



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Rum Corps to IXL: Services to Pastoralists and Farmers in New South Wales

B. R. Davidson*

The dominant factor in the development of agriculture in Australia has always been the high ratio of agricultural land to population. The domestic population has never been large enough to provide a market for all that could be produced or to provide a cheap labour force to work all of the available land intensively. In these circumstances, agriculture was only profitable if the land was used to produce a commodity for which an export market existed, which could be transported to that market without deterioration, and at a cost which would not absorb all of the profits. The same commodity had to be produced with a small labour force as the number of labourers was limited and able to demand high wages. The situation favoured the production of commodities requiring a large area of land, of which there was a plentiful supply. Wool was the first commodity which met all of the above criteria. Later technologies were developed in Australia or imported from abroad to enable other animal products and grain to be produced and exported profitably.

The role of first the government of Great Britain, and later of the Colonial and Australian governments, in the development of agriculture was probably greater than in most other countries. As the sole initial owner of all land, and through control of immigration policies, these governments played a vital part in the supply of both land and labour to farmers, particularly during the first century of settlement. During the last 100 years wages paid to hired farm labour have been affected by government wage policies and the trade unions. The basic infrastructure in the form of roads, railways, wharves, irrigation works, post and telegraph communications, education and research services has always been largely provided by governments which have also played a significant part in providing farms with credit. Since the 1930s, governments, by means of bounties, subsidies and two-price schemes, have partially determined the price farmers received for their produce and at certain periods

have even acquired some farm products and disposed of them on behalf of the farmers.

With the exception of the very early period of settlement, other inputs in the form of food, clothing, machinery, buildings, chemicals, insurance, sea and road transport and most marketing and credit services, if they have not been created by the farmers themselves, have been provided by a separate commercial sector. However, the supply and price of these inputs has often been affected by government tariffs and resource bounties.

Any study of the supply of inputs to farmers in New South Wales (NSW) should involve an examination of the degree to which government land, immigration, pricing and other policies favoured, or were detrimental to, the development of the export oriented and extensive land and labour types of land use which were essential for profitable farming in Australia. As such systems of land use involved the development of new techniques it is necessary to examine the part played by the governments, farmers and the commercial sector in developing the technology required. As Australian agriculture developed it changed from a semi-subsistence form of land use, in which the major inputs were land and family labour, to one in which a high proportion of inputs were created by a separate commercial sector of the economy. Thus, the organization of this commercial sector and the efficiency with which it provided farmers with goods and services, marketed their products and transferred land between users, must also be examined.

In this four-part series, the supply of input, processing, marketing and facilitating goods and services to pastoralists and farmers in New South Wales is examined chronologically over the period 1788 to the present.

*Previously Senior Lecturer, Department of Agricultural Economics, University of Sydney.
Commissioned series. Review coordinated by David Briggs

Part I 1788-1850: The First Settlement and the Pastoral Age

1. Farming Inside a Prison

1.1 Land, labour and markets

When the convict settlement was established at Port Jackson in 1788 the Crown was the sole owner of all land. The initial aim was to use land, convict labour, and the limited quantities of tools, seed and animals that were carried by the first fleet to produce enough to feed the settlement. The original intention was to produce enough food for the convicts on government farms. However, as the convicts refused to work, production was limited (Tench 1793, pp. 142-6). Land grants of approximately 30 acres were to be made to convicts whose sentences had expired and somewhat larger areas of land to retired marines if they chose to settle in the colony. These small settlers were supplied with rent-free land for 10 years, and with tools, seed and rations for 18 months. Larger land grants of 100 to 4000 acres were made after 1790 to both civil and military officers and to free migrants with capital (HRA I, 1, pp. 124-8). After 1820 the size of land grants made was in proportion to the amount of capital migrants possessed. The grants ranged from a minimum of 320 acres for those with £250 to a maximum of 2560 acres for £3000 capital (Burroughs 1967, p. 121).

Some settlers were supplied with convict labourers who were fed and clothed by the state until 1798 (HRA I, 2, p. 151). This labour force was later supplemented by convicts whose sentences had expired, and after 1801, by convicts with 'tickets-of-leave' whose sentences had not expired but who were permitted to work for wages. The labour market was by no means free. In the hope of encouraging agricultural production, the early governors unsuccessfully attempted to fix wages to prevent them rising. This policy had little effect, as by 1800 when fixed wages were 1 shilling (s.) a day, labourers were being paid 5s. by settlers (HRA I, 2, p. 621).

