

The 1828 Census and the Analysis of Rural Settlement in New South Wales

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This paper explores the usefulness of the 1828 Census as a means of understanding rural settlement from the 1820s to the 1850s in New South Wales. The formulation of a typology of the reconstructed household returns enables the recognition of a number of settlement types. When used in conjunction with inventories of improvements the Census provides evidence of the characteristics of settlement, of the economic motivation of landholders and of social and economic constraints. The Census therefore can become a useful tool for predicting the nature of the archaeological resource.

The 1828 Census is one of the most useful historical documents for the study of the settlement of New South Wales, and in particular the state of initial progress or development of settlement beyond the Cumberland Plain. It is surprising that it has not been more widely used for other than genealogical purposes and the research of individual families or groups.¹

In this paper a model to assist in the interpretation and understanding of rural settlement is developed from the 1828 Census. It will be shown that it has wide application for the study of the period from the 1820s to the 1850s, characterised by the rapid expansion of settlement from the Cumberland Plain, large scale pastoral enterprise and convict labour. The end of transportation and the economic depression in the 1840s, together with the advent of closer settlement in the 1850s and 1860s resulted in substantial changes to the rural landscape, so that this model may not be applicable to later settlement without careful examination.

The rapid expansion from the Cumberland Plain opened up new areas of settlement in the 1820s, including the Hunter Valley, Bathurst, the Illawarra and the South Western Districts. This analysis is restricted to the latter area, comprising the Counties of Argyle, Camden, Georgiana, King, and Murray, including parts of Westmoreland. The Illawarra and the County of Saint Vincent have been excluded. All entries from the 1828 Census within this area have been analysed, together with all other entries for the estates to which they belonged, even if outside the immediate study area. The principal purpose has been to reconstruct the original estate populations or estate staff lists, where the original household returns are absent. This resulted in the inclusion of a large number of individuals residing on the Cumberland Plain, but also a small number from Bathurst, the Illawarra, and the County of Saint Vincent. While these individuals are technically outside the study area, they are nonetheless within the 'study group' or sample of the Census under investigation, because they belong to households or estates within the study area.²

The Inaccuracies of the Census

The reliability and usefulness of any model depends largely on the accuracy of the data used. An examination of the inaccuracies in the 1828 Census is therefore appropriate, so that its shortcomings may be recognised in advance. In the introduction to the published version of the Census, M. R. Sainty and K. A. Johnson point out errors and exclusions relating to groups of persons, or individual entries.³ While the omission of certain Sydney residents, the Military Department and their families, and also the majority of Aborigines may be

recognised as detracting from the overall value of the statistics, nevertheless with the analysis of the settlement of the South Western Districts these errors cause negligible difficulties and in some cases assist in the study.

The method of analysis, specifically the reconstruction of the original household returns, enables many inaccuracies to be overcome.⁴ By reconstructing the original household returns, the internal consistency of the evidence may be checked to a large degree. For example, the names of landholders omitted from the Census can be recovered from the entries of their employees. In addition, the number of duplicates can easily be recognised, when their entries are placed together in the reconstructed household returns. For the study group there are 237 duplicated entries out of a total 2826 entries.⁵ The duplicated entries frequently give additional information, which would otherwise not be available. They may record that an employee worked at different locations, undertaking different activities, or that a landholder possessed land and stock at two locations. In many cases, duplicated entries may be the result of their entry on the return for the main residence, even though absent, while they were listed again on the return completed at their actual location.

Certain errors or mistakes cannot be recognised so consistently. For example, the name, age, class (status), ship, year, sentence, religion, occupation and employer listings can be checked to varying degrees against other historical documentation. In most cases this has not been possible within the bounds of this study, although specific reference will be made to some occupations and also class (status). There is no assessment of whether the class (status) of a person may have been deliberately disguised or falsified, as may have been the case in the 1841 Census.⁶

There are few means of cross-checking the accuracy of land and stock figures without detailed historical research into each individual landholder. Where individuals are listed twice, at least this can be recognised by the similarity between entries, but when land is listed by a landholder on the household return for his main residence, it may in some instances include all land and stock held elsewhere. The result is that land and stock cannot be precisely equated with settlement type. It is also frequently the case that land and stock, belonging to the landholder, is listed in the name of a superintendent, overseer or other manager. Without detailed historical research, it is again difficult to know whether or not this represents a double listing. The above comments indicate that substantial information may have been lost in the conversion of the household returns, now mostly destroyed, into the published statistical evidence (Table 1).⁷

ANALYSIS OF THE 1828 CENSUS

The Census was collected from 18 September 1828, when the forms were issued to each Bench of Magistrates. The first completed forms were returned on 8 November 1828, while some returns were not collected until 1829.⁸

In order to develop a typology of rural settlement, this data was analysed in two distinct ways. First the household returns were reconstructed into a total of 397 households by listing individuals in groups according to employer and residence. By this method, it was possible to recognise fifteen settlement types, defined on the basis of ownership and management of land and stock (Table 2).⁹ Then the wide range of occupations listed in the 1828 Census were also divided into groups. These occupations indicate various economic activities or the socio-economic status of an individual or group. They are thus termed 'socio-economic categories'. For the purposes of analysis they were again sorted into a total of thirteen 'key socio-economic categories' (Table 3).¹⁰

The characteristics of the fifteen settlement types can be analysed in terms of the other variables in the 1828 Census, including occupation, land and stock. This reveals only three broader settlement groups (groups of settlement types), with four settlement types remaining ungrouped (Figs. 1 to 8).¹¹ Both settlement types and settlement groups are defined on the basis of tenure and management of land and stock. The recognition of fifteen settlement types, but only three settlement groups, may be interpreted simply as the result of the identification of a wider variety of management practices and family relationships from the individual entries in the 1828 Census. Settlement groups based on occupation, land and stock do not lend themselves to the analysis of these complexities, and instead reflect the sources of income or type of land title.¹²

The main characteristics of the settlement types and settlement groups are described below (Figs. 1-8).¹³

Settlement Group 1. Alienated Land

Settlement Group 1 includes settlement types where income is principally derived from primary production on land alienated from the Crown (Figs. 1, 5).

This settlement group exhibits the broadest range of occupations (key socio-economic categories) among all other settlement groups. It is characterised by high frequencies of family grouping and primary production, but also consistent figures for possession of capital, domestic, management, secondary production, improvement and transport categories. These frequencies may be partly explained by the willingness of landholders to expend capital only on alienated land. The presence of family groupings indicates capital or adequate income to support dependents. The families of landholders usually lived at the main residence, with household servants to cater for their needs.

The progressive reduction in the key socio-economic categories of possession of capital and family grouping from the Main Residence, through the Main Residence of Other Family Member, to the Managed Station or Farm Settlement Type is noteworthy. It reflects the residence of the main family group predominantly at the main residence, with one or more family members at the main residence of other family member, and finally the absence of the landholder's family at the managed station or farm (family groupings at the latter are formed by the dependents of the management staff).

The management of an estate, its land, buildings and stock required a large labour force. One or more overseers or superintendents would be required to manage those involved in primary production. The availability of capital is indicated by the presence of those employed in secondary production, improvement and transport.

As expected Settlement Group 1 exhibits the highest averages for acreage held, cleared and cultivated, although it is similar to Settlement Group 2 in terms of high average figures

for cattle and sheep. Agriculture was again centred on alienated land, because it was labour intensive, and also required the expenditure of capital in improvements.

Settlement Group 1 includes the following settlement types:

- Main Residence Settlement Type.
- Main Residence of Other Family Member Settlement Type.
- Managed Station or Farm Settlement Type.
- Other Residence Settlement Type.

Settlement Group 2. Crown Land

Settlement Group 2 includes settlement types where income is principally derived from primary production on Crown land (Figs. 2, 6).

This settlement group is characterised by consistently low figures for all socio-economic categories, except for primary production. There is only a low level of variation in the small frequencies for possession of capital, family grouping and management categories, depending on the ownership or management of the stock.

Since it was Crown land, little or no land was cleared or cultivated, while there are consistently high frequencies for cattle and sheep.

The nature of this settlement group may be explained by the scarcity of capital available to the stockholder, or by the reluctance of the landholder, residing elsewhere, to expend capital on unalienated land.

Settlement Group 2 includes the following settlement types:

- Run on Crown Land Settlement Type.
- Run on Crown Land, Managed, Settlement Type.
- Run on Crown Land, by Stockholder, Settlement Type.

Settlement Group 3. Other Income

Settlement group 3 includes settlement types where income is principally derived from sources other than primary production, or where resources for primary production are scarce (Figs. 3, 7).

This settlement group is characterised by consistently high average frequencies for family groupings and domestic staff. Frequencies for other income, innkeeping and land tenure vary according to source of income, but at least one of these socio-economic categories will be present. Average figures for primary production and improvement are low or absent, reflecting not only the source of income, but also the meagre resources available to this settlement group.

While total acreage varies, land cleared and cultivated is consistently low in this settlement group. Horses, cattle and sheep are also consistently few or absent, again reflecting the derivation of income principally from sources other than primary production.

The high frequencies for family groupings and household servants indicate capital or adequate incomes for their support. In the case of innkeeping, the domestic staff may have been used to run the establishment, while the presence of the improvement category is explained by the need for blacksmiths or wheelwrights to service the needs of transport. In other instances the improvement category is explained by the nature of the place of work, for example, a millwright at a flour mill. Settlement Group 3 includes the following settlement types:

- Innkeeping Settlement Type.
- Lodgings Settlement Type.
- Place of Work Settlement Type.
- Tenant Settlement Type.

Ungrouped Settlement Types

Four settlement types could not be grouped, namely:

- Duplicate Settlement Type.
- Land and Stock Held by Employee Settlement Type.
- Land and Stock Held by Partner Settlement Type.
- Unidentified Settlement Type (Figs. 4, 8).

The Duplicate Settlement Type shares characteristics with

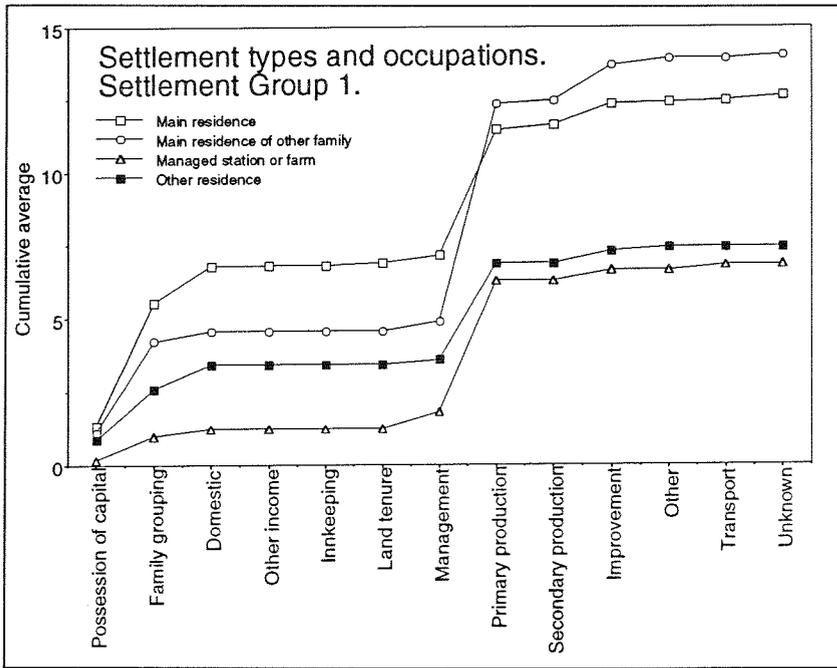


Fig. 1: Settlement Types and Occupations. Settlement Group 1.

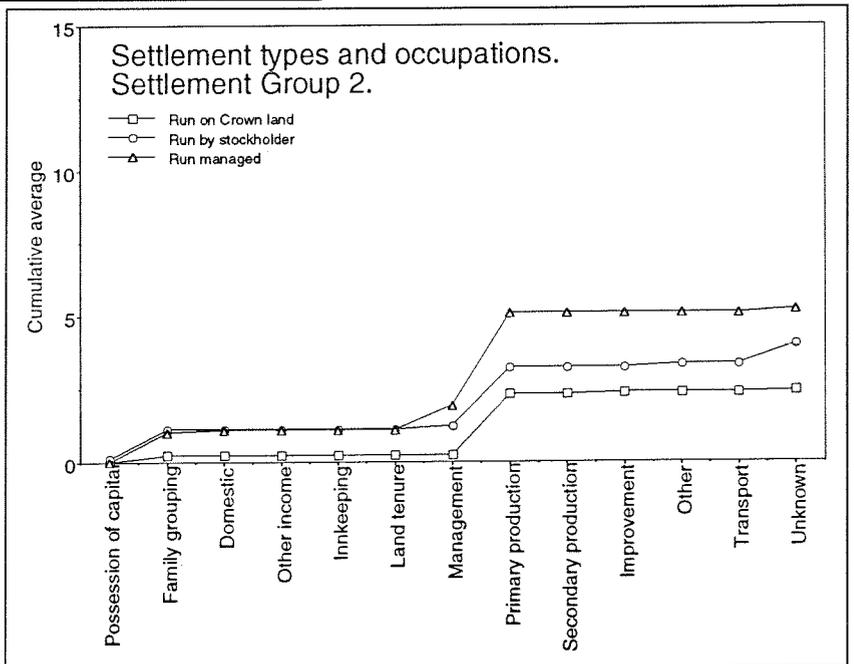


Fig. 2: Settlement Types and Occupations. Settlement Group 2.

