the inner part of the ledge' which sits over the rim of the vessel.⁵⁴

Internal diameter of the larger lids ranged between 230 to 255 mm with the smaller lid having an internal diameter of 60 mm and a full height of 25 mm. The height of the storage lids is unknown as the sherds did not survive in sufficient detail. One of the few published parallels was found at the Gateway site which had a internal diameter of 80 mm.⁵⁵ A fine ware lid in the same shape was also found (Y5), see below.

These lids may have covered storage vessels. The use of this form of lid, with is more complex to make than other types of lids, is interesting as it is the only type of lid found in association with the bakehouse in both coarse lead-glazed earthen wares and fine wares. It may reflect a preference of the potter or of the customer.

⁵¹ Beaudry *et al.* 1988:66.

⁵² Greer c. 1981:83.

⁵³ Greer c. 1981:71.

⁵⁴ Greer c. 1981:71.

⁵⁵ Higginbotham 1987:17, fig. 11.5.

Bases

Bases of two lead-glazed vessels with similar size and decorative elements were found – B7 and B13. Both are very similar in glaze and slips used. Possibly by the same potter. Shape of upper body is uncertain. May be a bulbous jar shape? These forms are called by the generic term ‘pot’ in the database. This will have to suffice until their form can be fully recognised. Probably used for food preparation as a container.

Rims

One rim, B14, had insufficient evidence to identify the most likely type of body with which it was likely to be associated. B4 had a flared rim with a diameter 160 mm.

Fine Wares

In 1999 Mary Casey identified the presence of a group of finer wares that were possibly locally made.⁵⁶ These are typically a pale yellow glaze on a white fabric. It has been suggested that these were probably imitating imported British creamware and annular creamware.⁵⁷ Remains of these vessels, because of their finer fabric, are very fragmentary and only two full shapes could be identified from the bakehouse. Shapes identified in association with the bakehouse are:

- Y11, a small bowl,
- Y4, a medium sized, rounded, covered jar, larger than shape parallels in Pearce 1992:Fig 44.403-409. This has a ledge for a flat lid to sit inside the rim. The term ‘jar’ is a term commonly used to describe food/storage vessels in Australia throughout the nineteenth century.⁵⁸
- Y5, a lid made with a hanging two-process rim.
- Y1, the foot of a small bowl.
- Y9, foot of an unknown vessel.
- Y19, rim of a fine bowl, larger than Y11 by 40 cm.

It is presumed these fine wares were associated with the consumption of food (tablewares) but may have also been used for drinking tea. The bowls may have been slop bowls. The presence of these fine wares at two early sites does suggest they are a relatively common ware to be found on early Sydney or Parramatta sites and are probably generally unrecognised on most sites.

14.6.2 Discussion

A notable aspects of the bakehouse deposits during excavation was the frequency with which lead-glazed pottery sherds occurred (Table 1000.11). There were 660 sherds of lead-glazed pottery with a minimum item count of 84 items or vessels. Among the bakehouse remains lead-glazed ceramics (24.6%) constituted one quarter of all ceramics recovered (Table 1000.11). Due to the very fragmentary nature of this pottery only 38 vessel forms could be identified with only some of them being specifically identified beyond a general group; 46 vessels shapes remain unidentified (Table 1000.1). Many of the lead-glazed vessels were used for preparation of food stuffs. There are a total of 28 lead-glazed vessels in this group (Table 1000.8).

The presence of so many lead-glazed vessels suggests many of them were typically used in association with bread making. As Table 14.2 illustrates the frequency of this type of vessel at this site is rather high, higher than was found at a dairy site down near the Haymarket (DMR A). This

⁵⁶ Casey 1999.

⁵⁷ Casey 1999:22-23.

⁵⁸ Casey 1999:31.