Initially, the hoe was almost the only cultivation tool available to farmers. Draught oxen could be hired from the government herds after 1804, but the

hoe was not replaced by oxen ploughing on a large scale until 1820.

Any surplus grain or meat produced by farmers was purchased by the Government Commissary store at a price fixed by the governor. For the main crop, wheat, this varied from 7s. a bushel in good seasons to 15s. a bushel in periods of shortage. In most years the average price was 10s. a bushel for wheat and 8s. a bushel for maize (King 1948, pp. 692-721). Payment was made in store receipts which could be used to purchase goods from merchants who later converted them into Treasury Bills.

In the initial stages of settlement the government was the supplier of land and much of the labour available to settlers, and it even attempted to fix the wages paid to free labour. It was also the sole supplier of tools and draught animals and the final purchaser of produce at fixed prices. Early agriculture in NSW was almost as socialized as it could possibly be.

1.2 Free-traders versus monopolists

The farmers' first experience with free enterprise was far from beneficial. It consisted of a monopoly on most imported goods, established by the Officers of the NSW Corps during the three years of military rule after Governor Phillip left the Colony in 1792 (HRA I, 2, pp. 11-13, 153). Goods could only be purchased from ships by payment in sterling, and this was available to the officers in the form of store receipts in which they were paid for meat and grain sold by them to the Commissary Store, and in Paymasters' Bills drawn from the NSW Corps banker's agents in London (Hainsworth 1981, pp. 25-30). The officers purchased all cargoes of ships entering Sydney and sold these through ex-convict middlemen at prices 100 to 500 per cent higher than they had paid (Lang 1834, pp. 62-5). Initially the monopoly was extremely effective since all tools and other metal goods, sugar, tea, tobacco and most clothing were imported. Even in 1820 colonial manufactures were limited to the production of leather, coarse salt and some inferior blankets and clothing (Bigge 1823, pp. 52-3). The monopolists also managed to gain control over the entry of grain into the government stores in periods of oversupply. Small settlers were forced to sell grain to the monopolists for 20 per cent less than the

government prices. It was then sold to the store at the government price (Fletcher 1976, pp. 78-82; Evatt 1971, pp. 314-5; King 1948, pp. 672-3). The net effect of lower product and higher input prices was insolvency for many of the small settlers. In addition to accepting a low price for produce sold to the monopolist, the settler was often forced to accept payment in rum, which was valued at the monopolists' inflated prices. For a time, rum became the unofficial currency of the colony and was used in payment of wages, as well as in the purchase of goods. Thus, the currency was often consumed by wage earners and settlers before it could be used to purchase goods for their sustenance (H.R.A. I, 2, p. 422; Clark 1962, pp. 135-7, 214).

The monopoly was soon threatened by a free market which developed to supply emancipists not in receipt of government rations, with grain and meat. By 1796, the free population comprised 18 per cent of the total population and the proportion increased in future years (Fletcher 1976, pp.82-85). More importantly, the ex-convicts, who disposed of the officers' cargoes to the settlers and purchased grain and meat from them, acquired sterling by the sale of this produce to the government store. They were soon able to purchase goods from ships in their own right, and competed vigorously with each other and the officers in the sale of these goods to settlers. Some of the ex-convict dealers such as Simeon Lord, Andrew Thompson, Henry Kable, James Underwood and Thomas and Mary Reiby later became important merchants, sealers and manufacturers in their own right (Hainsworth 1981, pp. 36-43, 85, 88-89, 95, 106-7). By 1800 the officers' monopoly was severely threatened and it was further eroded by the establishment of merchants from India, such as Robert Campbell in 1800 and William Tough in 1801 (Hainsworth 1981, pp. 86-88; Steven 1965, pp. 26-61). By 1803 the Sydney market was glutted with goods supplied by Indian merchants (Hainsworth 1981, p. 50; Fletcher 1976, pp. 67-8). Free trading was further encouraged by the establishment of markets in Sydney in 1810 and Parramatta in 1811. At these, farmers could sell produce directly to consumers (Fletcher 1976, pp. 137-8).