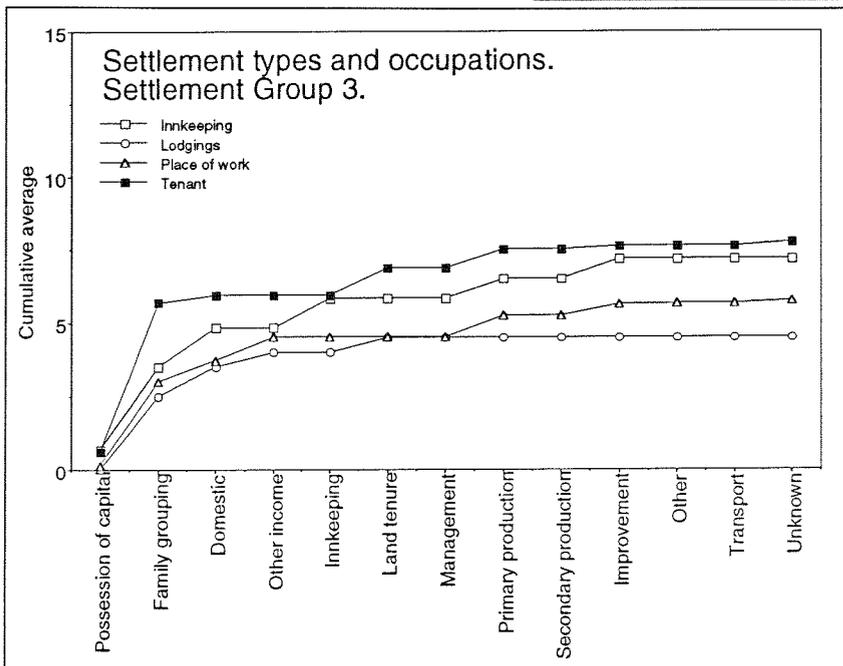


Fig. 3: Settlement Types and Occupations. Settlement Group 3.

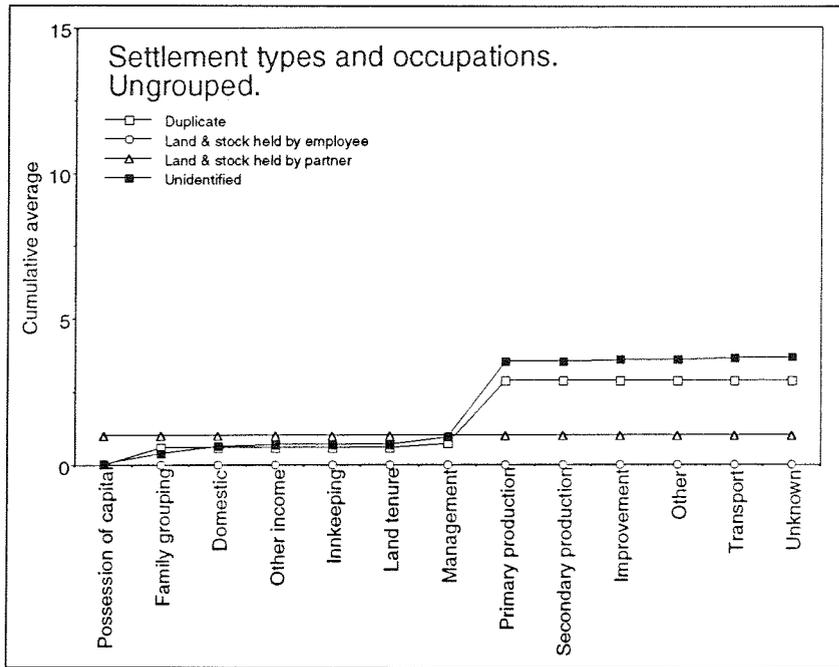


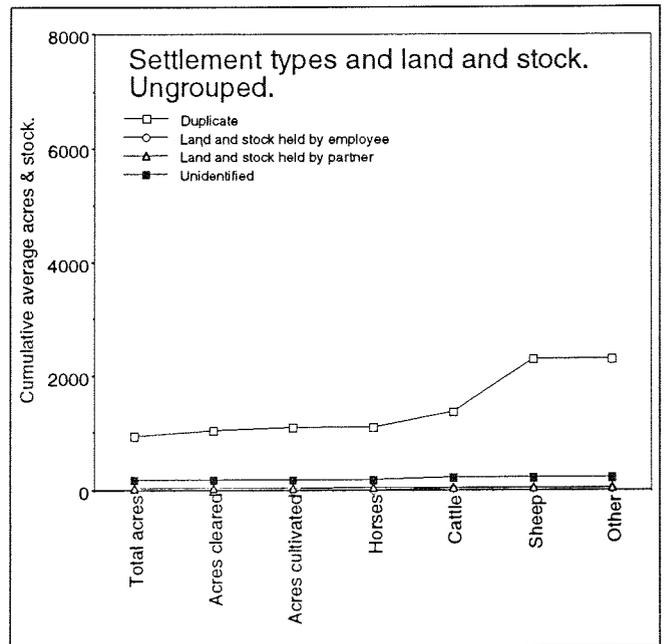
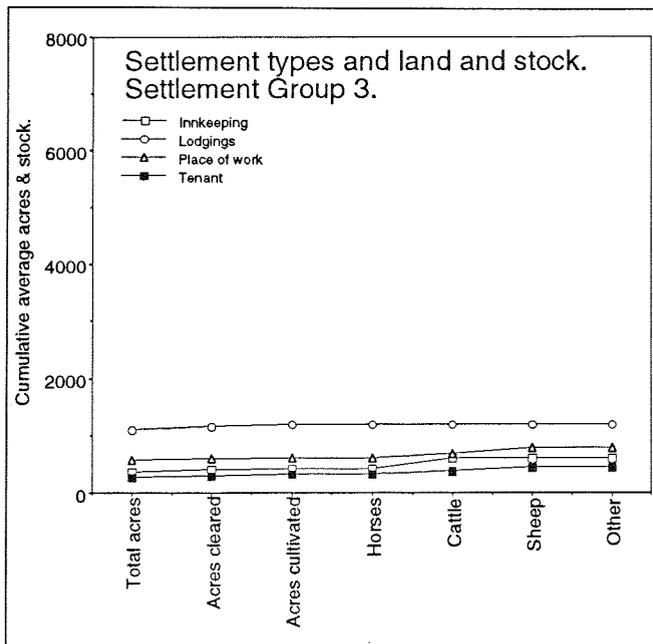
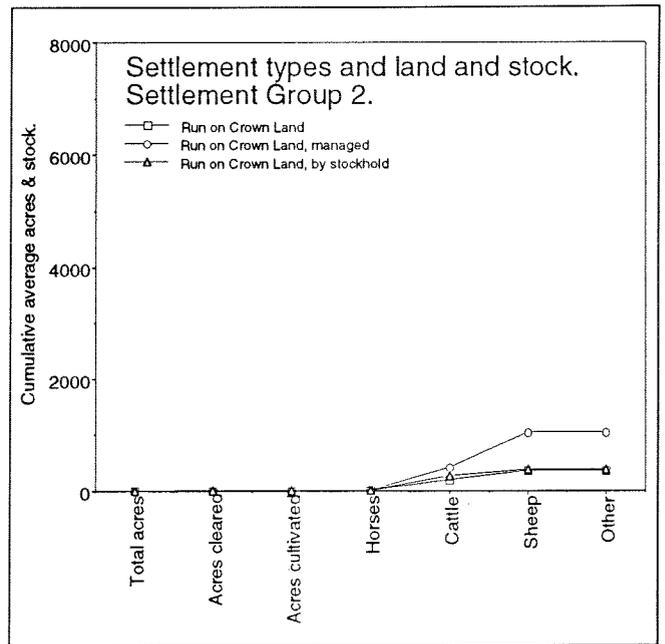
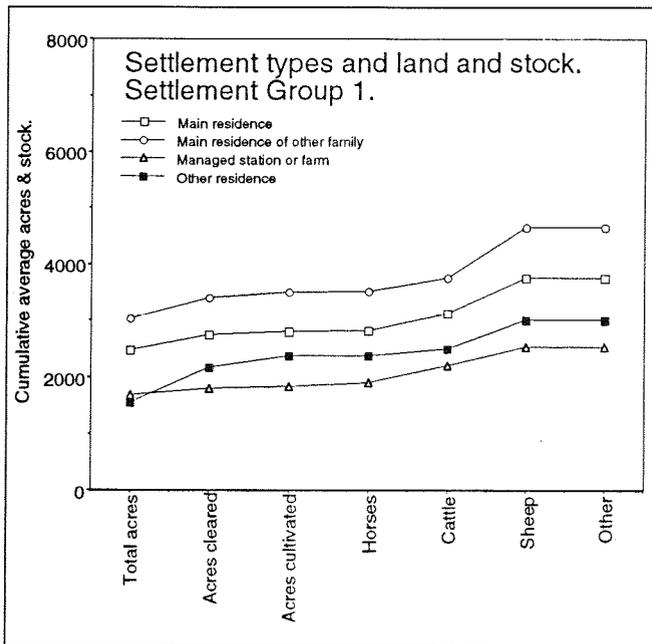
Fig. 4: (at left) Settlement Types and Occupations. Ungrouped settlement types.

Fig. 5: (center left) Settlement Types and Land and Stock. Settlement Group 1.

Fig. 6: (centre right) Settlement Types and Land and Stock. Settlement Group 2.

Fig. 7: (bottom left) Settlement Types and Land and Stock. Settlement Group 3.

Fig. 8: (bottom right) Settlement Types and Land and Stock. Ungrouped settlement types.



two settlement groups. It has a similar range of key socio-economic categories to Settlement Group 2, while land and stock relate closely to Settlement Group 1. This settlement type cannot therefore be placed in either settlement group. These characteristics are explained by the joint ownership of land and stock, with economies in labour made possible by shared management.

The Land and Stock Held by Employee Settlement Type is characterised by the absence of persons in any key socio-economic category.¹⁴ Land and stock holdings are consistently low. This settlement type reflects the situation where an employee is paid in kind, and accumulates land and stock of his own. The low frequency of this settlement type suggests that payment in kind was in fact quite rare, at least in the 1820s, or may not be reflected in the census figures.

The Land and Stock Held by Partner Settlement Type is superficially similar to the Land and Stock Held by Employee Settlement Type, except for the possession of capital key socio-economic category. Land and stock holdings are consistently low. The characteristics of this settlement type cannot be considered reliable, since it occurs only once in the study group.

The above three settlement types do not stand on their own, but by definition will always be associated with another settlement type. For example, a Duplicate Settlement Type will always be found either with a Main Residence or a Managed Station or Farm Settlement Type. This factor may explain why these settlement types could not be grouped.

The final settlement type, namely the Unidentified Settlement Type, cannot be grouped, because it is formed by a mixture of census returns, which could not be readily placed in any other settlement type. It shares characteristics with Settlement Group 2 in terms of occupations, but with Settlement Group 3 in terms of land and stock. This settlement type cannot therefore be placed in either settlement group. The common factor is a restricted access to labour, land and stock, which are features of both Settlement Groups 2 and 3.

THE EXTREME SOCIAL AND ECONOMIC VARIATION IN THE POPULATION

The settlement types and groups have been analysed on the basis of the average figures for occupations, land and stock. However these averages tend to disguise the extreme variation present in the population in terms of land or stock ownership, control of the labour market, and the size and number of family groups.

Tenure of Land and Stock

One of the most important features of settlement as seen from the 1828 Census is the concentration of the tenure of land and stock in the hands of a tiny proportion of the population. Of the 36598 persons recorded in the Census, only 2597 have a listing for land and stock.¹⁵ Land and stock was concentrated in the hands of 7.1 percent of the population, leaving the remaining 92.9 percent without property. Even if the families of the landholders are regarded as joint owners, less than 10 percent of the population owned property. The uneven distribution of wealth is further emphasised, because the labour force was restricted to employment either by government or by these property holders.

Access to the Labour Market

The uneven control of labour among the holders of land and stock may be seen when the settlement types are divided according to social status. The free settlers dominated the labour market among the holders of land and stock. They employed 83 percent of the labour force of free settlers or persons arriving free, 56 percent of the native born, 60 percent of the emancipated, and 78 percent of the bond. Landholders of any other social status could not hope to approach these

figures. Of the other free landholders, the emancipated came off better than the native born, the former managing to employ up to 25 percent of the emancipated labour market, while the native born could only manage 11 percent in both the emancipated and native born labour market. (Fig. 9).

The Restricted Occurrence of the Family Group

The analysis of the settlement types has also indicated variation in the frequency of the family group between different settlement types. In fact there is a distinct pattern. For example, 62 percent of the estates are owned by persons in family groups, while the remaining families in the study group are principally restricted to certain socio-economic categories. The key socio-economic categories of management and possession of capital have the highest number of individual entries (Table 4). However the concentration of family groups in a restricted number of categories becomes apparent when these entries are considered as a proportion of the total number in each socio-economic category (Fig. 10). Married persons predominate in the socio-economic categories of:

- Alcohol production
- Government
- Innkeeping
- Management
- Meat production
- Medical profession
- Possession of property
- Publisher
- Religion
- Rental of domestic property
- Rental of land and buildings.¹⁶

This distribution of persons with family groups indicates that marriage and the creation of a family was closely, if not absolutely, linked with socio-economic position. Persons without these social or economic qualifications could not hope to marry. These qualifications included the possession or rental of property or capital, innkeeping or the management of other enterprises, or the professions.¹⁷

It is perhaps surprising that only a small proportion of the trades or mechanics included family groups, but their low frequencies may be the result of the nature of their employment, perhaps not being located in one place for long periods.

