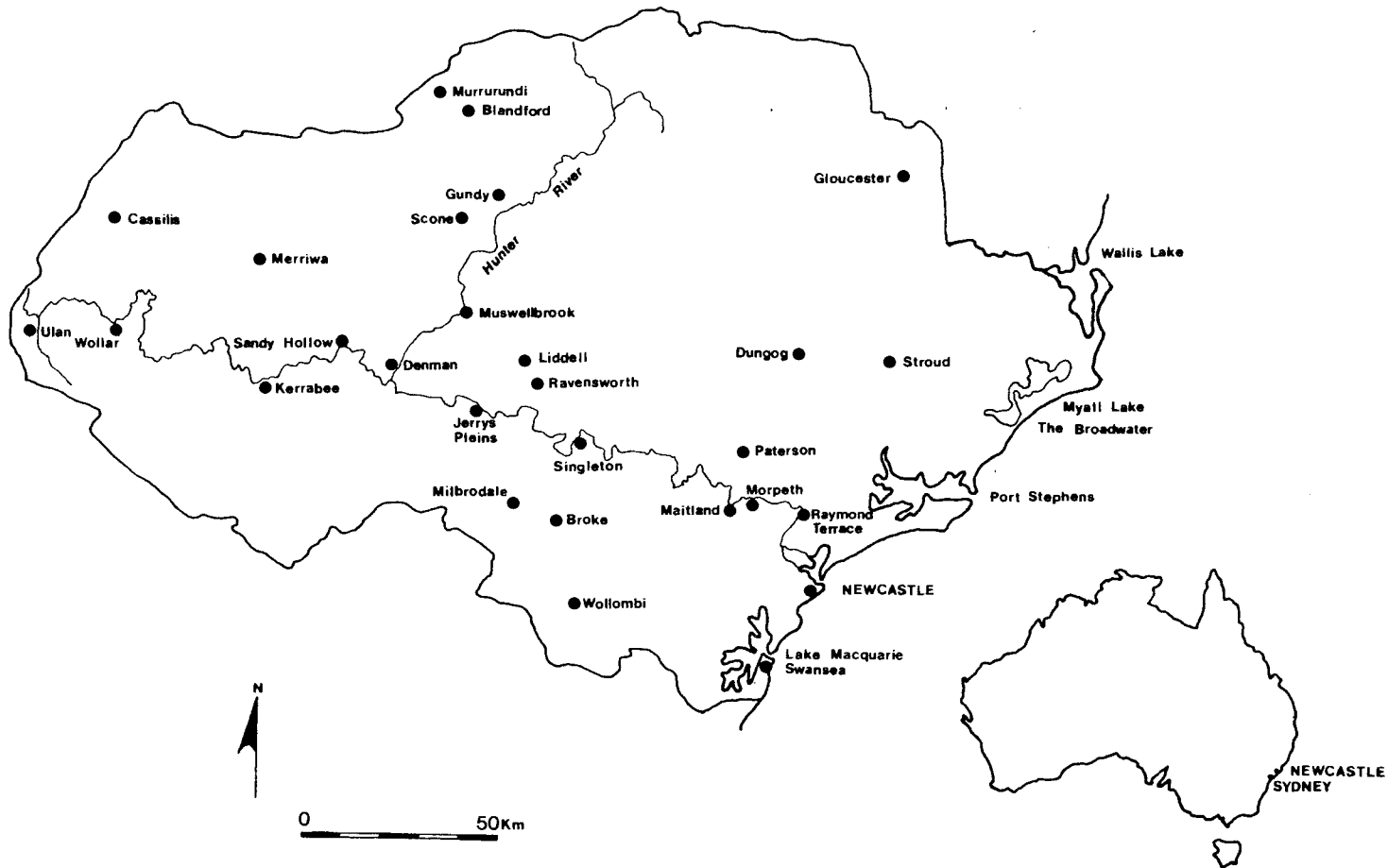


**ABORIGINES  
of the  
HUNTER VALLEY**

**Helen Brayshaw**

# HUNTER VALLEY



**ABORIGINES OF THE HUNTER VALLEY**

**A Study of Colonial Records**

**HELEN BRAYSHAW**

**SCONE & UPPER HUNTER HISTORICAL SOCIETY  
SCONE, N.S.W.**

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In memory of my father, Bruce Brayshaw.

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## FOREWORD

This particular book has its origin in research for an area study of the Hunter Valley, the study itself part of the planning process for protection of the Valley's Aboriginal cultural resources at a time when industrial development put these at risk. Conflicts over land use and between the differing values various groups within society may perceive in natural and cultural landscapes are not new to the Valley: this is clear in Dr Brayshaw's introduction. Over a century ago government use of Newcastle as a penal settlement and its reservation of the area for exploitation of coal and timber resources excluded settlers eager for land on which to pasture sheep and cattle. When their demands could be met, in the 1820s, the pressures of development had much in common with those of the 1980s. The dispossessed in this scramble for land were its Aboriginal inhabitants. Dr Brayshaw quotes from Henry Dangar's 1828 **Index and directory to a map of the country bordering upon the River Hunter :**

In this division of country, occupying upwards of one hundred and fifty miles along the river, which in 1822 possessed little more than its aboriginal inhabitants, in 1826-27, more than half a million acres were appropriated and in a forward state of improvement.

The richness of the "luxuriant plains" of the river's middle reaches that drew the colonial farmers and pastoralists had for millennia sustained substantial Aboriginal societies with a hunter-gatherer economy. What do we know of this lifestyle before it was shattered by dispossession? Archaeologists may reconstruct aspects of past lifeways from the material remains (artefacts and food refuse) that survive on old camp sites along the creeks and under the sheltering overhangs of the sandstone country. They can build up a record linking the distant to the recent past, with a time framework provided by radio-carbon dating. The evidence from archaeology on the Aboriginal past of the Hunter is discussed by Dr Brayshaw. But archaeology is not our only source of information on the life and past of the dispossessed "aboriginal inhabitants". Their descendants still retain many traditions about earlier times, and are now working to collect and preserve these.