By 1810 it was also clear that in most years grain could be imported from the Cape of Good Hope,

India and Chile for less than the government fixed price (King 1948, pp.328-9). The larger settlers turned to grazing since meat production was more profitable than grain for those with sufficient capital to establish herds and flocks. The production of grain was left to the small settlers (Dunsdorfs 1956, pp. 41-6). The domestic market for grain could not be expanded by exporting. The small Australian coastal ships were incapable of overseas voyages. Until 1813 external shipping was controlled by the East India Company, and even after this date large overseas ships were too few and far between to develop a regular export trade. Exported grain had to be collected from a large number of small settlers. A medium-sized freighter, capable of carrying a cargo of grain to Batavia, Chile or the Cape, required the whole crops of 30 to 80 farms. Merchants shipping grains had no knowledge of the prices they would receive when the grain reached a particular port. In these circumstances it is not surprising that attempts to export grain from Tasmania to the Cape and to England in the 1820s and '30s were abandoned (Dunsdorfs 1956, pp. 79-80). It was a much simpler matter to know that a grain shortage was developing in New South Wales and to despatch ships to Chile or the Cape for grain, knowing that by the time such ships returned the grain price would be high. Shipment of meat or perishable produce was impossible. Shipping was further restricted by a complex set of port charges and also by regulations aimed at preventing convicts and debtors from escaping. These delayed the sailing of ships for up to 10 days and increased the cost of transport (Bigge 1823, p. 54).

It was also obvious as early as 1820 that the profitable production of grain at any distance from the sea or a major centre of population was impossible as transport costs consumed most of the returns from grain if it was carried far by land. In 1828 the cost of land carriage from the Hawkesbury to Sydney was the same as sea freight from Tasmania to Sydney (Dunsdorfs 1956, p. 66).

Between 1820 and 1850, wheat production in the Australian colonies was only sufficient to meet domestic demand, and in drought years Australia was a net importer of wheat. New South Wales was a net importer of wheat from Tasmania and South Australia throughout this period, as the cost of transporting wheat by sea from these colonies to

Sydney was less than the cost of land carriage from any part of NSW which was more than 40 miles from Sydney (Dunsdorfs 1956, pp. 52-3). In the inland rural areas of NSW, sufficient wheat was produced to supply the local population, and surplus maize was shipped from the north coast to Sydney to feed domestic livestock (Shipping Gazette and Sydney General Trades List 1844-53).

With the exception of the sale of surplus produce to local merchants and the purchase from them of limited quantities of tools, clothing and some items of food, until 1820 agriculture in NSW was a subsistence venture. Further expansion was checked by the lack of a profitable market for additional surplus produce. In these circumstances it is not surprising that the colonists turned to the production of wool and meat (Fletcher 1976, pp. 131, 147-8, 163-4). Wool was the only product with an expanding export market and because it was not perishable and was valuable in terms of its weight and volume, it could be shipped to that market and return a profit. The flocks and herds established in County Cumberland between 1810 and 1820 were the basis of the future Australian pastoral industry.

2. The Pastoral Industry (1820-1850)

2.1 Land and tenure

Ample land was available for rearing sheep once the Blue Mountains were crossed in 1813. However, the existence of land was of little use to pastoralists if they were not permitted to use it. Livestock were not permitted to cross the Blue Mountains until 1815. Even then, livestock were restricted to the 19 Counties, which would have limited the area of occupation to the central coast, the Hunter valley and parts of the south coast, central and southern tablelands (HRA I, 12, p.378). It was the refusal of the graziers to accept these regulations and their illegal occupation of Crown Land beyond these limits which enabled a large wool industry to be established rapidly (Burroughs 1967, p. 140).

By 1829, when the 19 Counties were first promulgated, livestock were already grazing beyond the official area of settlement, and most of the tablelands and the upper reaches of the Murrumbidgee had been occupied. In 1835 the Namoi and Murray

valleys were occupied and the squatters moved north into what was later Queensland and south into Victoria. In NSW by 1850 only the dry land west of the Lachlan was unoccupied (Roberts 1968, pp. 166-73).

Under the land regulations of 1831 grants of land were abolished and replaced by sales of land by auction at a minimum price of 5s. per acre. Such sales were limited to land within the 19 Counties. The returns from land sales were to be used to subsidize immigration. The regulations were deliberately designed to concentrate settlement and create an adequate supply of labour for colonial capitalists by preventing migrants from acquiring land cheaply.