Unexpectedly high frequencies were encountered in a number of socio-economic categories, for example, meat production, rental of domestic property and rental of land and buildings. It should be noted that the butchers in the study group were employed by some of the most eminent persons in the colony, John Coghill, John Dickson, Sir John Jamison, Hannibal and John Macarthur, and Charles Throsby.¹⁸ It was a specialised occupation, and its socio-economic position obviously allowed marriage. The high proportion of family groupings in the rental of domestic property is partly due to small samples, but none in fact represent marriage. They are all children lodging in the households of other families.¹⁹

The high frequency of rental of land and buildings was unexpected, given the analysis of the settlement type of tenant, where only meagre resources were usually available. The fact that the rental of a farm, by clearing lease or otherwise, was one of the cheapest means of obtaining property might explain the high frequency of family groups in this category. It was the first step for a family in their acquisition of property and the improvement of their socio-economic position.

On the basis of the overall population recorded in the 1828 Census, there were 27611 males as opposed to 8987 females.²⁰ Females were therefore equivalent to only 24.55 percent of the population in 1828. The uneven proportions of the population and the absence of socio-economic qualifications amongst most employees meant that the majority of males were unlikely to be able to marry and start a family

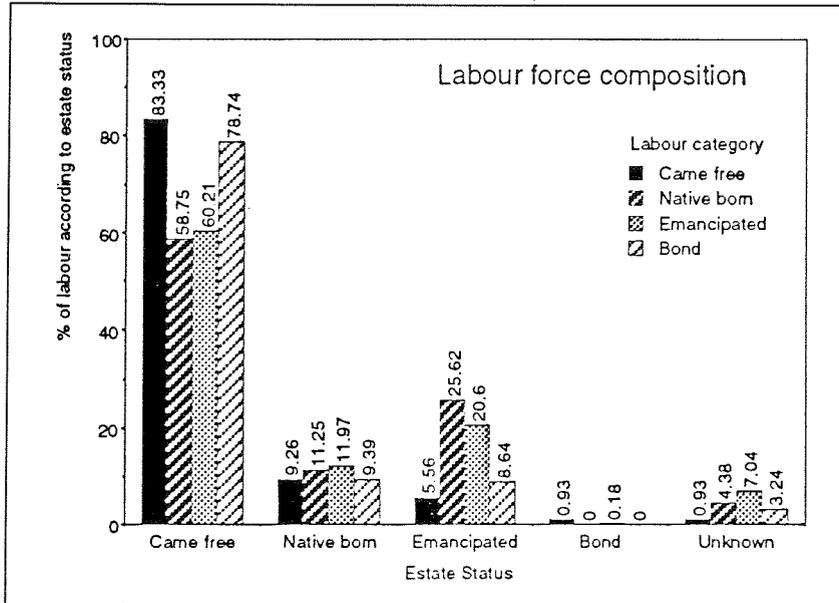


Fig. 9: Labour force composition. The proportion of labour in each status available to each estate, according to estate status.

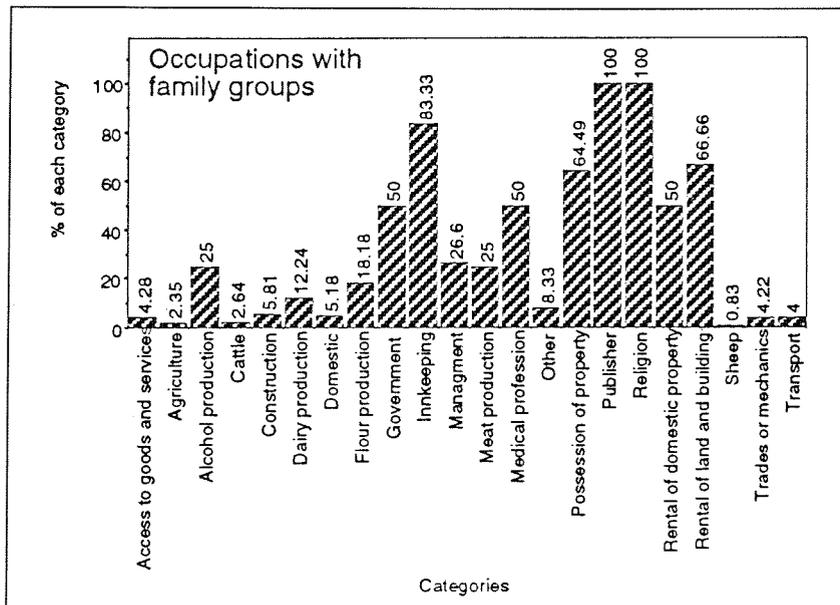


Fig. 10: Occupations and Family Groups. The proportion of each key socio-economic category belonging to family groupings.

STATUS AND SETTLEMENT TYPES

The extreme social and economic variation of the population in 1828 is highlighted when the status of each household is compared according to occupations (key socio-economic categories), land and stock. Each household or group of households was given the status of the landholder, this being termed the 'estate status'.

Settlement Group 1. Alienated Land

Except for the Managed Station or Farm Settlement Type, all settlement types in Settlement Group 1 exhibit a broad range of variation, principally in the size of the family group, number of domestic servants and primary production (Fig. 11).²¹ Secondary production is restricted to the free settlers able to expend capital, while they also exhibit a higher average for improvement. The Managed Station or Farm Settlement Type exhibits little variation, because of the unwillingness of landholders to expend capital where only the pasturage of stock was required (Fig. 12).

Settlement Group 2. Crown Land

Settlement Group 2 exhibits the least variation among all settlement types, clearly reflecting the limited labour or capital necessary for the successful depasturing of stock on Crown land.²² The only key socio-economic category common to nearly all estate status categories is primary production, closely followed by family grouping.²³ Most other key socio-economic categories are absent or only present in limited frequencies. The management key socio-economic category is consistently present on the Run on Crown Land, Managed, Settlement Type (Fig. 13).

Settlement Group 3. Other Income

Settlement Group 3 exhibits little major variation, except in the size of the family grouping.²⁴ The came free are consistently, but slightly, better off in each settlement type. For example they are the only ones with persons employed in the improvement key socio-economic category in the Innkeeping Settlement Type (Fig. 14). This may perhaps be explained by the greater resources available to the free settlers to employ blacksmiths and wheelwrights.

In the Place of Work Settlement Type there is little difference between the came free and native born, whereas the emancipated are clearly in a disadvantaged position (Fig. 15). Nonetheless the defining feature of this settlement type, namely other income, is present in all three estate status categories.

The occupations available to the free settlers are those at the top of the Civil Department, while the range of choice available to the native born and emancipated is restricted to the more menial jobs within the Department, or to other trades (Table 3). The variation in the possession of capital is partly an indication of the fact that the lower paid jobs did not enable property ownership, but only its rental or lease. The same is also true of family groupings and domestic servants, both of which were largely beyond the means of the emancipated. The low level or absence of primary production is a factor not only of the derivation of income from other sources, but also because a number of estates have several settlement types belonging to them. Primary production may be more evident in the other settlement types.

AN EXPLANATION OF THE VARIATION

Variation according to estate status is exhibited mainly in the socio-economic categories of family grouping, domestic and primary production, but is also apparent in land and stock. Differences are seen principally in the total acreage held, except of course among the various run settlement types, where only stock is usually held.²⁵ Among stock, variation is most obvious among cattle, closely followed by sheep.

There are some obvious trends where estate status determines the composition of settlement types. The free settlers had the resources to develop their estates to the greatest degree, while the native born and emancipated were forced to trim the diversity of their estates according to their more limited resources. As a measure of the variation in each settlement type, the range of the average number of persons for each settlement type according to estate status was plotted (Table 5).

The most obvious explanation for the presence of small or large variation may be found in the nature of the settlement types themselves. Where capital investment is deliberately minimised or unavailable, then there should be little variation. This is clearly the case with the various runs, but less easily explained in innkeeping, although the latter are noted for the small size of their establishment.

Falling into the mid range of variation are the Tenant, Place of Work and Managed Station or Farm Settlement Types. Their position on the scale of variation in estate status is relatively easy to explain. For example, tenants had a limited range of resources, forcing them into rental, rather than purchase of land or buildings.

It is interesting to note that of the settlement types on alienated land, the Managed Station or Farm Settlement Type shows the least variation. It is clear that only restricted capital would be expended on properties used simply to extend primary production, particularly pastoralism.

The corollary is where there is no restriction on the capital invested, since its expenditure would then depend to a large degree on socio-economic status. It is a very basic premise that wealth, or the absence of it, is reflected in the main residence of an individual. Settlement Group 1 will therefore exhibit the greatest variation, as an indication of the range of socio-economic status in New South Wales at that time.²⁶

The extensive resources available to the free settlers, as opposed to the other status groups, is indicated by secondary production being limited to their estates alone. The restricted resources available to the emancipated is equally illustrated by the absence of domestic servants in the majority of settlement types. In fact, domestic servants are present only on 16 percent of households with emancipated status.

Religion and Settlement Types

Variation within each settlement type was also expected on the basis of 'estate religion', namely the religious beliefs of the householder or proprietor of each estate. The situation indicated by the 1828 Census, within the study group, is that the Protestant denominations predominate on the estates with the estate status categories of native born, came free, and emancipated, while the Catholics are a minority. The Catholics are best represented in the estates of the emancipated, reflecting the high proportion of Catholics among the former convicts (Fig. 16 and Table 6).

Analysis concentrated on the Catholics, as the only sizeable minority in the study group. In terms of occupations (socio-economic categories), few substantial differences were found between settlement types of the same estate status. On the other hand the Catholics were substantially disadvantaged in the acreage of their estates. There is also a difference between the proportion of Catholics in the population, compared with Catholic estates as a proportion of the study group, showing

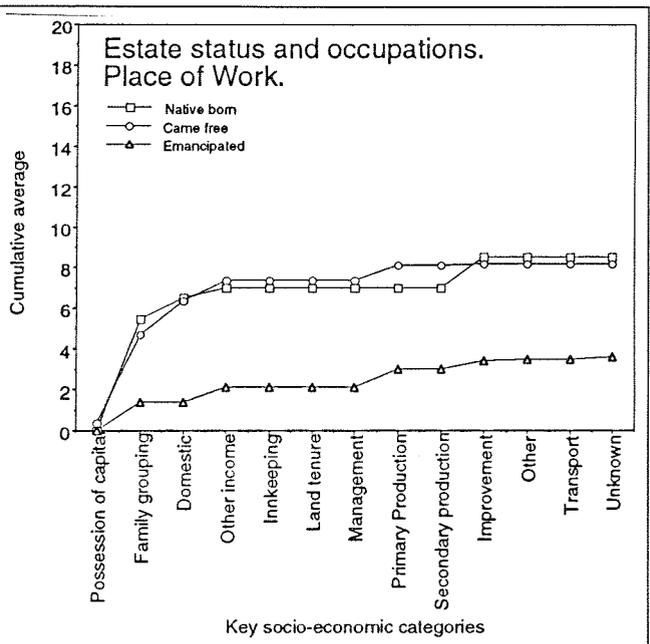
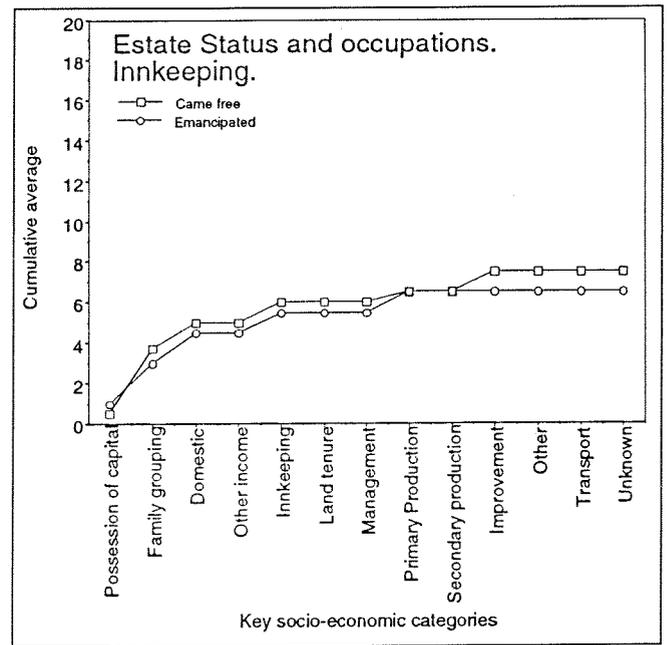
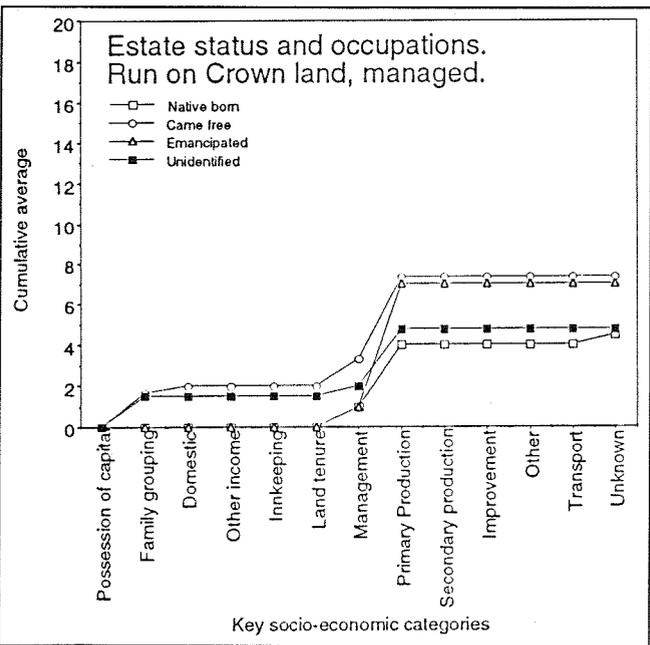
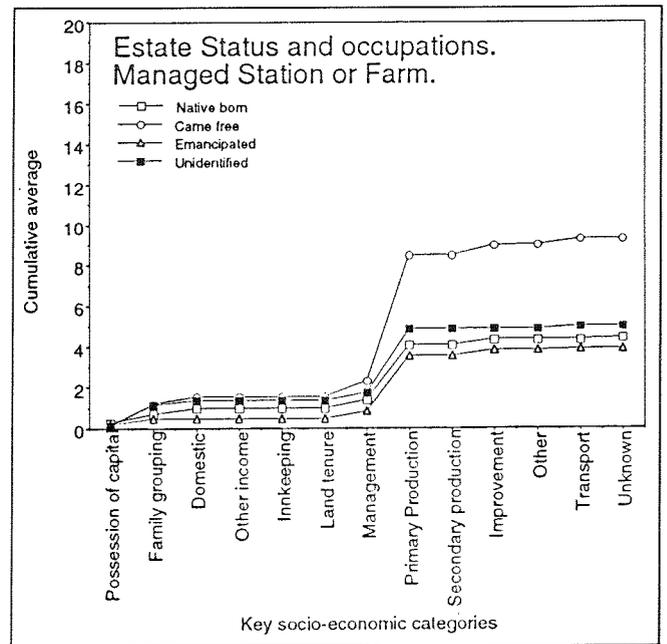
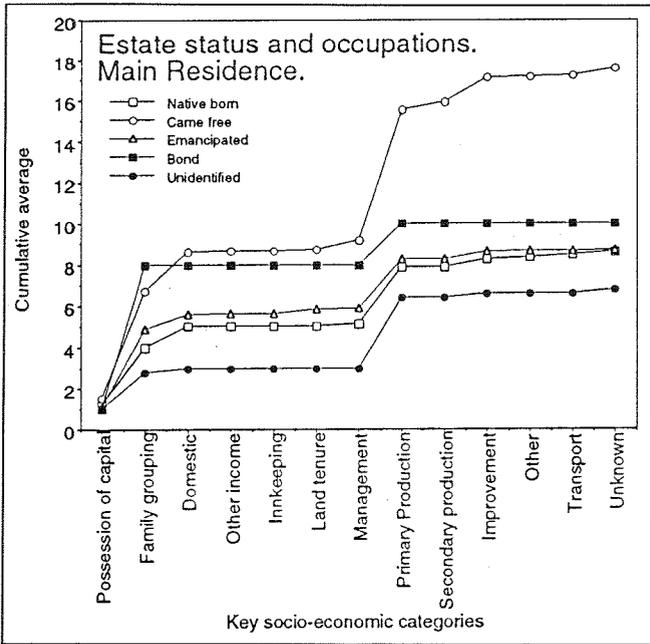