Table 14.2: List of various archaeological sites in Sydney and the quantification of lead-glazed ceramics from these sites.⁵⁹

Site	Period	Lead-Glazed	%
Old DMR – A (house/yard)	late 19th	5	2.7
Old DMR – B (house/dairy)	early 19th	57	30.3
Old DMR – C (yard)	early 19th	21	11.2
Poplar A (yard of 2 houses)	2/2 19th	3	1.6
Poplar B (house/yard)	2/2 19th	12	6.4
Albion Street Brickfield period	c. 1830/40s	4	2.1
Albion St (rubbish pits in yard)	2/2 19th	-	-
Sussex St A (manufacturing)	2/2 19th	-	-
Sussex St C	2/2 19th	2	1.1
Bulwara Rd – B (house/yard)	2/2 19th	-	-
Bulwara Rd – C (foundry)	2/2 19th	-	0.-
Con site Bakehouse	1800-1815	84	44.7
	Total	188	100

Table 14.3: General function categories from the bakehouse compared with other sites in Sydney.⁶⁰

General Function	DMR – B (house/ dairy)	DMR – A (house/ yard)	DMR – A well #35	Poplar A (yard of 2 houses)	Poplar B hotel bottle dump	Poplar B resumed slum house	Albion St (rubbish pits in yard)	Sussex St A (manufac turing)	Con. site #850 rubbish dump	Con. site Bakehouse
Alcohol	17.6	18.4	22.1	10.2	54.9	0.8	19.8	35	32.6	7.0
Alcohol/Food	-	0.1	-	1.0	5.4	-	0.3	0.3	-	0.2
Architecture	7.8	13.8	8.7	3.7	3.6	2.0	13.2	2.3	1.9	30.6
Beverage	2.5	0.6	0.4	1.6	10.6	0.3	1.8	0.3	3.4	-
Clerical	-	0.2	0.2	1.2	0.1	3.4	0.1	-	2.1	-
Communication	-	-	-	0.1	-	-	-	-	-	-
Economy	-	-	-	1.7	0.4	1.8	-	0.3	-	-
Food	59.4	45.5	42.1	53.3	7.4	45.3	53.5	60.1	44.4	36.6
Household	0.6	5.5	7.6	3.0	0.6	14.5	1.9	-	2.2	0.5
Military	-	-	-	-	-	-	-	-	-	0.2
Music	-	0.1	0.2	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-	-	-
Personal	1.7	3.8	4.2	6.8	1.2	14.1	2.1	0.3	3.7	0.6
Pers/Food	-	-	-	-	-	-	-	-	0.1	-
Pharmaceutical	0.6	2.3	2.2	6.6	3.2	-	1.8	-	5.1	-
Pharm/personal	-	-	-	-	-	-	-	-	0.5	-
Recreation	2.0	2.4	1.4	4.2	0.6	12.4	2.1	1.1	1.7	4.6
Service	-	1.3	2.2	1.3	-	0.3	0.4	-	0.3	-
Store	2.5	1.2	1.6	2.9	0.1	1.4	0.4	-	0.1	0.2
Transport	-	-	-	-	-	-	0.1	-	-	-
Work	-	0.1	-	-	-	0.2	-	-	-	-
Yard	3.6	1.1	2.2	1.6	0.1	1.1	0.4	-	1.0	-
Unid	1.7	3.4	4.8	0.7	11.6	2.4	2.1	0.3	0.8	19.6
Total	100	100	100	100	100	100	100	100	100	100
# of Items	357	1054	497	694	3241	1642	682	351	1069	628

⁵⁹ This is a variation on the table in Casey 1999:table 4.⁶⁰ This is a variation on the table in Casey 1999:table 7.

is supported the quantity of the preparation vessels found at the bakehouse, 50 per cent of vessels identified as being related to food activities were associated with food preparation (Table 1000.13). When compared with other sites this appears to be a lower overall proportion of food items but this is distorted to some extent by the high proportion of unidentified items and the high proportion of building materials associated with the demolition of the bakehouse (Table 14.3). Yet when the proportion of preparation-related vessels are examined the bakehouse contained the second highest quantity other than the early dairy site at DMR B (Table 14.5). This reinforces the pattern previously identified at DMR B where a high proportion of food/preparation vessels were considered to be a significant feature of sites associated with the commercial production of food.⁶¹