Governor Bourke realized that it was impossible to force graziers, already settled beyond the prescribed limits, to return to the 19 Counties. Indeed, it was not in the interest of the colony to do so. Wool was the only product with a large expanding export market which could be sold for the sterling needed to purchase imports. At the same time Bourke was determined that large areas of land beyond the 19 Counties should not pass into the hands of a few individuals who would reap the benefit of increased land prices if and when, with increasing population, the land was required for a more intensive type of farming (Burroughs 1967, pp. 146-7).

Bourke's solution was to legalize occupation by the squatters, but to ensure that this was not interpreted as a permanent form of tenure. In 1836 the squatters were given annual licences on payment of £10 for each run. Licence fees were used to pay the salary of the Commissioner of Crown Lands to enforce the Act. After 1839 an additional 0.5 pence per head of sheep was charged to pay for the Border Police, a force containing a number of aborigines recruited to maintain the law and control of aborigines in the newly occupied land (HRA I, 18, p.539).

Even if land sales had been permitted beyond the 19 Counties, the returns from squatting were not enough to justify purchasing land at 5s. per acre, the minimum price for which Crown Land could be bought after 1831. It was far more profitable to invest the returns from squatting by buying land within the 19 Counties. Many of the squatters, particularly those who already held land with the Settled Districts,

adopted this policy (Burroughs 1967, pp.119, 126).

The squatters clamoured for freehold tenure but this was still refused by the colonial governors. In 1847 a compromise was reached under which the squatters were granted leases for 14 years in the unsettled lands in New South Wales beyond the 19 Counties, excluding the alluvial flats within two miles of the Clarence and Richmond Rivers. Leases were limited to eight years in the latter regions and in the better areas of the Port Phillip district. Rents were fixed at £10 for an area capable of supporting 4000 sheep and an additional £2.5 for every additional 1000 sheep the run was capable of carrying. All land could be auctioned and sold for a minimum price of 20s. per acre, but the squatter was to have first right of purchase and was to be compensated by any other purchaser for any improvements he had made (New South Wales 1847a). The squatters had at last obtained cheap land with some security of tenure.

2.2 Labour and wages

A labour force was required to shepherd the sheep during the day and watch them when they were held in folds during the night. The higher lambing percentages obtained when sheep were shepherded, and the protection it gave from dingoes, made shepherding more profitable than fencing at the wage rates prevailing between 1820 and 1850 (Davidson 1981, pp. 120-122). Extra hands were also required at shearing time, and in the construction of dwellings and sheep yards from timber and bark growing on the run. Labour was partly provided by assigned convicts whom the squatter had to feed and clothe. This was supplemented by the labour of convicts with tickets-of-leave or whose sentences had expired, and later by free immigrants, all of whom had to be both paid, and supplied with better rations than convicts. Rations supplied to both groups per week are shown in Table 1.

The estimated cost of these rations including clothing was £12 per annum for convicts (Bigge 1823, p. 97). Graziers claimed it was about £15 per annum for free labour (Davidson 1981, p. 100). However, most estimates are based on the assumption that all of the ration was purchased. There is a good deal of evidence suggesting that the major portion of

Table 1: Rations for labourers in 1820-1840 (per week)

	Convicts	Tickets-of-leave men and free labour
Flour	9 lbs	10 lbs
Meat	7 lbs	10 lbs
Salt	2 ozs	2 ozs
Soap	2 ozs	2 ozs
Sugar	nil	1 lb
Tea	nil	2 ozs
<i>Source: Coghlan (1918, Vol. 1, pp.182, 203).</i>		

both the flour and meat were produced on the squatters' runs and grown with their own labour. In 1841, 9500 acres were cultivated outside the settled districts. Even if only half of this were sown to wheat yielding 12 bushels per acre, 57,000 bushels of wheat would have been produced. A weekly ration of 10lbs of flour was equivalent to 12 bushels of wheat per annum, thus sufficient flour for 4750 rations would have been obtained. The total population in the unsettled districts in 1841 was 7068 (New South Wales 1841). This suggests that a high proportion of the flour required for rations must have been obtained from the squatters' runs. All meat certainly came from sheep and cattle slaughtered on the run. It has been estimated that in 1841 the total amount of beef and mutton available from sheep and cattle in NSW was 570lbs per capita (Davidson 1981, p.86). It is doubtful if cash spent on rations and clothing exceeded £4 to £5 per man per annum (Marsh 1842, pp. 392-6).