Fig. 11: (top left) Estate Status and Occupations. Main Residence.

Fig.12: (top right) Estate Status and Occupations. Managed Station or Farm.

Fig. 13: (center left) Estate Status and Occupations. Run on Crown Land, Managed.

Fig. 14: (centre right) Estate Status and Occupations. Innkeeping.

Fig. 15: (bottom left) Estate Status and Occupations. Place of Work.

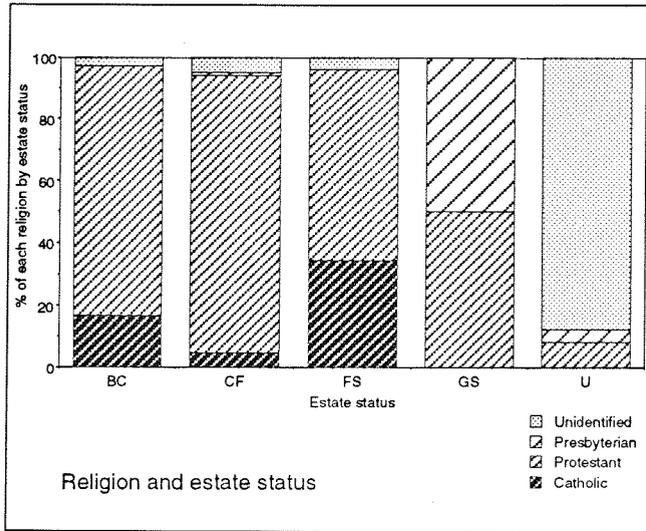


Fig. 16: Religion and Estate Status. The proportion of each religious denomination, in accordance with estate status.

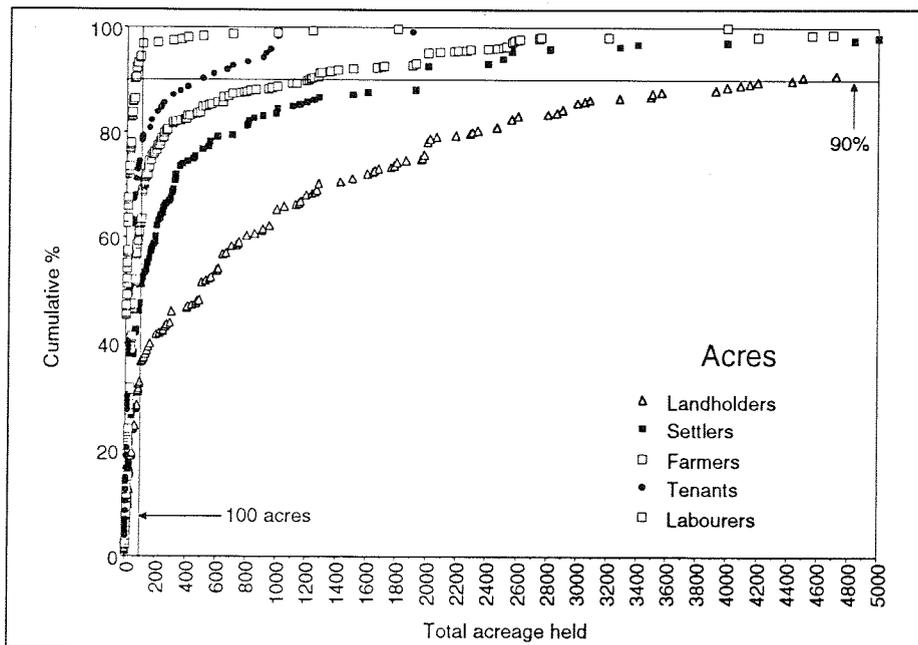


Fig. 17: Cumulative frequency graph of acreage, according to the terminology for landholders in the 1828 Census (see explanation of this graph in text).

that Catholics were again at some disadvantage in obtaining ownership of property (Table 7). Taken together, a distinct and clear prejudice is seen against the Catholics. As for the Presbyterians and other religious denominations, the sample is too small to obtain reliable results.

A Continuous Range of Variation

Any analysis of the 1828 Census rapidly reveals the complexity of the social and economic factors influencing the population and the composition of settlement types. As a result most, if not all, settlement types possess a range of variation, which causes them to overlap with other settlement types. It is a common error among both historians and archaeologists to refer to property owners either as small farmers or large landholders, depending on the size of the portion of land, which is the subject of their site specific study. A simplistic equation is made between a small portion of land and a small farmer, or a large land grant with a large landholder. Nothing can be further from the true situation. This dichotomy ignores the fact that many landholders own or occupy more than one portion of land. Furthermore the 1828 Census provides an ideal opportunity to analyse the meaning of the various terms historically applied to persons in agriculture and pastoralism in the nineteenth century, and also to look at the range of activities which they imply (Table 8).

One of the first measures of difference between the various terms may be seen in the total acreage held. Landholders, settlers, farmers, tenants and labourers were found to have significant variation in the total acreage held on each settlement type (Fig. 17). This cumulative graph may be interpreted in a number of ways. For example, 90 per cent of landholders had settlement types with less than 4720 acres (Landholders cross the 90% line at 4720 acres). The same proportion of graziers had less than 2000 acres, farmers 1275 acres, tenants 500 acres and labourers 55 acres. Looking at the graph in another way the following persons held less than 100 acres; 36 per cent of landholders (they cross the 100 acre line at 36%), 46 per cent of settlers, 68 per cent of farmers, 78 per cent of tenants and 96 per cent of labourers.²⁷ The largest proportion of small farms was therefore held by labourers, farmers, tenants, householders and settlers (Table 8).

The nineteenth century terminology for persons in agriculture and pastoralism in fact provides a continuous or overlapping range of names to include all common husbandry practices, from the most intensive cultivation to the most expansive form of pastoralism. A range of terms are used to describe persons cultivating on average 30 per cent or more of their land, the most intensive cultivation being undertaken by labourers, then farmers, tenants, householders and settlers. All these persons were also husbanding stock, including cattle and sheep, and were thus practicing a form of mixed farming. The extent of dairy production on these properties could not be assessed from the available evidence, although it is expected that a high proportion would be involved.

Shepherds, graziers and overseers or superintendents were least involved in agriculture and may therefore be described as almost exclusively interested in pastoral pursuits, while the others may be described as having mixed farming regimes with equal or greater emphasis being placed on pastoral interests. This intermediate group includes farmers, settlers, stockmen and landholders.²⁸

THE APPLICATION OF THE TYPOLOGY OF SETTLEMENT

The main purpose of this paper is to use the typology of settlement as a predictive model. It has already revealed insights into human behaviour, husbandry practices and the social and economic factors influencing or determining the establishment of each settlement type. But it can also predict the pattern of settlement and the nature of improvements on

each landholding recorded in the 1828 Census. The application of this model may best be illustrated through case studies.

Case study: a Main Residence Settlement Type

In the Census of November 1828 James Atkinson (1794-1834) was recorded as a landholder residing with his wife and young daughter at Oldbury, Sutton Forest. He had emigrated to New South Wales as a free settler in 1820. He soon became principal clerk to the Colonial Secretary, but resigned this position in 1822 to devote himself to his private business affairs.²⁹ He earned a reputation for his pioneering work in improving the standards of agriculture and pastoralism. In 1826 he published a well known treatise, entitled *An Account of the State of Agriculture and Grazing in New South Wales*.³⁰ His career was cut short by his death in 1834 after a long illness.³¹

His property was recorded in the 1828 Census as follows:

- 1760 acres held
- 260 acres cleared
- 86 acres cultivated
- 17 horses
- 184 cattle
- 974 sheep
- No hogs,³²

The following employees were recorded at Oldbury, Sutton Forest:

- 2 ploughmen
- 4 labourers
- 1 dairyman
- 3 shepherds
- 1 female servant
- 1 miller
- 1 overseer
- 1 male servant
- 1 other.

Two stockmen were recorded at 'Budgiong' or 'Badgong'.³³

The Census therefore reveals two settlement types belonging to James Atkinson, namely a Main Residence and an Unidentified Settlement Type.³⁴

The principal characteristics of his main residence and the socio-economic position of James Atkinson himself may be understood by comparing occupation, land and stock with the average figures for this settlement type (Table 9).³⁵ In most respects James Atkinson conforms to the average for free settlers, but was significantly above average in the key socio-economic category of primary production, no doubt indicating his special interest in agricultural improvement. He was significantly below average in family grouping, but this may simply be a reflection of his recent marriage and commencement of a family, rather than an indication of his socio-economic position. By 1834 his family had grown to equal the average figures for this settlement type and social status. His holdings in land and stock were all below the average. Nonetheless he was sufficiently wealthy as a landholder to afford an overseer to manage the estate and the capital for secondary production in flourmilling, as indicated by the miller. He even had the luxury of a female houseservant, who was a free immigrant.

Other aspects of primary production are revealed by the Census. The two ploughmen were clearly concerned with the tillage of the 86 acres under cultivation, while the dairyman indicates the presence of a herd of cows used for dairy production. The presence of shepherds at Oldbury reveals that the area was suitable for sheep at this time, although in later periods it was considered too wet.³⁶ While other cattle may have been kept at Oldbury, it is clear that the stockmen at 'Badgong' on the Shoalhaven were running the remaining cattle, even though none are actually listed at this location.³⁷

The personnel at Oldbury may also be compared with the contemporary inventory of improvements recorded at Oldbury on 25 August 1828. They included

House.	£150
Dairy.	£100
Barn.	£100
Stable.	£50
Cowyard, piggery, huts.	£300
Fencing. 14 miles.	³⁸

The dairy confirms the presence of a dairy herd of cows, while the barn for the storage of fodder and other crops provides evidence not available at all in the census returns. The piggery indicates that pigs were kept at Oldbury, in spite of the fact that they were again not mentioned in the Census. While the miller is listed in the Census, the mill itself is not recorded in August 1828, even though a post mill only blew down in November 1828.³⁹

The above inventory suggests that the landholder, his family and staff were accommodated either in the house or in huts, raising the question of whether the socio-economic barriers between a landholder and his staff could have been lowered in the pioneering stages of rural settlement. This issue is also apparent in the pioneering stages of urban settlement. For example, convicts and subsequently emancipated or free persons were housed in simple timber huts in the 1790s and early 1800s in Parramatta, revealing little differentiation between the living standards of the bond and free at this time.⁴⁰

Inventories of Farm Buildings and other Improvements

Comparisons with inventories can be used to build up a database of improvements, which may be found on each settlement type. Such inventories provide the equation between the census data for population, land and stock and the physical structures used for accommodation or husbandry.⁴¹

References to buildings and other improvements are infrequent in historical documentation. The majority appear in correspondence with the Colonial Secretary regarding land between 1826 and 1830, and are therefore broadly comparable with the 1828 Census. The 1826 and later regulations for rental, grant or purchase of land, resulted in the most detailed descriptions of farms and farm buildings. These regulations required that the capital available for agriculture be verified by the Land Board before the approval of a land grant by the Governor. This type of application was directed towards free settlers in the most part, but was also used for assessing additional grants to those already settled in New South Wales.⁴² The inventories therefore provide a biased sample and may only be representative of the larger landholders, who were free settlers belonging to Protestant denominations. Smaller landholders, the emancipists, the native born, and the Catholics are under-represented or absent from this type of documentation, but nonetheless this historical resource still deserves analysis.⁴³

In some cases it is possible to overcome this sample bias, where the analysis of estate status has indicated little variation in occupations, land and stock within settlement types. The improvements described for runs on Crown land are a case in point, and will be described below. Only three settlement types provide sufficient evidence for discussion and analysis, namely the Main Residence, Managed Station or Farm and Run on Crown Land Settlement Types.