Other vital sources of information are the historical records of the colonial period, both official reports of exploration or administration, and the unofficial records in the diaries, station journals and reminiscences of those who took up land in the Hunter Valley. These records contain descriptions of Aboriginal life at the time of contact. Thus, though not primarily intended as anthropological texts, they encapsulate ethnographic evidence of rare value, much of it otherwise unavailable. It is a daunting task to bring together all this fragmentary historical material, and organise it as the basis for an historical ethnography. But it is also one of great significance and lasting value. Dr Brayshaw is to be congratulated on having met this challenge, and for providing us with a source book of historical evidence relating to the life of the Aboriginal societies of the Hunter during the period of their contact with the colonial settlers. We must

also congratulate the Scone and Upper Hunter Historical Society and Mrs Gray for recognizing the importance of the local ethnohistorical record and making it part of their publication series. Such records deserve the most energetic collection, curation and analysis. If the archaeological sites are at risk, so also are many historical documents. Yet even so many treasures must await the attention of local historical societies throughout northern New South Wales.

Dr Brayshaw has close personal links with the Hunter Valley, having grown up on "Miranee" near Gundy. As an honours student in History and Prehistory at the University of New England her major research project was devoted to Hunter Valley ethnohistory. Her doctoral studies were undertaken through the History Department of James Cook University in Townsville. Her topic was again the archaeology and ethnohistory of a coastal river region, but this time in the far tropics of north Queensland. More recently she has been engaged on archaeological work in the Hunter as a consultant. It is fitting that she has returned to her own personal and academic "roots" for the research presented in this book. Having been associated with the academic work of Dr Brayshaw's earlier studies I am particularly delighted to have been invited to present the foreword to this book. I wish it, its author and its publishers every success.

Isabel McBryde

Australian National University, Canberra.

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## 1 INTRODUCTION

The fate of the Aborigines of the Hunter Valley and also of their history is closely linked with the nature of the valley itself. The resources it offered and its accessibility meant that then, upon the arrival of the Europeans, as now, their exploitation of the land was widespread, extremely rapid, and apparently unstoppable.

Coal was found at Newcastle in 1797, and good timber, especially cedar, flourished along the lower reaches of the Hunter, Williams and Paterson Rivers. The first official expedition to the valley was that led by Lieutenant-Colonel Paterson in the winter of 1801. Its purpose was to explore the lower part of the Coal River, as it was then known, and to determine the nature of the reserves of coal.

A penal colony was established in 1804 and maintained until 1821 when the convicts were taken to Port Macquarie. The area was virtually closed for this period, by the end of which it had been depleted of timber, the large heaps of shells left in Aboriginal middens had been burnt and used as mortar and cement in the buildings of Newcastle and Sydney, and as coal was in abundance the government thought it no longer necessary to continue reservation of the area for its exclusive occupation and exploitation.

From 1813 onwards a few people were permitted to occupy land at Patersons Plains and a little later at Wallis Plains, this settlement later becoming part of Maitland. By October 1821 settlers had occupied land as far north as Singleton by grazing and cultivation.

In November 1819 John Howe had reached the Hunter River near Jerrys Plains by a route from Windsor, and a year later he traced the river down to the settlement at Wallis Plains. In 1822 Lawson reached the upper Goulburn from Bathurst, and the following year Allan Cunningham reached Dart Brook in the upper Hunter Valley via the same route. In 1825 he travelled up the Hunter from Wollombi and on through the Goulburn Valley to the Liverpool Plains.

In 1822 Henry Dangar began detailed surveying on the lower Hunter, and until November 1826 he continued to survey most of the remainder of the valley. He located the junction of the Goulburn and Hunter Rivers in October 1824, and travelled along the Hunter and Dart Brook to the top of the valley, briefly crossing the Liverpool Range and venturing onto the plains.

Settlement followed closely behind him. In October 1824 the northernmost settlement was that of Dr James Bowman at Ravensworth, and in April 1825 it was George Blaxland's at Wollun Hills near the Goulburn junction. Writing from Merton, an adjacent holding, in 1826, Peter Cunningham (1827:154) wrote of the section of the valley between there and Muswellbrook, then known as Twickenham Meadows,

This rich and beautiful tract of country was but very lately discovered by Mr H. Dangar, our zealous surveyor on this river, and such was the eagerness to obtain

locations here, that it was all granted away in a very few months after that gentleman's first visit.

Settlement on the Goulburn was slower, the first official selection of land being authorised in 1828 (Wood 1972:166), but for some years prior to this the upper valley had been considered suitable as back country for sheep. The first herds of cattle were depastured on the Liverpool Plains in 1826 (Dawson 1830:382).

Dangar (1828:127-28) himself wrote of the speed of settlement in the Hunter Valley:

from March 1822 to November 1826, when I left the surveys of that district, the amazing extent of 372,141 acres were appropriated to settlers; 132,164 acres were allotted for church and school purposes; to which may be added 100,000 which were surveyed and not appropriated; making altogether 604,305 acres. In this division of country, occupying upwards of 150 miles along the river, which, in 1822, possessed little more than its aboriginal inhabitants, in 1826-27, more than half a million of acres were appropriated and in a forward state of improvement...Here in 1827 were upwards of 25,000 head of horned cattle, and 80,000 fine and improved-wool sheep.

The experience of the "aboriginal inhabitants" facing this rush of development can only be imagined. Unfortunately few Europeans took time to record anything of the Aborigines who before 1830 had ceased effective resistance and whose society and very persons had suffered irreparably. A compelling personal account of this and subsequent Aboriginal experience in the Hunter Valley has recently been published by James Miller (1985), who grew up at Singleton and whose family and tribal links are with the Wonaruah people (see Chapter 3).

\* \* \* \* \*

In view of this rapid and catastrophic destruction of the Aboriginal lifestyle the present work attempts to reconstruct largely from archival evidence various aspects of the environment and the life of the Hunter Valley Aborigines as they were at the time of early European settlement.