Wages which had to be paid to free labour and to ticket-of-leave convicts varied between years and with the distance from Sydney. In Parramatta in 1845 shepherds were paid £10 per annum, but on the Darling Downs the wage was twice this amount (New South Wales 1845a; New South Wales 1847b). Average wages of shepherds varied with the supply of labour, from a maximum of £27 per annum in 1840 after transportation ceased, to a minimum of £15 per annum in 1844 when the labour market was flooded with free immigrants (Coghlan 1918, vol. 1, pp. 218-6, 426-39, 460-6).

Part of the wages paid by squatters was recovered immediately, since the only means by which most employees could obtain goods was from the squatter's store. There is some evidence to suggest that squatters profited, since prices charged in country areas were at least 25 per cent higher than in the ports (Coghlan 1918, v. 1, p. 208; *Australian Magazine* 1838, p. 144).

2.3 Transport

Any resources not produced on the squatters' runs had to be transported from the coast. By 1850, 40 per cent of Australia's population lived in the coastal ports of Sydney, Melbourne, Geelong, Adelaide, Hobart and Launceston (Blainey 1966, p. 136). These towns were the location of foundries, dray and coach builders, breweries, distilleries and boot and clothing factories, and it was these, supplemented by imported goods, which supplied the squatters' needs. Country towns hardly existed before the gold-rushes. Scattered inns provided accommodation for travellers and their horses and were the chief recipients of wages paid to the squatters' servants.

The cost of transporting goods from the coast was high if normal commercial rates were paid. A charge of £20 per ton was the normal rate from Bathurst to Sydney in the early 1820s but 10 years later this was reduced to £10 per ton as the road improved (HRA I, 15, p. 254). However, most of these items could have been carried as back-loading on the wool waggons returning from the ports. In 1841 the average squatter's labour force was one man to 700 sheep (New South Wales 1841). Assuming adult sheep cut 2.5 lbs and lambs 1 lb. of wool per head, and that 40 per cent of the flock were lambs, the total wool produced from 700 sheep would be (700 x 1.9 lbs) 1330 lbs of wool, or 26 lbs per man-week of labour. The total weight of rations, excluding meat but including flour, was 11.4 lbs per man-week, or less than half the weight of wool carted to the ports per man employed.

2.4 Capital and credit

Buildings, including housing and wool sheds, were initially constructed either from a wooden frame covered with sheets of stringy bark, or with wooden slab walls and a bark roof. Where timber was

scarce, walls were made of wattle and daub. When wooden flooring was introduced it too was made of slabs (Joyce 1942, pp.50-66). When better buildings were constructed, the timber for walls and flooring was normally sawn, and shingles for roofs were split from timber on the property (Henning 1969, p.32). Corrugated iron was not imported until 1840 (Cannon 1978, p.150).

Although land and buildings were provided at negligible cost, capital was required not only to purchase sheep but to pay for wages and rations until returns from sales of wool and surplus sheep were obtained. In addition, estimates of the profits made by squatters suggest that returns from wool in most years were only sufficient to cover the cost of operating the station. Profits depended on the sale of surplus sheep, so profits were only available in years when the industry was expanding and additional sheep were required. In the late 1820s, early 1830s and the early 1840s returns from sheep sales were negligible. It was not until 1843 that it was discovered that surplus sheep could be boiled down for tallow for export. This enabled graziers to sell surplus sheep for at least 5s. per head (Roberts 1964, pp. 204-5). On many stations additional credit was required to finance the next year's operations in periods when sheep prices were low (Davidson 1981, pp. 103-113).

Capital to establish and operate stations was available from a number of sources. The land beyond the Great Divide was discovered by established graziers such as Blaxland, Lawson, Wentworth, Throsby and James Macarthur, who already owned land within the 19 Counties (Fletcher 1976, p. 172). These were rapidly followed by other colonial land holders and such settlers already possessed sheep and cattle, which was the major form of capital required to establish a run. In addition, their land within the 19 Counties could be used to raise capital to finance their squatting ventures. Other squatters were merchants, or the sons of merchants, from the Settled Districts who had acquired capital as traders or from other enterprises such as whaling (Watson 1907). Once the industry was established it attracted immigrants with capital, particularly the younger sons of the British gentry who were anxious to turn a limited inheritance into a fortune (Balfour 1845, p. 86).