Main Residence Settlement Type

Where insecurity of title did not restrict capital expenditure, the value of improvements would then depend to a larger degree on socio-economic status. This is clearly the case with the 43 references to the Main Residence Settlement Type. The evidence reveals a relatively common grouping of buildings and other improvements, including a house, fencing, barn,

men's huts, stable, outbuildings, dairy and stockyards. Other buildings are mentioned less frequently (Table 10).⁴⁴

While sample bias has been demonstrated, there are some grounds for accepting that the evidence does indicate the structures that might be expected on the Main Residence Settlement Type from the smaller to larger landholdings. Clearly not all of the common farm buildings were present on each establishment. The references to these buildings imply that it was only on the larger estates that most of the common buildings might be present, while only the essential improvements were constructed on smaller farms. The evidence is inconclusive and requires testing by archaeological investigation, but it is supported by the description of the 60 acre farm of George Lilly at Mittagong, which is a rare reference to a small farm. It had a hut, barn, three stockyards and other fencing.⁴⁵ These have already been identified as the most common or essential improvements, together with the ubiquitous stockyards and fencing (Table 10).

The above discussion clearly indicates how the data from the inventories can be used alongside the census returns to predict the nature of the improvements on each Main Residence Settlement Type, even in those cases where an inventory of improvements is unavailable.

Managed Station or Farm Settlement Type

The following buildings are described on the nine references to the Managed Station or Farm Settlement Type: dwellings, fencing, huts, stockyards, barns, buildings, dairies, outhouses and stables (Table 11).⁴⁶ Thus the range of improvements on the Main Residence and the Managed Station or Farm Settlement Type are similar, except that in some cases only minimal improvements are present. The significance of this will be discussed below.

Runs on Crown Land

The most basic improvements were made on runs on Crown land. Absence of secure title resulted in only the minimum and essential improvements being undertaken, in spite of the economic circumstances of the stockholder. These were consistently a hut and a stockyard, and are identical to those recommended by James Atkinson in his book, entitled *An Account of the State of Agriculture and Grazing in New South Wales*, published in 1826.⁴⁷ While there are only five references to this settlement type it is suggested that little variation would have occurred, because of the insecurity of title and use of the land.⁴⁸

The analysis of the 1828 Census and the inventories of improvements have both confirmed the near absence of variation in the three Run on Crown Land Settlement Types. Where a run on Crown land is clearly identified, it will accurately predict the nature of improvements, even though the archaeological evidence may now be extremely difficult to locate.

Case study: a Managed Station or Farm Settlement Type

The Census of November 1828 recorded William Hutchinson as a householder on George Street, Sydney. He resided there with his wife, Jane, and four children. Jane's three children by her previous marriage were described as lodgers.⁴⁹ However in this instance it is not his Sydney property, but William Hutchinson's land at Bong Bong, Sutton Forest, which is of interest. This property was listed under the name of Gabriel Nichols, overseer to William Hutchinson. It included:

- 4 labourers (Primary Production).
- 1 overseer (Gabriel Nichols) (Management).
- 4000 acres held.
- 30 acres cleared.
- 25 acres cultivated.
- 1 horse.
- 1010 cattle.⁵⁰

When the occupations land and stock are compared with the average figures for a Managed Station or Farm Settlement Type, held by an emancipated person, it is clear that a minimum of capital was being expended on the husbandry of this landholding.⁵¹ Apart from the overseer himself, all other occupations (key socio-economic categories) were below average. While the acreage and cattle were significantly above average and reflect Hutchinson's great wealth, nonetheless the acreage in cultivation shows little variation from the usual expectation. In fact Hutchinson's land at Bong Bong was being husbanded in a manner similar to a Run on Crown Land, Managed, Settlement Type, except that the land had been alienated from the Crown.⁵²

The important issue is what type of improvements are predicted or implied by this analysis. The similarity with runs on Crown land might suggest only a hut and stockyards, whereas other improvements might be implied if the staff compliment had been greater. Historical research in fact supports the former interpretation. On 9 November 1827 it was reported in the *Sydney Gazette* that George Handcock, aged 22, was indicted for stealing from the hut of John Haydon on William Hutchinson's Sutton Forest property. Hayden was a servant employed or assigned to William Hutchinson.⁵³ Gabriel Nichols, overseer to William Hutchinson, and William Bowman witnessed the theft. George Handcock was a government servant assigned to William Bowman, who resided on Hutchinson's property. In the evidence given, Hayden's hut was described as having bark sheet walls, a chimney and doorway, and was located near a stockyard. Handcock was found guilty. The case not only provides evidence for the close business and personal relationship between William Bowman and William Hutchinson, but also confirms the nature of the improvements predicted by the analysis of the census returns. Given the extent of the property it is quite likely that the overseer and other labourers were housed in similar huts with stockyards elsewhere on the landholding.

The analysis of the census returns therefore explains why Hutchinson's landholding at Bong Bong, Sutton Forest, remained underdeveloped for the first half of the nineteenth century or even later.

SETTLEMENT TYPE DYNAMICS AND RELATIONSHIPS

The above example of a Managed Station or Farm Settlement Type is one of a number with similarities to runs on Crown land. They are consistent with landholders who sought to extend their pastoral interests with the minimal capital outlay, over and above the grant or purchase of the land. However in at least two cases, namely the properties of John Nicholson at Sutton Forest and William Hutchinson at Bringelly, £2000 and £2500 capital was expended on improvements by 1828 and 1829 respectively.⁵⁴ While the census returns indicate that these properties were below average in terms of occupations, land and stock, nonetheless the inventories of improvements reveal substantial expenditure of capital.⁵⁵ These examples do not show the fallibility of the settlement typology, but instead these nonconformities point to other explanations. Because of secure title there was no risk or restriction on the expenditure of capital, except social or economic circumstances. Both John Nicholson and William Hutchinson were wealthy landholders, who could afford such investment. The expenditure of capital in fact reveals their intention to make these properties into Main Residence Settlement Types, as witnessed by later historical documentation.⁵⁶

Settlement types therefore change with the evolution or development of properties by landholders. For example a run may become a managed station or farm, a managed station or farm may become a main residence, or a main residence may become a tenant settlement type. Changes from one settlement type to another reveal significant stages in the development of economic strategies by landholders.

Apart from the chronological dynamism of settlement types, they may also have a variety of spatial or locational relationships. Referring again to James Atkinson at Oldbury, the 1828 Census reveals the presence of at least two more settlement types on the same landholding as the Main Residence Settlement Type. A tenant at Oldbury by the name of Jenkins was mentioned in the *Sydney Gazette* of 10 February 1827 (Tenant Settlement Type).⁵⁷ This person may be identified as John Jenkins in the 1828 Census. He was a farmer at Sutton Forest, a convict on a life sentence, assigned to his wife, Charlotte, who had arrived as a free settler in 1826 with their five children. He held 60 acres, 5 of which were cleared and cultivated, together with 30 cattle.⁵⁸ He employed one free settler as a labourer.⁵⁹

Furthermore Phillip Dunahoe, holding a ticket of leave, was recorded as a constable in the 1828 Census, residing at Oldbury (Place of Work Settlement Type). His wife and three children lived with him and he held 2 acres, which were cleared and cultivated, together with 14 cattle. There is little doubt that the constable resided at Oldbury, since James Atkinson was a Justice of the Peace.⁶⁰ The residence of constables on the property of landholders was not an uncommon arrangement at this time. It is recorded at least three times in the census returns for the South Western Districts.⁶¹

The Census therefore reveals the complexity of the settlement pattern on any one property, and compounds the problems and issues which have to be addressed in the assessment of historic landscapes. Furthermore the 1828 and 1841 Census returns make it clear that tenants and other settlement types on larger landholdings are mostly invisible in other historical documentation, as well as being extremely difficult to locate by site survey.⁶²

The relationships between settlement types in different locations or geographical areas also reveal that many settlers had developed by 1828 a number of strategies to best exploit the dispersed pattern of settlement and the distances to major markets. Their ability to successfully do this was largely determined by their social and economic circumstances. Thus it is not surprising that the option was only available to 41.5 percent of settlers in the study group, each of these landholders possessing between 2 and 8 settlement types in a number of locations. The most common links are found between the Main Residence and other settlement types, including the Main Residence of Other Family Member (9 instances), the Managed Station or Farm (36) and the various Run on Crown Land Settlement Types (18). Each relationship reveals aspects of a landholder's economic strategy or husbandry practices. For example a run on Crown land represents the cheapest means of extending primary production at another location, by utilising Crown land to run stock, while a managed station or farm means a greater capital investment to achieve the same goal, because of the acquisition of land. The Main Residence of Other Family Member and the Managed Station or Farm Settlement Types share many similarities. Where a landholder can place a son in charge of a managed station, it represents an economy on the wages of a manager, but also provides the family member with the necessary training to take over the landholdings at some future date. Thus the analysis of relationships between settlement types reveals a limited number of reasons for the establishment of additional settlement types, either at the same or another location. The reasons are either to extend primary production at another location, or to increase income, or to decrease the costs of land, stock or labour.

Of those landholders in the study group having two or more settlement types, 81 percent have their main residence in the County of Cumberland or The Cowpastures, while the remainder reside in the South Western District. Only 12 percent have their settlement types wholly within the County of Cumberland (including The Cowpastures), while a further 12 percent have their settlement types wholly within the South Western Districts.

The remaining 76 percent have settlement types in both the County of Cumberland (including The Cowpastures) and the South Western Districts. This is indeed the preferred option for providing ready access to the main markets in the County of Cumberland.

CONCLUSIONS

The study of the 1828 Census makes a substantial contribution to our understanding of rural settlement and the population as a whole, even though some of these issues may be regarded as having more historical than archaeological interest. The extreme variation in the tenure of land and stock, access to the labour market and the restricted occurrence of family groups may initially be considered as purely historical research issues, until the impact of these factors on the range of settlement types becomes apparent through differing status or religious beliefs.

There is indeed a necessity for archaeologists to look afresh at written sources and ask archaeological research questions of historical documentation. The main purpose of this paper is to use the typology of settlement as a predictive model. It has revealed insights into human behaviour, husbandry practices and the social and economic factors influencing or determining the establishment of each settlement type. It has also predicted the pattern of settlement and the nature of improvements on each landholding recorded in the 1828 Census.

The analysis may even be taken one stage further. The settlement pattern of the Nineteen Counties of New South Wales, within the Limits of Location, was largely established during the 1820s and 1830s. The 1828 Census can therefore make a significant contribution to our understanding of the present day landscape and the processes that have shaped it. Through the typology of settlement proposed by this study, the 1828 Census is transformed into a powerful tool for looking at any historic landscape within the Limits of Location.

ABBREVIATIONS.

1828 Census Sainty & Johnson. 1980.

ADB. *Australian Dictionary of Biography.*

CSRL. Colonial Secretary, Correspondence re. land.

S.G. *Sydney Gazette.*

The following abbreviations are used to describe status in this study.

Terms used in this study.	Terms used in the 1828 Census	Abbreviations. ⁶³
Came free	Free settlers.	CF
Native born.	Born in the Colony	BC
Emancipated.	Absolute pardon	AP
	Conditional pardon	CP
	Free, or free by servitude	F or FS
	Ticket of Leave	TL
Bond.	Assigned servant	AS
	Convict or prisoner	C or P
	Government servant	GS
Unknown or unidentified.	No status indicated or recognisable.	U

Note on cumulative curve graphs.