The literature has been examined in relation to the following topics:-

- \* Observations by early explorers and settlers as to the nature of the landscape, especially the vegetation cover.
- \* Evidence of modification of the environment by Aboriginal people, especially through the use of fire.
- \* Aboriginal economy - types of food and other resources exploited and the manner in which this was done.

- \* Aboriginal material culture of the region - supplemented by a search of museum catalogues.
- \* Rituals - concentrating on the archaeological manifestations that might be expected of this aspect of Aboriginal life.
- \* Movement and settlement patterns, for example the manner in which people moved across the region, the size of camps and the situations favoured for these.
- \* Demographic observations that might throw light on the impact that European disease had on the Aboriginal population of the region.

While primary sources have been consulted in regard to the nature of the environment, to settlement patterns and to population data, existing collations of ethnographic information have been largely relied upon elsewhere. Where possible contemporary sources have been used. Later works, such as personal reminiscences and ethnological writings, have been indicated as such and used sparingly. Some works were not available, for example the Lang Papers were withdrawn by the Mitchell Library for recording on microfilm. References to these papers have been taken from my own earlier work on the Hunter ethnography (Brayshaw 1966). Use has also been made of Sokoloff's (1973, 1978) studies of the Port Stephens ethnography and Vinnicombe's (1980) work in the Gosford-Wyong region.

The floor of the Hunter Valley is the focus of attention, together with the Goulburn Valley, with additional material from coastal areas such as Port Stephens and Lake Macquarie being used where appropriate. The cultural affiliations of Aboriginal groups in all these areas have been discussed but not reinvestigated.

In response to present day threats to the archaeological heritage of the Hunter Aborigines, particularly from coal mining and associated development, the National Parks & Wildlife Service funded an extensive archaeological investigation to determine the nature and extent of the region's archaeological resource. The aim of this project was to provide the Service with strategies for acquisition, preservation and protection of a representative sample of sites in the Hunter Valley. The ethnographic component of the present work (Brayshaw 1984) was originally undertaken as a part of the overall study, which was under the direction of Philip Hughes (1984). An additional component of the present work is a general description of the nature and distribution of archaeological sites occurring in the region and a discussion of what some of these sites tell us about the more distant past of the Hunter Aborigines and their place in the prehistory of Australia.

## 2 ENVIRONMENT

### Early Descriptions

Our view of the Hunter Valley below Maitland in the first years of European occupation is of the coal which was extracted from the cliff-face at Nobby's, the mounds of shells which were gathered and burnt to produce lime, and the timber resembling ash which was cut from Ash Island.

Tall cedar trees once graced Patersons and Wallis Plains in the Maitland-Morpeth area where there were also lagoons, silted flood channels and open swamps. The vine brushes along the banks of the river were up to 2-3 miles deep in places. The Quaker missionary James Backhouse (1843:388,397)

took a walk into one of the luxuriant woods, on the side of the Hunter, such as are termed Cedar Brushes, on account of the colonial White Cedar, *Melia Azedarach*, being one of the trees that compose them. *Eugenia myrtifolia* and *Ficus Muntia* are among the variety of trees in these brushes...These Cedar Brushes are also thick with climbers, such as *Cissus antarctica*, the Kangaroo Vine, *Eupomatia laurinae*, a briary bush, allied to the custard-apple but with an inferior fruit, and several Apocineae.

This scrub, sometimes so thick it was difficult to penetrate even a few yards (Breton 1833:122), extended to the water's edge. Many of the trees were gigantic, and lichens, staghorns, elkhorns and mistletoe flourished.

By contrast, early descriptions, a number of which have been assembled in Table A, indicate that the valley of the Hunter between Singleton and Murrurrundi and the Merriwa area of the Goulburn catchment was largely open parkland, the most striking feature of which was the scarcity or absence of timber.

John Howe first sighted the upper Hunter River in November 1819, when he reached the southern bank opposite the present Arrowfield vineyard. Riding south from there towards Jerrys Plains he wrote

Back ground very fine and little timber, only a few trees to an acre, and some patches without. Opposite side of the river, and more level and what timber is on is of no object. It may be said to be clear. The high land appears to be about 3/4 of a mile back, and that has very little timber on it, and the grass very green (in Campbell 1928:240).

Upon his return to Windsor Howe (1819) reported to Governor Macquarie

The land is very fine forest ground, thinly timbered, I think not exceeding from 4 to 6 trees to an acre,...in

many places there is from 20 to 50 acres with not more than from 20 to 30 trees on it. The flooded land continues from about 3/4 to 1 1/2 miles back from the river on each side (and more by places) and great parts of it equal meadow Land in England.

In March 1820 Howe returned and followed the river down from where he had left it to Wallis Plains. Of this stretch he wrote (CSIL 4/1744:162-3, 21/3/1820) "except a few places there is more timber than on the part that I made in November last, tho much thinner than on the banks of the Hawkesbury".

Thus below Singleton and Patricks Plains the landscape became gradually more densely wooded, eventually succumbing to the vine forests of Wallis Plains. Higher in the valley, however, the parkland continued. Peter Cunningham, in the Upper Hunter and Goulburn River valleys during 1826, wrote

In all these luxuriant plains there is scarcely a superfluous tree to be seen, not often above a dozen to the acre; and patches of acres are here and there met with destitute of even one, and only requiring the instrumentality of the plough to produce an abundant crop (1827:156).

Four years later Breton was in the Merriwa area, then known as Gammon Plains,

Many hundreds of acres have not a single tree upon them, and thousands more are so thinly sprinkled with timber, that there is not the slightest occasion for the axe (1833:96).

What timber there was along the Hunter floodplain was essentially as it is today, an association of Iron Bark and Box. Henry Dangar's field notes provide brief descriptions of the vegetation, and also the topography and soils. An example is his notation on section 26 of the township of Lemington, near Warkworth, surveyed on 9th September 1824 (Field Book 221) -

tollerable [sic] second class forest land, stiff soil, thinly timbered, small Box and Iron Bark.