Even those with no capital of their own could often borrow it from the Sydney merchants. To some extent these were dependent on the success of the wool industry for their existence. Until 1820 merchants had been able to obtain foreign currency to purchase goods in Britain by selling grain and meat to the Commissary Stores in exchange for Treasury Bills. Between 1810 and 1820 the value of Treasury Bills drawn increased from £73,000 to £181,000 (HRA I, 12, p.831). Over the same period the value of imports increased from £142,000 to £195,000. In 1821 the total value of exports of wool, coal, timber, seal skins, whale oil and hides was £52,000 (Abbott 1971, pp.45-46). The only other large source of foreign currency was from the sale of land, and this was limited to the large areas sold to the Australian Agricultural Company and the Van Diemen's Land Company (Roberts 1968, pp.57-62). However, the total investments in land by both companies was only £86,000. Returns from whaling reached a maximum of £183,000 in 1837 and then declined (Dakin 1963, p.267). If merchants were to have an adequate supply of foreign exchange, it could only be obtained by increasing wool exports. Thus Australian merchants were willing to supply capital to squatters, particularly as additional profits were obtained from handling the squatters' wool and supplying them with the imported goods they required.

Local banks were first founded in Australia with the establishment of the Bank of New South Wales in 1816. This was followed by the Bank of Australia in 1826 (Butlin 1968, pp. 7-8). The resources of these banks were extremely limited. It was not until banks with English capital such as the Bank of Australasia (1835) and the Union Bank (1838) were established that banks became a significant source of credit (Butlin 1968, pp. 258-74). Initially their lending was limited to loans secured on real estate. However, legislation was passed in 1843 which made it possible for banks to accept live-stock and wool on the sheep's back as security (Butlin 1968, pp. 340-5). Legislation notwithstanding, the tradition of only lending on real estate died hard, and so long as the pastoralists grazed leased land, their main sources of credit were the Australian merchants and the increasing number of wool-consigning firms who shipped their wool to England.

2.5 Marketing the clip

The final market for almost all Australian wool at the beginning of the pastoral age was Britain. Although direct shipments were later made to Europe, Britain remained the main market. Until 1830 the major immediate purchasers of Australian wool were local merchants who later shipped such wool to Britain and sold it on their own behalf. By the 1840s direct purchase by local merchants had declined to 50 per cent. Some 30 to 40 per cent of the clip was consigned to Britain through general colonial agents and was sold there on the grower's behalf. The remaining 10 to 20 per cent of the clip was consigned to Britain by the growers themselves (Barnard 1958, p. 47).

In the 1820s and 1830s local merchants purchasing wool included Sydney's pioneer merchant, Robert Campbell & Co., together with Aspinall, Brown & Co., J.B. Montefiore & Co. and C.W. Roemer. They were all prepared to buy wool at a stated price delivered in their Sydney stores. In the 1840s Griffith Gore & Co., Lamb & Parbury and Cooper & Hunt were prominent wool buyers. All of these also acted as general merchants supplying the squatters with clothing, sugar, tea, soap, salt and other goods which could not be produced on their runs. Successful trading depended on acting as agents for English distillers, milliners, ironmongers and suppliers of a multitude of goods (Barnard 1958, pp.49-50). Merchants were so keen to obtain the wool on which their supply of English currency depended that their agents were sent along the roads from Sydney to attempt to buy wool at roadside inns. Bales were opened and offers made, using a crude classing system in which locks and pieces were purchased at half the price of fleeces (Roberts 1964, pp. 346, 422-3).

As the industry expanded and the size of the station clips grew, some merchants established agencies in country towns to purchase wool. However, most producers turned to contract carriers to transport their wool to Sydney. This called for a means of disposing of a clip which was not accompanied by the owner. Initially this was achieved by placing wool in the hands of storekeepers who then sold the wool on the squatter's behalf. A more obvious solution was to auction the wool in Sydney and this began with Samuel Lyons' auctions in the early

1830s. The commission of 5 per cent charged included free storage of the clip. Competition to sell wool was so great that the commission demanded for storage and auction services declined rapidly. By 1845 charges of less than 1 per cent were offered (Barnard 1958, pp. 51-2). In the 1850s T.S.Mort in Sydney and Richard Goldsbrough in Melbourne provided regular auction services. Goldsbrough, Mort and others such as C.J.Dennys in Geelong and L.A.Elder in Adelaide provided both auctioning and direct consigning facilities for wool growers (Barnard 1958, p. 66).