Cumulative curve graphs have been used in Figures 1-8, 11-15 and 17 as the best means of graphically comparing data between various groups.⁶⁴ In Figure 1-8, and 11-15, the figures for each category are progressively summed, hence the

inclusion of a 'trend line'. Thus it is the shape of the graph which is most important and which aids in the recognition of similarities and differences (variation). In Figure 17, a 'trend line' has been omitted because the proximity of each symbol renders this unnecessary. The use of Figure 17 is also different from the other cumulative graphs because it is measuring a *ratio* scale, rather than a *nominal* scale (see Figure 17 for explanation of graph).⁶⁵

NOTES

- Henderson & Henderson 1983:4.
- Note the different use of the terms 'study area' and 'study group', the former meaning the South Western Districts, the latter being the part of the 1828 Census under investigation. The two do not exactly correlate.
- Sainty & Johnson 1980:14-18.
- It is extremely unfortunate that none of these returns for the study area are available for cross checking this procedure.
- There are a total of 237 duplicated entries. This means that 115 individuals have been entered twice, and three individuals entered three times.
- Henderson & Henderson 1983:22.
- Sainty & Johnson 1980:28-29. For this study, only the published version of the 1828 Census has been used, without reference to the original primary documents held by the Public Records Office in London, or the Archives Office of New South Wales.
- Sainty & Johnson 1980:14.
- The criteria for the definition of each settlement type are described in Appendix 1 of this paper.
- The criteria for the definition of each key socio-economic category are described in Appendix 2 of this paper.
- Appendix 3 of this paper.
- The use of occupations, land and stock to define a typology of settlement raises important archaeological questions. Archaeologists frequently make a comparison between population and resources to assist in the understanding of material culture. Material culture is regarded as an adaptation to the environment or set of resources. Where historical evidence is available, it is possible to go one step further. An occupation may be considered as an adaptation to the environment, the interface between human population and resources. Land and stock may also be considered in this way, as an interaction between population, husbandry practices and the environment.
- Appendix 3 of this paper.
- The employee holding the land or stock is listed under the settlement type of the employer. The employee does not have staff of his own.
- Sainty & Johnson 1980:15, 423-439.
- This list includes those categories where the number of individuals is greater than or equal to 25 % of the total number in that category.
- Alcohol production belongs to the key socio-economic category of secondary production, restricted to the estates of the free settlers with capital.
- 1828 Census: B1430, C1060, F935, J722, K913, N607, S1, S781.

19. 1828 Census: C3312, R937 -939, W2336, W2337.
20. Sainty & Johnson 1980:15.
21. Appendix 4 of this paper.
22. Appendix 4 of this paper.
23. In the Run on Crown Land, by Stockholder, Settlement Type, the unidentified estate status is made up of incomplete entries, a fact indicated by the absence of the primary production socio-economic category.
24. Appendix 4 of this paper.
25. Where land is held on a run, it is only in small acreages, at most 32 acres, but usually below 10 acres. Being a run on Crown land, the acreages would not in fact have been held by freehold title, and improvements would have been kept to a minimum. The small acreages probably represent only the land necessary for the subsistence of the persons on the run.
26. Small sample size may be partly responsible for some apparent variation.
27. Not illustrated on this graph are the figures for settlers (90% have less than 1960 acres: 51% have less than 100 acres) and householders (90% have less than 467 acres: 82% have less than 100 acres).
28. The term stockmen also includes data for stockholders, stockkeepers and herdsmen.
29. *ADB*. Vol. 1:42; Atkinson 1826 (1975):ix; AONSW. 4/1761. 31/7/1822:77.
30. Atkinson 1826 (1975):xi.
31. *ADB*. Vol. 1:42.
32. 1828 Census: A723-5.
33. 1828 Census: A81, B2067, B2207, B3415, C1800, D1148, F733, H321, J285, J446, K758, L794, P407, S651, S1431, W809, W2496.
34. Insufficient information is provided in the Census to identify the second settlement type. However when all the census information is compared, it is clear it is a Run on Crown Land Settlement Type.
35. See Table 3 to convert the occupations in the Census into the socio-economic categories used in this study. See Appendix 3 for average figures for occupation, land and stock. Appendix 4 provides the same information, except it is listed in accordance with estate status.
36. The 1841 Census reveals that there were no shepherds or others caring for sheep in this area. 1841 Census. District of Berrima. X946. AONSW.
37. This is a good example of how land and stock may be inaccurately recorded in the Census.
38. Atkinson, James. CSRL. Reel 1085. 25/8/1828.
39. Atkinson, James. CSRL. Reel 1085. 23/3/1830.
40. Higginbotham 1987.
41. The inventories of improvements on farms are solely used in this paper to provide evidence on the range of buildings and other improvements. They also provide a wealth of other information on the development of estates, the nature of husbandry practices, self sufficiency, building materials and values, but these issues are outside the scope of this paper.
42. *SG.*, 6/9/1826, 28/10/1826.
43. Only a sample of the CSRL Correspondence was studied, comprising all properties of most persons with property in the Police District of Berrima, as illustrated on the Map of the County of Camden in W. Baker's *Australian Atlas* of 1846. The building descriptions in the 1841 Census for the Police District of Berrima, and the Town of Berrima were also included in the analysis. Baker 1846; 1841 Census, X946. AONSW.
44. Higginbotham 1992. Vol. 1:66-68, 73-111.
45. Lilly, George. CSRL. 1/6, 9/10/1829. Reel 1153. AONSW.
46. Higginbotham 1992. Vol. 1:689-70, 111-114.
47. Atkinson 1826 (1975): 66.
48. Higginbotham 1992 Vol. 1:65-66, 118-123.
49. 1828 Census: H3022-3027, R937-939.
50. 1828 Census: C1214, M1169, M1744, N321, T265.
51. See Appendices 3 and 4 of this paper. William Hutchinson was an emancipist, who had made himself extremely wealthy, but a comparison with the came free estate status of this settlement type will highlight even more the spartan management of this property.
52. Compare the figures for occupations, land and stock with those for this settlement type in Appendices 3 and 4.
53. *S.G.* 9/11/1827: 3b-c.
54. Macarthur. H. H. 28/3099. CSRL. Reel 1157. AONSW; Hutchinson, W. 1/7/1829. CSRL. Reel 1143. AONSW.
55. For John Nicholson, see 1828 Census. J913, M3082, S640, S1434, S2906, S2908. For William Hutchinson, see 1828 Census: B3625, C546, C1110, H2197, M3565, M2272, T217, W2320.
56. Higginbotham 1992 Vol. 2:102, 163.
57. *S.G.* 10/2/1827.
58. 1828 Census: J277-283.
59. 1828 Census: C1176.
60. 1828 Census: D1785-9.
61. 1828 Census: B1675, D1785, E211, R791.
62. Higginbotham 1992 Vol. 1:124-146.
63. Abbreviations, except U for unknown or unidentified, are those used in the 1828 Census; Sainty & Johnson 1980:25.
64. Shennan 1988:29-31.
65. Shennan 1988:11-12.
66. A duplicate entry often appears in the Census where a property holder has land and stock at two locations. In many cases, the second entry is abbreviated purely to indicate ownership of land and stock.
67. If stock is listed alone, then it is defined as a Run on Crown Land Settlement Type.
68. If they are of an age to manage property, then it is defined as a Managed Station or Farm Settlement Type.
69. It should be noted that a number of entries will appear in more than one socio-economic category. The most

obvious example is that of the family grouping category, where family members can also have other occupations. Elsewhere, farmers, graziers and stockholders belong not only to the primary production key socio-economic category, but also to that of the possession of property or capital. However only in a few instances are two occupations assigned to an individual in the Census itself.

70. 620 out of 874 entries placed in the family grouping category are not assigned occupations in the study group of the 1828 Census.
71. In the published version of the Census, the beginning of a family of household is indicated by the letter F in front of the individuals age, the end of the group being indicated by the letter G in the same position. Sainty & Johnson 1980:22.
72. The entry for the publican and landholder is also listed in another category.

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- Sydney Gazette*.

Table 1. Correlation between the household returns and the abstract or unpublished version of the 1828 Census

Original household returns.	Abstract of Census, published version.
Heading.	
District.	
No.	
Householder's name.	
Residence.	
List.	
Name of family and servants.	Name.
	First name.
Age.	Age.
Class (status).	F/B (status).
Arrived: ship.	Ship.
Arrived: year.	Year.
Sentence.	Sentence.
Religion.	Religion.
Employment.	Occupation (or Remarks).
	Employer.
Residence.	Residence.
	Reference number.
Reverse side.	
District where situated.	
Name of Farm.	
Name of proprietor or tenant.	
Total number of acres.	Total acres.
Acres cleared.	Cleared.
Acres cultivated.	Cultivated.
Horses.	Horses.
Horned cattle.	Cattle.
Sheep.	Sheep.
	Other.

Table 2. The frequency and status of Settlement Types and Settlement Groups.

Settlement group	Settlement type	BC	CF	FS	GS	U	Total
Group 1	Main residence.	29	63	38	1	5	136
	Main residence of other family member.		7	2			9
	Managed station or farm	12	31	11		8	62
	Other residence.	1	4	2			7
Group 2	Run on Crown Land	3	5	6		5	19
	Run on Crown Land, managed	2	3	2		4	11
	Run on Crown Land, by stockholder.		1	7		1	9
Group 3	Innkeeping.		4	2			6
	Lodgings.	2					2
	Place of work.	2	11	15			28
Ungrouped.	Tenant.	1	2	12	1		16
	Duplicate.	3	4				7
	Land and stock held by employee.	2	4	3		3	12
	Land and stock held by partner.			1			1
	Unidentified.	12	41	12		7	72

Table 3. Occupations in the 1828 Census, divided into socio-economic and key socio-economic categories. (The symbol (#) indicates that all entries for an occupation are also included in another category, principally family grouping. Other occupations, for example a landholder who is married, would also be included in the family grouping category, although not all would have this double listing. In the access to goods and services socio-economic category, an asterisk (*) indicates that only the came free status is included, while the remainder have been placed in the domestic category.

Key socio-economic categories.	Socio-economic categories.	Occupation.	No. of entries.		
Domestic	Domestic	Cook*	20		
		Domestic	3		
		Housekeeper*	5		
		Housemaid	7		
		Houseservant*	20		
		Laundress	2		
		Nurse	1		
		Nursemaid	1		
		Sempstress	1		
		Servant*	191		
		Washerwoman	1		
		Family grouping	Family grouping	Child	5
				Daughter	1
Farmer and widow #	1				
Granddaughter	1				
Grandson	1				
Infant	1				
Sister	1				
Son	1				
Widow	2				
Wife	4				
Improvement	Construction	Bricklayer	4		
		Brickmaker	5		
		Carpenter	26		
		Fencer	33		
		Millwright	3		
		Nailer	1		
		Plasterer	4		
		Sawyer	5		
		Stonemason	5		
		Improvement	Trades or mechanics	Apprentice	1
Blacksmith	20				
Cabinetmaker	1				
Cooper	6				
Engineer	1				
Harnessmaker	1				
Shoemaker	31				
Smith and Labourer #	1				
Tailor	5				
Wheelwright.	4				
Innkeeping	Innkeeping	Publican	6		
		Publican and landholder	1		
Land tenure	Rental of domestic property	Labourer and tenant #	1		
Land tenure	Rental of land landholder	Lodger	10		
		Settler and lodger #	1		
		Surgeon and Lodger #	1		

		Tenant	14		
Management	Management	Clerk	9		
		Clerk and Overseer	1		
		Overseer	64		
		Overseer assistant	3		
		Steward	2		
		Superintendent	30		
Other	Other	At or with (in residence column)	12		
		Employ of	2		
		Errand boy	1		
		Lives at or with	2		
		Resides at or with	7		
		Other income	Government	Chief constable	2
				Clerk of Corporation	1
Clerk of the Bench	1				
Colonial Secretary	1				
Constable	11				
Constable and farmer#	1				
Customs Department (Employer column)	1				
Master Attendant	1				
Poundkeeper	1				
Registrar of the Supreme Court	1				
Sheriff Deputy and Landholder #	1				
Other income	Medical profession	Attendant	1		
		Surgeon	2		
		Surgeon and Lodger #	1		
Other income	Publisher	Editor of the Sydney Monitor	1		
		Other income	Religion	Chaplain	1
				Clergyman	1
Possession of Capital	Access to goods and services	Baker	1		
		Butler	1		
		Carman	1		
		Coachman	5		
		Cook*	2		
		Footman	2		
		Gardener	22		
		Groom	21		
		Housekeeper*	4		
		Houseservant	1		
		Schoolmaster	1		
		Servant*	8		
		Teacher	1		
		Possession of Capital	Possession of property or capital	Auctioneer	1
				Farmer #	43
				Farmer and constable #	1
Farmer and widow #	1				
Grazier #	4				
Householder	7				
Landholder	79				
Merchant	7				
Merchant and auctioneer	1				
Merchant and brewer #	1				
Partner	2				
Publican and Landholder #	1				

		Settler	17
		Settler and lodger #	1
		Sheriff Deputy and Landholder #	1
		Stockholder #	2
Primary production	Agriculture	Farmer #	43
		Farmer and constable #	1
		Farmer and widow #	1
		Farmingman	2
		Farmservant	3
		Labourer	604
		Labourer and tenant #	1
		Ploughman	23
		Smith and Labourer #	1
		Stockkeeper and Labourer #	1
Primary production	Cattle	Grazier #	4
		Herdsmen	66
		Stockkeeper	50
		Stockkeeper and Labourer #	1
		Stockman	68
Primary production	Cattle or sheep	Stockholder #	2
Primary production	Dairy production	Dairymaid	1
		Dairyman	23
		Dairywoman	10
		Milkboy	1
		Milkman	14
Primary production	Horses	Farrier	1
		Horsebreaker	1
		Ostler	1
		Stableman	1
Primary production	Meat production	Butcher	8
Primary production	Pigs	Pigman	1
Primary production	Sheep	Hutkeeper	49
		Shearer	8
		Shepherd	260
		Watchman	40
		Woolsorter	3
Primary production	Tobacco production	Tobacconist	3
Secondary production	Alcohol production	Brewer	1
		Brewer and Miller #	1
		Distiller	1
		Merchant and Brewer #	1
Secondary production	Flour production	Brewer and Miller #	1
		Miller	21
Secondary production	Leather production	Tanner	1
Transport	Transport	Bullockdriver	16
		Carter	8
Unknown	Unknown	-	36

Table 4. The total number of individuals in family groups according to each socio-economic category, and also as a proportion of the total number of individuals in each category.