On the left bank of Wollombi Brook, not far above its junction with the Hunter, Dangar noted light alluvial soil close to the Brook, and, towards the south east,

poor Tea Tree flat forest,...good undulating second class forest land, stiff loam soil, light Box and Iron Bark Timber (Field Book 220).

Land on the western bank of Dart Brook, north of Kayuga, surveyed by Dangar in May 1826, principally for George Hall Snr (Field Book 250), he describes as "largely flat and undulating meadow or thinly timbered

forest land, with Box and Iron Bark".

The meaning of the term "forest land" is confusing when such an area can be lightly timbered or even without timber (Field Book 236 18/6/1825). Its significance apparently derives from the English concept of unenclosed woodland (as opposed to a park), its emphasis deriving from the Latin origin - foris - meaning "outside" (Concise Oxford Dictionary). In fact all of the land surveyed by Dangar being hitherto unsurveyed and unfenced would have been forest land. Breton (1833:58) defined his use of the term "open forest" as "of that description where there is no underwood, and the trees in general far asunder".

The flood plain was particularly lightly timbered, and Howe described the high ground as being "well clothed with grass and lightly timbered, though mostly thicker than the low ground" (in Campbell 1928:239). This was in the area of Jerrys Plains where the hills on both sides of the River are today largely bare of trees.

In April 1825 Allan Cunningham rode along this section of the river past what is now Plashett to Wollun Hills, which had been established by George Blaxland with 800 sheep and 200 cattle, and was at that time "the most distant inland on the river" (Journal 29/3-31/5/1825). He noted that the timber was small, of Iron Bark and Box, with some Gum, and **Exocarpus** (Native Cherry) and **Sterculia heterophyllus** (Kurrajong) "appearing in every part of the forest" -

We continued over undulated country destitute of water, affording good feed however for stock and tolerable timber the Hills being of very gentle acclivity.

Among the plants Cunningham noted on these hills were **Acacias**, **Bursaria spinosa**, and a little **Trichinium** "appearing in the vallies or lower lands".

On and below a ridge from which the junction of the Hunter and Goulburn was visible Cunningham noted a variety of plants "strew'd", including several species of **Acacia**, **Zamia spiralis**, **Bursaria spinosa**, **Callitris pyramidales** and a species of Eucalyptus with an orange berry.

Other plants were growing luxuriantly in the alluvial deposits on the banks of the Hunter some four miles to the north, including **Polygonum adpressum**, **Convolvulus specum**, **Inomea pendula**, **Begonia** sp, **Croton** sp, and **Clematis** sp.

As to grasses, in 1821 William Bell had described this country as being well covered with kangaroo grass (Bigge Evidence BT Box 5:2028-30,2033). Allan Cunningham noted two years later, on the upper Goulburn, "a tall luxuriant species of danthonia, or kind of oat-grass".

While much of the floodplain of the upper Hunter River appears to have been strikingly devoid of trees, in places its banks and those of the Goulburn and smaller tributaries were lined with them.

Howe, on a tributary of Doyles Creek, passed through





a thick brush of pines on the banks of the creek, the trees seldom exceeding five or six inches through (in Campbell 1928:238).

These may have been *Casuarina* sp which line the banks of many watercourses in the valley today. On his first view of the upper Goulburn River in May, 1823, Allan Cunningham remarked the "stupendous swamp-oaks (*Casuarina paludosa*)" which lined its banks for miles. During his party's difficult journey along the southern foothills of the Liverpool Range, searching in vain for a convenient pass, they crossed "more than 19 large creeks, or swamp-oak rivulets" (Field 1825:157).

In April 1825 Cunningham saw "the dark line of forest trees marking the Course of the River as also of the channels of a water discharg'd into it on its northside" - this was the junction of the Goulburn with the Hunter.

In the branches of the large swamp oaks higher up the Goulburn there had been flood debris twelve feet above the ordinary level. Here on the lower Goulburn, however, Cunningham and his party "could not but with awe remark" flood debris 50 to 60 feet above the river level. Where he had first joined the Hunter on the 1825 expedition, north east of Mt Thorley, stubble high in the trees had indicated a great flood, "such a deluging...however having not taken place since the residence of Settlers on the lower part of the River or even since the settlement of Newcastle has been established".

In 1819 John Howe had noted flood debris "where the bushes were about breast high" on the flats near Jerrys Plains, and Henry Dangar later wrote (1828:44) of the Hunter

The banks of the river, so low down as Morpeth, are subject to inundations, the river sometimes rising thirty or forty feet above its usual level.

Barrallier (1802:80) had been one of the first to observe this:

as to the Patersons River it is a stream which will never be of use to a New Settlement, if I may Estimate the degree in which floods rise by traces on Trees of above 40 feet high.

Mrs Ellen Bundock (ML MS 1120) related being delayed by floods for many weeks at the Government residence at Wallis Plains (Maitland) early in 1826.

The Hunter Valley region was as prone to drought as it was to flooding. Dangar noted on his map of 1828 (Fig 1) that much of the country, especially that away from the river on either side between Denman and Muswellbrook, was very badly watered or even without water during the summer months. Prolonged dry weather only exacerbated this situation. Of the valley below Singleton John Howe had written