Participants at local auctions included wool dealers who purchased wool, had it scoured and reclassified before despatching it for sale in England. James Johnson, Clissold & Hill, the Hon. Saul Samuel and the Yorke Bros. operated scouring works in Sydney. Other buyers were professional speculators purchasing wool in Australia and reselling it in England. These often purchased on behalf of a number of English firms. Other purchasers were speculators in a number of commodities of which wool was one. Some of these, such as John Chase, even purchased wool from small country growers for resale in Sydney. However, the largest buyers at auctions were the colonial merchants who purchased for resale in England as a means of obtaining foreign exchange. Many of these, such as Robert Campbell, employed skilled English wool sorters to assist them in purchasing wool (Barnard 1958, pp. 51-7). By the 1840s and early 1850s buyers from both England and Australia were purchasing at the Australian auctions for foreign principals and shipping wool at its purchaser's risk to England or Europe (Barnard 1958, pp. 54, 67).

In spite of the growth of local sales of wool, increasing amounts of the commodity were consigned directly for sale in England by wool-selling brokers at the grower's risk. Large firms such as the Australian Agricultural Company shipped directly to England where marketing was arranged by their agents. However, most growers relied on consigning agents in Australia to arrange for the shipment of their wool to England and to arrange for its sale there. Initially consigning agents were often the same merchants purchasing wool on their own account in Australia. The names of some of these have remained in the wool selling industry until the present day. In Sydney, wool consignors included J.B.Montefiore & Co., and Gilchrist & Alexander.

In the Port Phillip District services were provided by Dalgety, Borrodaile & Co., Richard Goldsbrough and Bell & Buchanan. L.A.Elder in Adelaide in 1840, performed a similar function for South Australia. These general merchants were joined as consigning agents by auctioneering firms such as Mort & Co., who moved into wool selling and consigning in Sydney in the 1850s (Barnard 1958, pp.57-62).

2.6 Costs of wool marketing

Cartage to the ports had to be paid whether the wool was sold in Australia or consigned to England. Before 1850 all inland transport was by bullock waggon. Before 1860, roads were poor and the cost of inland cartage could exceed the total cost incurred for sea freight, insurance and of selling the clip in England. The cost varied with the distance wool was carted and the topography. The normal freight rate from Goulburn to Sydney in 1839 was £14 per ton, but from Bathurst it was likely to be as high as £20 per ton, although both are approximately 140 miles from Sydney (HRA I, 20, p. 223; Mort 1849, p. 23). The cost of wool cartage of 2.1 pence per lb from Bathurst to Sydney was only a little less than the total cost of 2.5 pence per lb., including sea freight, of consigning wool from Sydney and selling it in London (Table 2).

Table 2: Costs of consigning wool from Sydney and selling it in London

Costs as a percentage of selling price 1843-49	
Sea freight	7.81
Sea insurance	3.00
Fire insurance	0.25
Consigning commission	2.50
Selling commission	1.00
Warehousing	1.28
TOTAL	15.84
Total (pence per lb)	2.53 d
Average wool price (pence per lb)	16.00 d

Source: Adapted from Barnard (1958, pp. 185-7).

If the wool was sold in Sydney the following charges were incurred:

	Per cent of sale price
Commission	2.00
Fire insurance	1.25
Receiving charge	0.05
TOTAL	3.30

The total charge of 16 per cent of the final sale value of wool consigned to England (Table 2) should be contrasted with the charge of less than 4 per cent for wool sold at Australian auctions during the same period; most of the difference was due to sea freight and insurance.

London and Australian prices for similar wool types are not available for this period, but the difference must have been great enough to justify the cost of consignment, as in 1840, 30 to 40 per cent of the clip was consigned directly to London at the grazier's risk.

3. Conclusion

Until 1850 agriculture in NSW was essentially a semi-subsistence form of production. Improvements were constructed from materials on the sheep runs and farms by farm or station staff, and much of their food was home produced. Tea, sugar, salt, soap, clothing and a limited quantity of metal goods were the only resources brought onto the holdings. The one large commercial venture other than raising capital from merchants and banks was the sale of wool and livestock. The sale of wool involved a complex chain of middlemen ending in the English woollen mill, but most surplus livestock were disposed of at in-paddock sales.