Table 14.4: Specific food functions from the Conservatorium site bakehouse and the dairy site at DMR B.⁶²

General Function	Specific Function	MIC 1004, 1005 1034	%	MIC DMR B	%
food	condiment	-	-	6	2.9
	container	8	4.2	8	3.8
	food	-	-	1	0.5
	preparation	24	12.6	41	19.3
	prep/cont	5	2.6	-	-
	prep/store	2	1.0	2	0.9
	serve	7	3.7	17	8.0
	store	1	0.5	8	3.8
	tblw	103	53.9	67	31.6
	tblw/serve	2	1.0	9	4.2
	tea	39	20.4	53	25.0
Total		191	100	212	100

Table 14.5: Specific food functions from the Conservatorium site bakehouse and the dairy site at DMR B.⁶³

General Function	DMR – A (house/yard)	DMR – A well #35	DMR – B (house/dairy)	DMR – C (yard area)	Poplar A (yard of 2 houses)	Poplar B (house/yard)	Albion St (rubbish pits)	Sussex St A (manufacturing)	Con. site dump #850	Con Site. Bakehouse
Tableware	29.2	31.1	31.6	41	27.3	26.7	27.8	7.9	37.6	53.9
Tea ware	48.9	45.55	25.0	31.9	44.6	56.2	40.4	5	26.3	20.4
Serving	9.3	9.3	8.0	12.9	11.4	7.9	14.2	2.2	9.0	3.7
Preparation	1.9	1.9	19.3	9	2.5	2.3	2.7	-	1.3	12.6
Table/Serve	-	-	4.2	1	3.5	1.6	0.5	-	0.8	1.0
Condiment	3.5	4.8	2.8	1.9	2.2	-	6.4	71.9	14.5	-
Store	0.4	-	3.8	-	-	-	4.3	-	3.8	0.5
Container	6	10.5	3.8	2.4	8.6	-	2.9	9.4	3.6	4.2
Food	-	0.5	0.5	-	-	-	-	-	2.1	-
Closure	0.6	1.0	-	-	-	-	0.8	3.6	-	-
Prep/Serve	-	-	-	-	-	-	-	-	0.8	-
Prep/store	-	-	0.9	-	-	-	-	-	-	1.0
Prep/container	-	-	-	-	-	-	-	-	-	2.6
Preserve	-	-	-	-	-	-	-	-	0.2	-
Total	100	100	100	100	100	100	100	100	100	100
No. Items	517	209	212	210	370	692	374	139	476	191

⁶¹ Casey 1999:15.

⁶² Based on Casey 1999:table 8.

⁶³ Based on Casey 1999:table 9.

An interesting feature highlighted by Table 14.5 is the presence of a very high proportion of tableware items found associated with the bakehouse. This term incorporates a range of vessels, mainly dinner plates (51) as well as bowls (5), glass stemware (2) and a soup plate (1) (Table 1000.8). Many of the plates were the commonest form – creamware (82%) with the occasional plate in some other form, Chinese hand-painted porcelain (5) and lead-glazed (4) (Table 1000.14). This pattern is interesting and would repay further analysis.

14.6.3 Summary

The archaeology of the bakehouse illustrates the presence of a commercial premises as well as a residential household. The presence of an internal well in the building and the high proportion of lead-glazed earthenwares and preparation vessels represent the commercial elements of the site. The other types of ceramic, the plates and teawares testify to a more diversified range of activities. As it is considered that many of the artefacts under discussion mostly came from a bakehouse-period feature disturbed by the building of the Stables, the proportion of artefacts and their representation of a commercial and residential building confirms their relationship with the bakehouse rather than with any other occupation or period.

The analysis of the lead-glazed ceramics assists in the early stages of analysing the range of lead-glazed ceramics available in early Sydney. Their significance partly relates to the presumption that most of them are locally made. The pattern found at the bakehouse is similar in some means to that found at the dairy site at DMR B, suggesting that the identification of this pattern of commercial activities at early sites, whether it is known from the history or not, is a way of starting to further our knowledge of the range of activities represented by early archaeological assemblages.