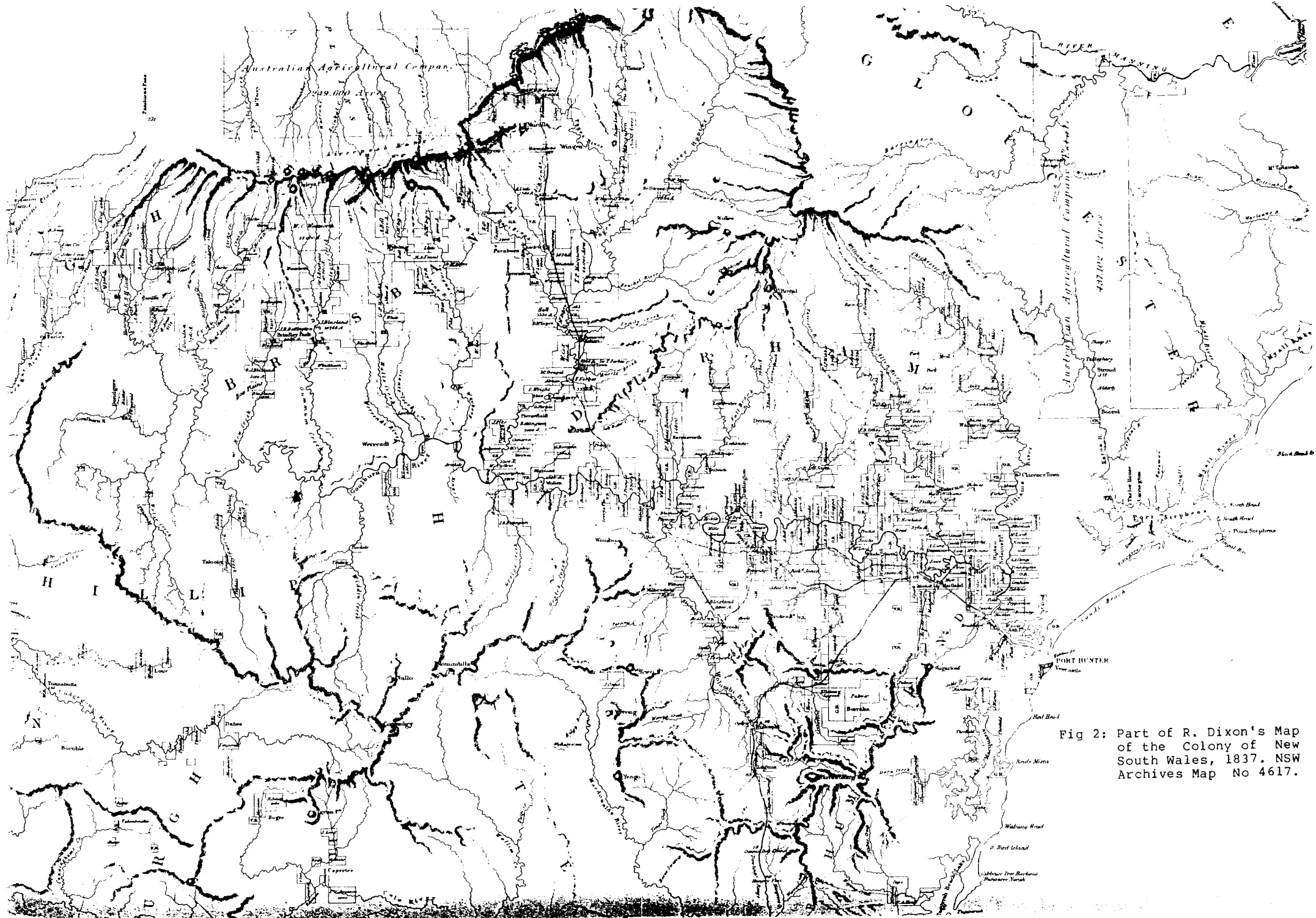


Fig 2: Part of R. Dixon's Map of the Colony of New South Wales, 1837. NSW Archives Map No 4617.

the country tho very extensive appears to be only watered from the River, as we only saw 5 lagoons till we made the Brush ground within a few miles of Wallace's plains, and only one of them of any considerable extent (CSIL 4/1744:166 13/4/1820).

In 1826 a severe drought began (Sturt 1833:1) which persisted for several years. Good rains were not experienced until August 1830 (Wood 1972:182). In February 1830 the surveyor Felton Mathew had found the Hunter south of the Wollombi Brook junction, to his surprise,

nothing but a wide bed of sand and gravel, with here and there a dirty pool of stagnant water (Journal, 11/2/1830).

Later, in another summer and another season of uncommonly long and severe drought, John Henderson had found at Darlington, now known as Singleton, that the Hunter was "perfectly dry as far as the eye could reach, with the exception of one pool of stagnant water" (1851:157). Thomas Mitchell (1838:13) noted that "the river, although occasionally stagnant, contains a permanent supply of water".

In such dry seasons some of the surface water in the upper Hunter Valley became brackish or salty. Mitchell himself noted a salt spring in the bed of Wollombi Brook no great distance from Blaxland's farm, and remarked

The waters in the lesser tributaries on the north bank of the river Hunter become brackish when the current ceases (1838:14).

Peter Cunningham (1827:154) reported that Dr James Bowman's homestead at Ravensworth was

situated between two rivulets, one of fresh and the other of brackish water, for the latter of which the sheep have a great predilection.

The fresh water rivulet is Foy Brook, better known as Bowman's Creek, and the brackish water was in Bayswater Creek. On the map dated 1837 (Fig 2) Bayswater Creek is actually called Saltwater Creek, what is now known as Saltwater Creek not being shown. In his Index and Directory (1828:18) Henry Dangar refers to the waters of the parish of Liddell as being impregnated with saline matter, suggesting that it was therefore not a good place to settle at, though perfectly suitable for winter and spring grazing of sheep and cattle. On his associated map "salt ponds" are indicated along what we know as Bayswater Creek.

While sheep may have had a "great predilection" for the brackish water, it is unlikely that wildlife such as kangaroos would have been particularly attracted to it. However, since the capacity of kangaroos for salinity is considerably greater than that of sheep, they certainly would not have avoided the area (Advice from Prof Terry Dawson, School of Zoology, University of NSW).

Of the wildlife Allan Cunningham wrote in November 1825, while in the Denman area,

Kangaroos and Emus particularly the former are abounding in every part of our Route but were too swift for our dogs, having fared rather sumptuously of late were in no disposition to exert themselves to catch the game, that was bounding about us in all parts of the timbered land.