References

- ABBOTT, G.J. (1971), *The Pastoral Age*, Macmillan of Australia, South Melbourne.
- The Australian Magazine* (1838), 1 (1), 135-145.
- BALFOUR, J.O. (1845), *A Sketch of New South Wales*, Smith, Elder, London.
- BARNARD, A. (1958), *The Australian Wool Market, 1840-1900*, Melbourne University Press, Carlton.
- BIGGE, J.T. (1823), *Report of the Commissioner of Inquiry on the State of Agriculture and Trade in the Colony of New South Wales*, House of Commons, Great Britain, Australian Facsimile Edition, No. 70, Libraries Board of South Australia, Adelaide, (1966).
- BLAINEY, G. (1966), *The Tyranny of Distance*, Sun Books, Melbourne.
- BURROUGHS, P. (1967), *Britain and Australia, 1831-1855: A Study in Imperial Relations and Crown Lands Administration*, Clarendon Press, Oxford.
- BUTLIN, S.J. (1968), *Foundations of the Australian Monetary System, 1788-1851*, Sydney University Press, Sydney.
- CANNON, M. (1978), *Life in the Country*, v. 2 *Australia in the Victorian Age*, Nelson, West Melbourne.
- CLARK, C.M.H. (1977), *A History of Australia: v. I From the Earliest Times to the Age of Macquarie*, Melbourne University Press, Carlton.
- COGHLAN, T.A. (1918), *Labour and Industry in Australia*, v.1, Oxford University Press, London.
- DAKIN, W.J. (1963), *Whalemen Adventurers*, Angus and Robertson, Sydney.
- DAVIDSON, B.R. (1981), *European Farming in Australia: An Economic History of Australian Farming*, Elsevier, Amsterdam.
- DUNSDORFS, E. (1956), *The Australian Wheat-Growing Industry, 1788-1948*, Melbourne University Press, Carlton.
- EVATT, H.V. (1971), *Rum Rebellion*, O'Neil, Melbourne.
- FLETCHER, B.H. (1976), *Landed Enterprise and Penal Society: A History of Farming and Grazing in New South Wales before 1821*, Sydney University Press, Sydney.
- HAINSWORTH, D.R. (1981), *The Sydney Traders: Simon Lord and his Contemporaries, 1788-1821*, Melbourne University Press, Carlton.
- HENNING, R. (1969), *The Letters of Rachel Henning*, edited by David Adams, Penguin, Harmondsworth.

- HRA (*Historical Records of Australia*) (1914-15), Series I: Governors' Despatches to and from England, Vols 1-26 (1788-1848), Library Committee of the Commonwealth Parliament, Sydney.
- JOYCE, A. (1942), *A Homestead History*, Melbourne University Press, Carlton.
- KING, C.J. (1948), "The first fifty years of agriculture in New South Wales", *Review of Marketing and Agricultural Economics* 16, 669-721.
- LANG, J.D. (1834), *An Historical and Statistical Account of New South Wales*, v.1, Cochrane and McCrone, London.
- MARSH, M.H. (1842), Evidence to the Select Committee on Immigration, New South Wales Legislative Council, V. & P., 351-411.
- MORT, T.S. (1849), Evidence to the Select Committee on the Sydney Railway Bill, New South Wales Legislative Council, V. & P., Volume 2.
- NEW SOUTH WALES (1841), Select Committee on Immigration, New South Wales Legislative Council, V. & P., 422.
- NEW SOUTH WALES (1845a), Evidence to the Select Committee on Immigration including Police Districts Reports, New South Wales Legislative Assembly, V. & P., 615-65.
- NEW SOUTH WALES (1845b), Message of the Governor [Gipps] to the Legislative Council. In: Committee on Upset Price of Land, New South Wales Legislative Council, V. & P., 333-343.
- NEW SOUTH WALES (1847a), Orders in Council Respecting the Occupation of Crown Lands, New South Wales Legislative Council, V. & P. 1, 283-291.
- NEW SOUTH WALES (1847b), Evidence to Select Committee on Immigration, including Police District Report on Wages, New South Wales Legislative Council, V. & P., 294.
- ROBERTS, Stephen H. (1964), *The Squatting Age in Australia, 1835-1847*, Melbourne University Press, Carlton.
- STEVEN, M. (1965), *Merchant Campbell, 1769-1846: A Study of Colonial Trade*, Oxford University Press, London.
- The Shipping Gazette and Sydney General Trade List*, Sydney (1846-53).
- TENCH, W. (1793), *A Complete Account of the Settlement at Port Jackson*, Nicol and Sewell, London.
- WATSON, J.H. (1907), "Benjamin Boyd, Merchant", *Journal of the Royal Australian Historical Society* 2, 129-139.