Socio-economic categories.	Number of individuals in family groups	Total number of individuals in	% of total
Access to goods and services	3	70	4.28
Agriculture	18	680	2.35
Alcohol production	1	4	25.00
Cattle	5	189	2.64
Construction	5	86	5.81
Dairy production	6	49	12.24
Domestic	13	252	5.18
Flour production	4	22	18.18
Government	11	22	50.00
Innkeeping	5	6	83.33
Management	29	109	26.60
Meat production	2	8	25.00
Medical profession	2	4	50.00
Other	2	24	8.33
Possession of property	109	169	64.49
Publisher	1	1	100.00
Religion	2	2	100.00
Rental of domestic property	6	12	50.00
Rental of land and buildings	10	15	66.66
Sheep	3	360	0.83
Trades or mechanics	3	71	4.22
Transport	1	25	4.00

Table 5. The range and variation of the average number of persons for each settlement type according to estate status.

Settlement Group	Settlement type	Range of average number of persons.	Variation in average number of persons.
Settlement Group 1.	Main Residence of Alienated Land.	1.5 - 17.5	16
	Other Family Member		
	Main Residence	6.8 - 17.5	10.7
	Other Residence	3 - 10	7
	Managed Station or Farm	3.9 - 9.2	5.3
Settlement Group 3.	Place of Work Other Income.	3.6 - 8.5	4.9
	Tenant	4 - 8.5	4.5
Settlement Group 2.	Run on Crown Land, by Stockholder	1 - 4.4	3.4
	Run on Crown Land, Managed	4.5 - 7.3	2.8
	Run on Crown Land	1.6 - 2.6	1
Settlement Group 3.	Innkeeping Other Income.	6.5 - 7.5	1

Table 6. The proportion (%) of each religion in accordance with estate status. Each row adds up to 100 %.

Estate status	Catholic	Protestant	Presbyterian	Unidentified
Native born	16.667	80.556	0.000	2.778
Came free	4.762	89.286	1.190	4.762
Emancipated	34.568	61.728	0.000	3.704
Bond	0.000	50.000	50.000	0.000
Unidentified	0.000	8.333	4.167	87.500

Table 7. Religion as a proportion of the population and as a proportion of the number of estates in the study group of the 1828 Census.

Religion	Population.	% of population.	Number of estates.	% of estates
Catholic	833	29.455	38	16.740
Protestant	1761	62.270	157	69.163
Presbyterian	44	1.556	3	1.322
Other	9	0.318	0	0.000
Unidentified	181	6.400	29	12.775

Table 8. Nineteenth century terminology for husbandry practices and averages of land and stock, derived from the 1828 Census. NB:- The term stockmen also includes data for stockholders, stockkeepers and herdsmen.

Terminology	Total no. of entries	Averages:			
		Acres held cultivated (as a % of acres held)	Acres	Cattle	Sheep
Labourer	318	85	58	21	238
Farmer	727	408	50	92	818
Tenant	126	222	43	39	508
Householder	89	568	33	76	230
Settler	221	751	30	120	1206
Stockmen	58	779	21	163	183
Landholder	326	1734	20	244	1608
Superintendents & overseers	123	2456	10	248	1588
Grazier	19	1541	2	187	1037
Shepherds	13	1742	0	168	1260

Table 9. The composition of the Main Residence Settlement Type of James Atkinson at Oldbury, derived from the 1828 Census.

Key socio-economic categories	Socio-economic categories.	Occupation & no. of entries	Total in each key socio-economic category.
Possession of Capital	Access to goods and services	1 Servant F	2
Possession of Capital	Possession of property or capital	1 Landholder	
Family grouping	Family grouping	3	3
Domestic	Domestic	1 Servant M	1
Managment	Managment	1 Overseer	1
Primary production	Agriculture	4 Labourers	10
Primary production	Agriculture	2 Ploughmen	
Primary production	Dairy production	1 Dairyman	
Primary production	Sheep	3 Shepherds	
Secondary production	Flour production	1 Miller	1
Other	Other	1	1

Table 10. The number of references to buildings out of a total of 43 references to the Main Residence Settlement Type in rural situations.

Improvements.	Total number	Frequency (%).
Dwelling, house, cottage or hut	40	93.02
Fencing	25	58.14
Barn	16	37.21
Stable	10	23.26
Mens or servants huts, or barracks	9	20.93
Outbuildings, outhouses, offices.	8	18.60
Dairy	8	18.60
Stockyard	5	11.63
Granary	4	9.30
Kitchen	2	4.65
Mill	2	4.65
Sheep shed	2	4.65
Store	2	4.65
Coach(house)	1	2.33
Cowyard	1	2.33
Ditching	1	2.33
Dockyard	1	2.33
Forge	1	2.33
Milking yard	1	2.33
Piggery	1	2.33
School house	1	2.33
Shed	1	2.33
Water holes or tanks	1	2.33
Watermill	1	2.33
Workshop	1	2.33

Table 11. The number of references to buildings out of a total of 9 references to the Managed Station or Farm Settlement Type in rural situations.

Improvements.	Total number	Frequency (%).
Dwelling	5	55.56
Fencing	4	44.44
Hut	3	33.33
Stockyard	4	44.44
Building	2	22.22
Barn	1	11.11
Dairy	1	11.11
Outhouse	1	11.11
Stable	1	11.11

APPENDIX 1. CRITERIA FOR THE DEFINITION OF SETTLEMENT TYPES

Various settlement types were recognised from the analysis of the 1828 Census. The principal criteria used in the definition of settlement types are described below:

Duplicate Settlement Type.

The Duplicate Settlement Type is defined:

1. where a family member has listed land and/or stock at the property of another family member.
2. where land and/or stock for a main residence appear in a different listing from labour.

Innkeeping Settlement Type.

The Innkeeping Settlement Type is defined where a publican or innkeeper is listed in the household.

Land and Stock Held by Employee Settlement Type.

The Land and Stock Held by Employee Settlement Type is recognised when land and/or stock are listed for employees, where the land and stock of the landholder or other partner are listed in another entry, but at the same location.

Land and Stock Held by Partner Settlement Type.

The Land and Stock Held by Partner Settlement Type is recognised when land and/or stock are listed for partners, where the staff, land or stock of the landholder or other partner are listed in another entry.

Lodgings Settlement Type.

The Lodgings Settlement Type is defined:

1. when the occupation of the individual holding land and/or stock is given as a lodger.
2. when the occupation or residence is given as 'at' or 'with' (in residence column), 'lives at' or 'with' (in occupation column), 'resides at' or 'with' (in occupation column).

Main Residence Settlement Type.

The Main Residence Settlement Type is defined as the place where the property holder is in residence. If there are two or more listings for the property holder, then preference is given to the more complete listing, or the one where he or she is listed with other family members.⁶⁶

Main Residence of Other Family Member Settlement Type.

The Main Residence of Other Family Member Settlement Type is reserved for situations where sons have taken up residence on what would otherwise be a managed station or farm.

Managed Station or Farm Settlement Type.

The Managed Station or Farm Settlement Type is defined as the place where land and stock are listed in the care of a superintendent, overseer, or other staff. It may also be recognised in two other situations:

1. where land and stock are listed without staff, but not where stock alone is listed.⁶⁷
2. where neither land or stock, nor landholder are listed, but where the number of staff indicate a large establishment.

Other Residence Settlement Type.

The Other Residence Settlement Type is used if the property holder is listed at two locations. The more complete listing is usually defined as the main residence, the abbreviated listing as the other residence. It may also be recognised in another situation:

1. where other family members reside at a location other than the main residence, but where they are not of an age to manage property.⁶⁸

Place of Work Settlement Type.

The Place of Work Settlement Type is defined where the occupation of the property holder or person at that location falls into the key socio-economic categories of other income or trades and mechanics. The settlement type may also be a main residence.

Run on Crown Land Settlement Type.

The Run on Crown Land Settlement Type is defined where stock and/or small quantities of land are held at a location specified as government land, or where stock, but no land, is held.

Run on Crown Land, Managed, Settlement Type.

The Run on Crown Land, Managed, Settlement Type is defined where stock and/or small quantities of land are held at a location specified as government land, or where stock, but no land, is held. The stock and/or small quantities of land are listed in the care of an employee.

Run on Crown Land, by Stockholder, Settlement Type.

The Run on Crown Land, by Stockholder, Settlement Type is defined where stock and/or small quantities of land are held at a location specified as government land, or where stock, but no land, is held. The stock and/or small quantities of land are listed in the name of the property holder.

Tenant Settlement Type.

The Tenant Settlement Type is defined:

1. where the occupation of the property holder is given as tenant.
2. where the residence is described as part of a landholding owned by another person.

Unidentified Settlement Type.

The Unidentified Settlement Type was allocated to all other households, groups or estates, which did not satisfy the criteria for other settlement types, or where they could have been placed in two or more types.

APPENDIX 2. KEY SOCIO-ECONOMIC CATEGORIES.

The key socio-economic categories are described below:⁶⁹

Do mestic. The domestic key socio-economic category includes most domestic activities. Exclusions from this key socio-economic category on the basis of status or specialisation of occupation have been placed in the possession of capital key socio-economic category. There is some evidence that the servant occupation has been used to indicate an employee, rather than as a specific occupation.

Family grouping. The majority of entries placed in the family grouping key socio-economic category are not given occupations in the 1828 Census.⁷⁰ Of the remaining entries, there are eighteen which indicate a particular family relationship in the occupation column. The remaining entries have other occupations, but are clearly annotated as members of one family or household in the Census.⁷¹

Improvement. The improvement key socio-economic category includes the activities of construction, as well as that of trades and mechanics. It not only implies improvement to property, but also the extent of self-sufficiency of an establishment.

Innkeeping. The key socio-economic category of innkeeping has been included as a separate category, in view of the frequency that it provided another form of income to landholders. In the study group, only six publicans and one publican and landholder are included in this key socio-economic category, but other historical documentation indicates that it was a more frequent occupation.⁷²

Land tenure. The land tenure key socio-economic category includes the socio-economic categories of rental of land, buildings or domestic property. It excludes the ownership or possession of property or capital, which is included in the possession of capital key socio-economic category.

Management. The key socio-economic category of management includes several occupations, relating to administration or management.

Other income. The key socio-economic category of other income includes those occupations, which derive income from sources other than land, crops and stock. It includes employment by the government, or in medicine, publishing and religion. In the 1828 Census as a whole the number of other occupations may form a larger group.

Other. The other key socio-economic category includes those occupations, which do not readily fit into any other socio-economic category.

Possession of Capital. The possession of capital key socio-economic category includes the socio-economic categories of access to goods and services, and also that of possession of property or capital.

The term 'access to goods and services' is used in preference to any terms related to class structure. Access to goods and services as a measure of socio-economic standing is more directly applicable in the archaeological context, where access to goods may be assessed by the statistical analysis of artifacts, and the access to services by the similar analysis of census figures. The following criteria were used to place occupations in this socio-economic category, namely, the status of the individual, whether free, emancipated or bond, and the specialised nature of the occupation. In most cases it is assumed that the employment of household staff, who came free to New South Wales, is an indication of socio-economic status.

Primary production. The key socio-economic category of primary production may be divided up into several economic activities and numerous occupations. It is by far the most numerous key socio-economic category, being 42.77 % of the total number of entries. There is some evidence that the occupation of labourer has been used to indicate an employee, rather than as a specific occupation.

Secondary production. The key socio-economic category of secondary production, like its counterpart, primary production, may also be divided up into several economic activities and occupations.

Transport. The key socio-economic category of transport includes occupations involved in the transport of goods rather than people (Table 3). Occupations, including carman and coachman, are included in the socio-economic category of access to goods and services.

Unknown. The unknown key socio-economic category includes all those entries for which no occupation is given, but excludes members of family groupings where no occupation is given. There are only 36 individuals in this key socio-economic category.

From the above analysis, the frequency of the key socio-economic categories may be calculated (Table 3). The most common key socio-economic category is primary production, hardly a surprising result, but strongly confirming the importance of agricultural and pastoral pursuits in the study area, as well as in New South Wales as a whole. The next most frequent key socio-economic category of family grouping reflects the large number of property owners with families, but also family groups among staff. The following four most frequent key socio-economic categories of domestic, possession of capital, improvement and management respectively reflect the focus on household domestic activities, property ownership, improvement of property or self sufficiency, and the importance of the management of property and other staff.

**APPENDIX 3.
SETTLEMENT GROUPS 1-3 AND
UNGROUPED SETTLEMENT TYPES.**

Settlement Group 1.

Key socio-economic categories	Main residence	Main residence other family	Managed station or of farm	Other residence
Possession of capital	1.31	1.11	0.18	0.86
Family grouping	4.15	3.11	0.79	1.71
Domestic	1.23	0.33	0.26	0.86
Other income	0.03	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00	0.00
Land tenure	0.09	0.00	0.00	0.00
Management	0.25	0.33	0.58	0.14
Primary production	4.22	7.44	4.47	3.29
Secondary production	0.18	0.11	0.02	0.00
Improvement	0.72	1.22	0.34	0.43
Other	0.04	0.22	0.02	0.14
Transport	0.07	0.00	0.16	0.00
Unknown	0.16	0.11	0.02	0.00

Land & Stock	Main residence	Main residence of other family	Managed station or farm	Other residence
Acres	2469.53	3023.33	1679.97	1552.86
Cleared	273.50	368.00	108.11	614.29
Cultivated	59.59	95.39	46.95	207.57
Horses	12.40	17.89	71.93	3.86
Cattle	305.96	247.22	293.39	125.00
Sheep	630.59	895.56	322.34	500.00
Other	1.47	0.00	0.00	0.00

Settlement Group 2.