The condition of the dogs may indicate that smaller game was equally plentiful.

Peter Cunningham later remarked of the same area that the thick grass on the flattened ridges made them "the great resort of the kangaroos...in the winter season" (1827:157).

Further down the Hunter, at Patricks Plains, near Singleton, he noted that

These plains are the great resort of our wild turkeys, which you will see here stalking majestically about, and which afford an excellent and most delicate repast (1827:152-3).

Robert Dawson observed Aborigines hunting kangaroos near Lochinvar in the mid 1820s (1830:8).

On the Wollombi in 1831 Breton (1833:93)

went out after kangaroos, and to my surprise saw only sixteen, at a place where formerly a hundred might have been seen together; but within the last two or three years they have almost disappeared.

On seeing a kangaroo above Maitland in April 1836, Backhouse (1843:392,398) remarked that they were becoming scarce in settled areas, although the "large Bats, called Flying Foxes, and the black, flying opossums" were still numerous in the Raymond Terrace area.

Dawson reported seeing "several fine emus", "flocks of kangaroos of every size" and "kangaroos in the greatest abundance" on the flats of the Karuah River (1830:196,204). A later account (Fitzpatrick 1914) suggests red kangaroos were in the coastal area as well as greys. Ebsworth (1826:70) also noted the presence of emus.

Dawson reported that possums were more numerous inland than on the coast, that there was an abundance of quails and ducks in the Karuah-Port Stephens area, and that "the deep pools in the river abounded with fine perch" (1830:191).

Above Jerrys Plains in November 1819 John Howe had caught a few perch in the Hunter, of which there were "a great number in the river" (in Campbell 1928:239).

On the upper Goulburn in May 1823 Allan Cunningham, less fortunate, noted that

the deep clear pools...abounded with a short, thick, black fish, not to be tempted by our baits (1823).

At Wallis Plains, the lagoons watering the "flooded vine brushes" were linked with the river and were observed to "swarm with the most delicious fish...including immense eels" (P. Cunningham 1827:151).

Near the mouth of the Hunter, in the winter of 1801, Grant (1803:159-160) reported plenty of fish.

Fish was taken in great quantities, and of various kinds, particularly mullets, which were large and well flavoured. We caught also a species of jew fish, one of which weighed 56 pounds, and proved excellent eating. From the numbers of this fish, which escaped from the seine, I am inclined to think there is great plenty in this river.

Grant had earlier reported many kangaroos, some distance inland, and various kinds of birds, but "of four-footed animals there was no plenty - the opossum, the flying squirrel, the cat, and some others were all we saw".

### **Modification by Aborigines**

The literature contains very little evidence of any influence the Aborigines may have had on the environment beyond their use of fire. In this the evidence relating to the upper Hunter and Goulburn River valleys is minimal, resting solely on Cunningham's observation, when on the lower Goulburn in April 1825, that although no Aborigines had been seen, "their recent marks on the Trees and fired country" showed that they had been in the area.

Thomas Mitchell had an alarming experience with fire while on the upper Hunter in late November and December 1831 (1838:13-19). Although by this time settlement extended to the head of the valley and beyond, and the fire was probably not lit by Aborigines, his description gives an indication of the behaviour and effect of fires in the area. On November 28,

We found the country across which we rode, very much parched from the want of rain. The grass was everywhere yellow, and in many parts on fire, so that the smoke which arose from it obscured the sun, and added sensibly to the heat of the atmosphere.

The next day

After travelling six hours we encamped beside a small watercourse near Muscle Brook, the thermometer at 4pm being as high as 95 degrees. In the evening, the burning grass became rather alarming...I soon discovered that the progress of the fire was against the wind especially where the grass was highest...The extremities of the stalks bending from the wind, are the first to catch the flame, the fire runs directly towards the windward, which is towards the lower end of the spikes of grass, and catching the extremities of other stalks still further in the direction of the wind, it travels in a similar manner along them.

Mitchell and his party managed to extinguish the fire before it reached their camp, but in future he took the precaution of burning a space around the tents "to prevent the invasion of such a dangerous enemy".

Evidence from elsewhere in the region indicates that the Aborigines burnt the countryside for a variety of reasons, and that often the results were very extensive.

One of the earliest attempts to reach the Hunter by an overland route was that of William Parr, who probably reached the edge of the southern catchment in November 1817. Riding north from the Hawkesbury he noted in his journal (NSW Archives 2/3623) that there was fire and smoke everywhere and the grass was burnt, leaving little feed for his horses. Eventually he was forced to abandon the journey as Aborigines in front and at the rear had "set fire to all the ridges round about".

There is evidence that fire was useful to the Aborigines not only in deterring Europeans but also in attracting game. Dawson (1830:214, 218) wrote, while in the Karuah River area,

we descended into a small valley at the foot of the hill where there was a large flock of kangaroos feeding upon young and tender grass which had sprung up after a fire of the natives.

Returning from this area he saw,

abundant traces of the wild natives: the smoke of their fires and from the grass which was burning in various directions amongst the hills, frequently ascended in thick clouds at a distance on all sides of us. Immense quantities of kangaroos were feeding on the young grass.

That burning was done deliberately is suggested by Threlkeld's (in Gunson 1974:206) reference to a ceremony performed in the mountains near Lake Macquarie in 1826 which involved burning "a large part of the country" prior to a kangaroo hunt. There is a much later reference to burning for this reason in the literature (Fawcett 1898:153) which suggests that the fires were lit about a month before the proposed hunt.

The Aborigines carried firesticks with them on most occasions, and it is possible that fires sometimes started by accident, as Dawson (1830:209) observed

in every quarter clouds of smoke rising from grass,  
which had been accidentally set on fire by the natives.

Fires were also lit for signalling purposes. Threlkeld (in Gunson 1974:133) noted that "if they wish to assemble together, it is only to despatch a messenger, who sets fire to the grass on his route, by which means the tribes know, when, and where to congregate".

There is evidence that significant areas were burnt. Thus Dawson (1830:118-19),

on ascending a gentle acclivity we saw the grass had all been burnt as far as the eye could reach...In a few moments[we] discovered numerous footsteps of men and children on the burnt ground.

And Parry (nd:61), in December 1831, also north of the lower Hunter

I never saw anything like the state of the country with fires - literally as black as charcoal for miles together. I am confident we rode four or five miles at once without seeing 100 acres of grass.

Thus while there was a school of thought that fires sometimes started naturally, from friction between boughs rubbing together (Leichhardt 1842, in Arousseau 1968:550), the Aborigines would have been responsible for much burning of the country. As to just how much in inland areas has to be conjectured from a minimum of evidence and comparison with areas nearer the coast.

\* \* \* \* \*

Dramatic vegetational change took place on the lower Hunter with the clearance of the vine forests below Maitland. However in terms of the vegetation cover, flooding, drought and salinity the present environment of much of the central lowlands area of the Hunter Valley, which extends from Singleton to Murrurundi, may be closer to its condition at the time of early settlement than is widely believed.

There is ample evidence from the lower Hunter and along the coast of Aborigines regularly and systematically burning the landscape, although there is no evidence that this resulted in vegetational changes. From the upper Hunter there are examples, albeit not very specific, of Aboriginal burning, especially of grass. It is possible that the woodlands of the central lowlands and the central Goulburn Valley may have been maintained in an open state by burning. The basalt plains of the Merriwa Plateau were even more sparsely timbered, but Hughes (1984:41) believes this to have been a natural response to the nature of the local soils rather than to the effects of burning.

TABLE A : DESCRIPTIONS OF THE ENVIRONMENT

Location	Description	Date of Observation	Reference
Morpeth	I may estimate the degree in which floods rise by traces on Trees of above 40 feet high - and all the country called schank Forest plain appear, consequently, to be under water at certain times of the year and ponds of different dimensions are in great number at other seasons. Patersons River has ... the advantage to have on its Banks the finest Cedars ever seen.	1801	Barrallier 1802:80
Maitland	Wallis Plains are of no great extent, and being originally densely wooded, required great labour in clearing, a disadvantage, however, amply compensated by the amazing fertility of the soil, which is alluvial, and still subject to being covered with water during high flood... The country back from the river consists of rising hills, inferior soil, with fertile flood vine brushes, watered by lagoons communicating with the river.	1826	P. Cunningham 1827:150-151
Paterson River	The quantity of good land on the banks of this river is very inconsiderable in every part of it.	late 1820's	Dawson 1830:383
Paterson, Williams Rivers	The alluvial banks of Paterson's and William's Rivers are heavily timbered, but the forest land behind is open, grassy, and every way suitable for pasture without cutting down a single tree.	1826	P. Cunningham 1827:147



**TABLE A : DESCRIPTIONS OF THE ENVIRONMENT**

Location	Description	Date of Observation	Reference
Williams River	There is only a very small portion of good land on the William's River, as far as the salt water flows, and less from the point towards its sources than on most other streams of the same description.	late 1820's	Dawson 1830:383
Hunter Valley above Maitland	The country connected with this river from Wallis Plains to its sources, contains an incalculably greater proportion of lightly timbered and rich soil than has yet been observed in an equal space continuously in any quarter of the colony.	late 1820's	Dawson 1830:379
Hunter Range north of Howe's Valley	This days journey through a great deal of good land, well watered and mostly thin of timber to what it is in the neighbourhood of the Hawkesbury. The good land being mostly valleys between rocks, with good grass up the sides of the hills, as well as in the flats, and a creek running through them.	2 November 1819	Howe in Campbell 1928:237
Tributary of Doyles Creek	A thick brush of pines on the banks of the creek, the trees seldom exceeding five or six inches through.	4 November 1819	Howe in Campbell 1928:238

TABLE A : DESCRIPTIONS OF THE ENVIRONMENT

Location	Description	Date of Observation	Reference
Hunter River between Doyles Creek and Jerrys Plains	The last two hours through a fine country thinly timbered, and for the last hour many acres without a tree on it. One spot, I think, exceeds 50 acres with not 20 trees on it, and very fine ground... The land on both sides very fine, and a great part of it may be cultivated without felling a tree. Even the high land is well clothed with grass and lightly timbered, though mostly thicker than the low ground. The grass on the low ground equals a meadow in England, and will throw as good a swath.	5 November 1819	Howe in Campbell 1928:239
Singleton	The [Patrick] Plains contain several thousand acres, clear of timber, and of the richest alluvial soil, producing heavy crops of wheat, maize or whatever else is sown thereupon; while the natural grasses are of the most luxuriant description. These plains are the greatest resort of our wild turkeys.	1826	P.Cunningham 1827:152
Ravensworth	Much alluvial Flat and undulating Land on Banks of Foy Brook. The West, Middle & East Parts are well watered by Foy Brook and two small chains of ponds - forest land, generally undulating surface, of the first and second class description, some being of third class. Iron Bark, scrubby land of small extent - soils rich vegetable alluvial, rich stiff and friable loams with some poor stuff and stone gravelly, yet forming a very desirable tract of Country.	5,6 August 1824	Dangar Field Field Book 220

**TABLE A : DESCRIPTIONS OF THE ENVIRONMENT**

Location	Description	Date of Observation	Reference
Ravensworth, Bowmans & Bayswater Creeks	Mr. Bowman's situated between two rivulets, one of fresh and the other of brackish water, for the latter of which the sheep have a great predilection.	1826	P. Cunningham 1827:154
Broke	Assisted Mr. Macleod in measuring the government reserve of Broke, on the Wollombi - country picturesque, but great part of the land very poor and though flat abounding in Iron Bark - and in some parts with Apple and Gum.	10 February 1830	Mathew, Journal 1830-32
Hunter River Mt. Thorley area	To my astonishment I found it now nothing but a wide bed of sand and gravel, with here and there a dirty pool of stagnant water.	12 February 1830	Mathew, Journal 1830-32
Broke - Warkworth - Ravensworth	We found the country across which we rode, very much parched from the want of rain. The grass was everywhere yellow, or burnt up, and in many parts on fire; so that the smoke which arose from it obscured the sun, and added sensibly to the heat of the atmosphere... the valley of the river Hunter... consists of low undulating land, thinly wooded, and bearing in most parts a good crop of grass... The waters in the lesser tributaries on the north bank of the river Hunter become brackish when the current ceases.	28 November 1831	Mitchell 1838:13-14