Key socio-economic categories	Run on Crown land	Run on Crown land, managed	Run on Crown by stock holderland,
Possession of capital	0.00	0.00	0.11
Family grouping	0.21	1.00	1.00
Domestic	0.00	0.09	0.00
Other income	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00
Management	0.00	0.82	0.11
Primary production	2.11	3.18	2.00
Secondary production	0.00	0.00	0.00
Improvement	0.05	0.00	0.00
Other	0.00	0.00	0.11
Transport	0.00	0.00	0.00
Unknown	0.05	0.09	0.67

Land & Stock	Run on Crown Land	Run on Crown Land, managed	Run on Crown Land, by stockholder
Acres	1.21	1.00	3.64
Cleared	1.21	1.00	3.64
Cultivated	1.21	1.00	1.73
Horses	4.00	8.00	4.91
Cattle	176.79	391.67	246.54
Sheep	167.58	630.89	118.18
Other	0.00	0.00	0.00

All columns indicate the average figures for each estate status.

Settlement Group 3.

Key socio-economic categories	Innkeeping	Lodgings	Place of work	Tenant
Possession of capital	0.67	0.00	0.14	0.06
Family grouping	2.83	2.50	2.86	3.06
Domestic	1.33	1.00	0.71	0.25
Other income	0.00	0.50	0.82	0.00
Innkeeping	1.00	0.00	0.00	0.00
Land tenure	0.00	0.50	0.00	0.94
Management	0.00	0.00	0.00	0.00
Primary production	0.67	0.00	0.75	0.62
Secondary production	0.00	0.00	0.00	0.00
Improvement	0.67	0.00	0.36	0.12
Other	0.00	0.00	0.04	0.00
Transport	0.00	0.00	0.00	0.00
Unknown	0.00	0.00	0.07	0.12

Land & Stock	Innkeeping	Lodgings	Place of work	Tenant
Acres	371.75	1100.00	563.82	271.72
Cleared	35.33	52.50	35.39	33.22
Cultivated	8.92	43.50	14.50	18.19
Horses	6.33	1.00	2.86	2.19
Cattle	184.00	0.00	78.21	48.44
Sheep	0.00	0.00	90.86	71.88
Other	0.00	0.00	0.00	0.00

Ungrouped settlement types.

Key socio-economic categories	Duplicate	Land and stock held by employee	Land and stock held by partner	Unidentified
Possession of capital	0.00	0.00	1.00	0.03
Family grouping	0.57	0.00	0.00	0.38
Domestic	0.00	0.00	0.00	0.18
Other income	0.00	0.00	0.00	0.01
Innkeeping	0.00	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00	0.00
Management	0.14	0.00	0.00	0.24
Primary production	2.14	0.00	0.00	2.60
Secondary production	0.00	0.00	0.00	0.00
Improvement	0.00	0.00	0.00	0.04
Other	0.00	0.00	0.00	0.03
Transport	0.00	0.00	0.00	0.06
Unknown	0.00	0.00	0.00	0.01

Land & Stock	Duplicate	Land & stock held by employee	Land & stock held by partner	Unidentified
Acres	931.43	1.50	24.00	171.67
Cleared	103.43	1.50	7.00	4.51
Cultivated	51.43	0.33	1.50	2.54
Horses	2.57	0.08	9.00	0.26
Cattle	267.43	29.25	5.00	35.53
Sheep	945.71	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00

**APPENDIX 4.
SETTLEMENT TYPES AND ESTATE STATUS.**

Settlement Group 1.

Main Residence Settlement Type.

Key socio-economic categories	BC	CF	FS	GS	U
Possession of capital	1.21	1.54	1.08	1.00	1.00
Family grouping	2.79	5.19	3.82	7.00	1.80
Domestic	1.03	1.89	0.71	0.00	0.20
Other income	0.00	0.05	0.03	0.00	0.00
Innkeeping	0.00	0.00	0.00	0.00	0.00
Land tenure	0.00	0.06	0.21	0.00	0.00
Management	0.10	0.46	0.05	0.00	0.00
Primary Production	2.72	6.37	2.34	2.00	3.40
Secondary production	0.00	0.38	0.00	0.00	0.00
Improvement	0.38	1.19	0.39	0.00	0.20
Other	0.10	0.03	0.03	0.00	0.00
Transport	0.14	0.10	0.00	0.00	0.00
Unknown	0.14	0.32	0.05	0.00	0.20

Land & Stock	BC	CF	FS	GS	U
Total acres	715.86	4641.17	456.62	60.00	1638.00
Acres cleared	82.31	511.21	68.39	5.00	28.20
Acres cultivated	15.52	102.90	30.18	5.00	18.20
Horses	8.83	19.14	6.00	0.00	2.80
Cattle	216.69	459.03	154.24	30.00	149.80
Sheep	309.55	1132.81	73.61	0.00	803.80
Other	0.00	3.17	0.00	0.00	0.00

Main residence of other family member.

Key socio-economic categories	CF	FS
Possession of capital	1.29	0.50
Family grouping	3.86	0.50
Domestic	0.43	0.00
Other income	0.00	0.00
Innkeeping	0.00	0.00
Land tenure	0.00	0.00
Management	0.43	0.00
Primary Production	9.43	0.50
Secondary production	0.14	0.00
Improvement	1.57	0.00
Other	0.29	0.00
Transport	0.00	0.00
Unknown	0.14	0.00

Land & Stock	CF	FS
Total acres	3558.57	1150.00
Acres cleared	451.71	75.00
Acres cultivated	111.14	40.00
Horses	0.71	37.50
Cattle	12.29	126.50
Sheep	281.71	0.00
Other	1151.43	0.00

All columns indicate the average figures for each estate status.

Managed station or farm.

Key socio-economic categories	BC	CF	FS	U
Possession of capital	0.25	0.16	0.18	0.12
Family grouping	0.42	1.06	0.27	1.00
Domestic	0.33	0.32	0.00	0.25
Other income	0.00	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00	0.00
Management	0.42	0.77	0.36	0.38
Primary Production	2.67	6.13	2.73	3.12
Secondary production	0.00	0.03	0.00	0.00
Improvement	0.25	0.48	0.27	0.00
Other	0.00	0.03	0.00	0.00
Transport	0.00	0.26	0.09	0.12
Unknown	0.08	0.00	0.00	0.00

Land & Stock	BC	CF	FS	U
Total acres	2185.00	1862.26	1385.64	620.75
Acres cleared	128.25	131.45	23.55	103.75
Acres cultivated	25.92	75.16	14.00	14.50
Horses	6.50	137.29	5.91	7.62
Cattle	413.83	287.00	257.36	187.00
Sheep	125.00	388.32	111.55	652.50
Other	0.00	0.00	0.00	0.00

Other residence.

Key socio-economic categories	BC	CF	FS
Possession of capital	1.00	0.75	1.00
Family grouping	2.00	1.75	1.50
Domestic	0.00	1.50	0.00
Other income	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00
Management	0.00	0.25	0.00
Primary Production	0.00	5.00	1.50
Secondary production	0.00	0.00	0.00
Improvement	0.00	0.75	0.00
Other	0.00	0.00	0.50
Transport	0.00	0.00	0.00
Unknown	0.00	0.00	0.00

Land & Stock	BC	CF	FS
Total acres	1250.00	2300.00	210.00
Acres cleared	1200.00	760.00	30.00
Acres cultivated	1200.00	49.00	28.50
Horses	16.00	2.75	0.00
Cattle	10.00	212.50	7.50
Sheep	0.00	875.00	0.00
Other	0.00	0.00	0.00

Settlement Group 2.

Run on Crown Land.

Key socio-economic categories	BC	CF	FS	U
Possession of capital	0.00	0.00	0.00	0.00
Family grouping	0.00	0.00	0.67	0.00
Domestic	0.00	0.00	0.00	0.00
Other income	0.00	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00	0.00
Management	0.00	0.00	0.00	0.00
Primary Production	1.33	2.60	2.00	2.20
Secondary production	0.00	0.00	0.00	0.00
Improvement	0.33	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00
Transport	0.00	0.00	0.00	0.00
Unknown	0.00	0.00	0.00	0.20

Land & Stock	BC	CF	FS	U
Total acres	5.00	1.20	0.00	0.40
Acres cleared	5.00	1.20	0.00	0.40
Acres cultivated	5.00	1.20	0.00	0.40
Horses	6.00	0.60	5.17	4.80
Cattle	130.33	186.00	205.17	161.40
Sheep	133.33	556.80	0.00	0.00
Other	0.00	0.00	0.00	0.00

Run on Crown Land, managed.

Key socio-economic categories	BC	CF	FS	U
Possession of capital	0.00	0.00	0.00	0.00
Family grouping	0.00	1.67	0.00	1.50
Domestic	0.00	0.33	0.00	0.00
Other income	0.00	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00	0.00
Management	1.00	1.33	0.50	0.50
Primary Production	3.00	4.00	3.00	2.75
Secondary production	0.00	0.00	0.00	0.00
Improvement	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00
Transport	0.00	0.00	0.00	0.00
Unknown	0.50	0.00	0.00	0.00

Land & Stock	BC	CF	FS	U
Total acres	1.00	0.00	0.00	1.75
Acres cleared	1.00	0.00	0.00	1.75
Acres cultivated	1.00	0.00	0.00	1.75
Horses	3.00	4.00	7.50	9.75
Cattle	543.00	198.67	225.00	348.25
Sheep	1422.00	494.67	675.00	0.00
Other	0.00	0.00	0.00	0.00

Run on Crown Land, by stockholder.

Key socio-economic categories	CF	FS	U
Possession of capital	0.00	0.14	0.00
Family grouping	0.00	1.29	0.00
Domestic	0.00	0.00	0.00
Other income	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00
Management	0.00	0.14	0.00
Primary Production	3.00	2.14	0.00
Secondary production	0.00	0.00	0.00
Improvement	0.00	0.00	0.00
Other	0.00	0.14	0.00
Transport	0.00	0.00	0.00
Unknown	1.00	0.57	1.00

Land & Stock	CF	FS	U
Total acres	0.00	5.71	0.00
Acres cleared	0.00	5.71	0.00
Acres cultivated	0.00	2.71	0.00
Horses	1.00	7.29	2.00
Cattle	350.00	244.57	650.00
Sheep	0.00	185.71	0.00
Other	0.00	0.00	0.00

Settlement Group 3.

Innkeeping.

Key socio-economic categories	CF	FS
Possession of capital	0.50	1.00
Family grouping	3.25	2.00
Domestic	1.25	1.50
Other income	0.00	0.00
Innkeeping	1.00	1.00
Land tenure	0.00	0.00
Management	0.00	0.00
Primary Production	0.50	1.00
Secondary production	0.00	0.00
Improvement	1.00	0.00
Other	0.00	0.00
Transport	0.00	0.00
Unknown	0.00	0.00

Land & Stock	Inn CF	FS
Total acres	151.62	812.00
Acres cleared	26.25	53.50
Acres cultivated	0.50	25.75
Horses	2.50	14.00
Cattle	87.50	377.00
Sheep	0.00	0.00
Other	0.00	0.00

Place of work.

Key socio-economic categories	BC	CF	FS
Possession of capital	0.00	0.36	0.00
Family grouping	5.50	4.36	1.40
Domestic	1.00	1.64	0.00
Other income	0.50	1.00	0.73
Innkeeping	0.00	0.00	0.00
Land tenure	0.00	0.00	0.00
Management	0.00	0.00	0.00
Primary Production	0.00	0.73	0.87
Secondary production	0.00	0.00	0.00
Improvement	1.50	0.09	0.40
Other	0.00	0.00	0.07
Transport	0.00	0.00	0.00
Unknown	0.00	0.00	0.13

Land & Stock	BC	CF	FS
Total acres	955.00	1235.82	18.87
Acres cleared	30.00	76.64	5.87
Acres cultivated	12.50	28.00	4.87
Horses	5.00	5.55	0.60
Cattle	140.50	133.18	29.60
Sheep	150.00	202.45	1.13
Other	0.00	0.00	0.00

Lodgings.

Key socio-economic categories	BC	CF	FS	GS
Possession of capital	0.00	0.50	0.00	0.00
Family grouping	3.00	4.50	2.58	6.00
Domestic	0.00	1.00	0.17	0.00
Other income	0.00	0.00	0.00	0.00
Innkeeping	0.00	0.00	0.00	0.00
Land tenure	1.00	1.00	0.92	1.00
Management	0.00	0.00	0.00	0.00
Primary Production	0.00	1.00	0.58	1.00
Secondary production	0.00	0.00	0.00	0.00
Improvement	0.00	0.50	0.08	0.00
Other	0.00	0.00	0.00	0.00
Transport	0.00	0.00	0.00	0.00
Unknown	0.00	0.00	0.17	0.00

Land & Stock	BC	CF	FS	GS
Total acres	920.00	225.00	168.96	950.00
Acres cleared	50.00	110.00	17.71	46.00
Acres cultivated	50.00	13.00	14.83	37.00
Horses	3.00	10.50	0.92	0.00
Cattle	300.00	41.00	31.83	11.00
Sheep	1150.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00