TABLE A : DESCRIPTIONS OF THE ENVIRONMENT

Location	Description	Date of Observation	Reference
Hunter Valley north of Warkworth	The mountains northward of this valley of the Hunter consist chiefly of traprock [igneous], the lower country being open and lightly wooded. The river, although occasionally stagnant, contains a permanent supply of water, and consequently all the land on the banks is favourable for the location of settlers, and accordingly has been all taken up. The country, and especially the hills beyond the left bank, affords excellent pasturage for sheep, as many large and thriving establishments testify.	November 1831	Mitchell 1838:13
Liddell	This parish affords an excellent tract of open, sound and deep loam up-land country; a most desirable tract for winter or spring sheep or cattle grazing, but owing to the waters being impregnated with saline matter, the situation cannot be recommended to settle at.	mid 1820's	Dangar 1828:18
Jerrys Plains	The timber was small, of Ironbark and Box with a ? Gum, all of ordinary Dimensions Exocarpus and sterculia heterophyllus appearing in every part of the Forest... We continued over undulated country destitute of water, affording good feed, however, for stock and tolerable timber the Hills being of very gentle acclivity commonly brushed with the following plants ?Daviosia sp.(Springwood) Acacia ? Kennedia monophylla some ? Sultanoa scabia Bursaria spinosa a little Trichinium appearing in the valleys or lower lands.	14 April 1825	A. Cunningham Journal 1825

**TABLE A : DESCRIPTIONS OF THE ENVIRONMENT**

Location	Description	Date of Observation	Reference
Jerrys Plains - Denman	Most of the land (it is all open forest) is very fertile, the soil being rich, and with no want of grass; but it is used chiefly as a sheep walk. All this tract is too much confined by elevations, particularly about the Goulburn.	c1830	Breton 1833:94-95
Junction of Hunter & Goulburn Rivers	I was gratified by an extensive view of the Country from SW by the way of W to N. From the opposite or N bank of this range westerly a beautiful tract of undulated land and the valley stretched for 7 or 8 miles to some rocky ridges with bluff ? the dark line of forest trees marking the Course of the River, as also of the channels of a water discharg'd into it on its northside - this water... is probably the Hunter or Goulburn.	15 April 1825	A. Cunningham Journal 1825
Denman	the ridges upon the upper part of Hunter's River are almost uniformly flattened at the top, forming little miniature hills and valleys covered with fine soil of moderate depth, and abounding in grass, which makes them the great resort of the kangaroos and cattle in the winter season.	1826	P. Cunningham 1827:157

**TABLE A : DESCRIPTIONS OF THE ENVIRONMENT**

Location	Description	Date of Observation	Reference
Lower Goulburn	Resuming our journey westerly we passed a rocky ridge and immediately reached a beautifully luxuriant grassy flat, evidently inundated however, in unusually high floods which are however of rare occurrence.	17 April 1825	A. Cunningham Journal 1825
Denman to Merriwa	we crossed the Hunter... alluvial flats subject to inundation... indifferent country to the Wybong... Leaving this we found the land thinly wooded, and the soil sandy; nevertheless grass was plentiful, nor has there been any deficiency of it for the last seventy miles.	1832	Breton 1833:95
Merriwa	Gammon Plains greatly resemble those of Goulburn, but the soil at the former is generally better; even on the hills it is often good. Many hundreds of acres have not a single tree upon them, and thousands more are so thinly sprinkled with timber, that there is not the slightest occasion for the axe.	1832	Breton 1833:96

**TABLE A : DESCRIPTIONS OF THE ENVIRONMENT**

Location	Description	Date of Observation	Reference
Upper Goulburn River between Ulan and Cassilis	Upon reaching the brow of the ridge of forest hills, we at once descended to a fine tract of good country, watered by a stream, whose winding channel could be easily traced by the particularly dark verdure of the swamp-oak ( <i>Casuarina paludosa</i> ) on its banks, several miles in a N.E. direction... seasons of heavy rains, wherein its waters are swollen to a perpendicular height of 12 feet above the present ordinary level, as appears by the lodgement of stubble in the branches of the stupendous swamp-oaks on its margin... the deep clear pools... abounded with a short, thick, black fish, not to be tempted by our baits.	6 May 1823	A. Cunningham Journal 1823.

TABLE A : DESCRIPTIONS OF THE ENVIRONMENT

Location	Description	Date of Observation	Reference
Upper Goulburn River	Along the left bank of this interesting stream, to the N.E., an extent of nine miles of rich grazing tracts meets the eye, consisting of clear open levels or small plains, and grassy hills of the most easy acclivity, which to the S.E. are bounded by ridges of forest land, thickly clothed with timber. The level tracts, immediately bounded by the river, occasionally break into small plains, whose areas comprise from 100 to 150 acres, clear of tree or shrub, and with the downs, or open gently rising grounds, furnish all the grasses and herbage of the Cugeegong and other western rivers, with the addition of a tall luxuriant species of danthonia, or kind of oat-grass, not remarked on other streams. The soil of these limited plains, or more level lands, is of a moist alluvial nature; whilst that of the small downs especially near the southern extremity of this beautiful tract of country, is rich, loamy and dry.	7 May 1823	A. Cunningham Journal 1823.
Between Upper Goulburn River and Kingdon Ponds	From Goulburn River to our most eastern point of penetration, no fewer than 19 large creeks, or swamp-oak rivulets...	May, 1823	A. Cunningham Journal 1823.

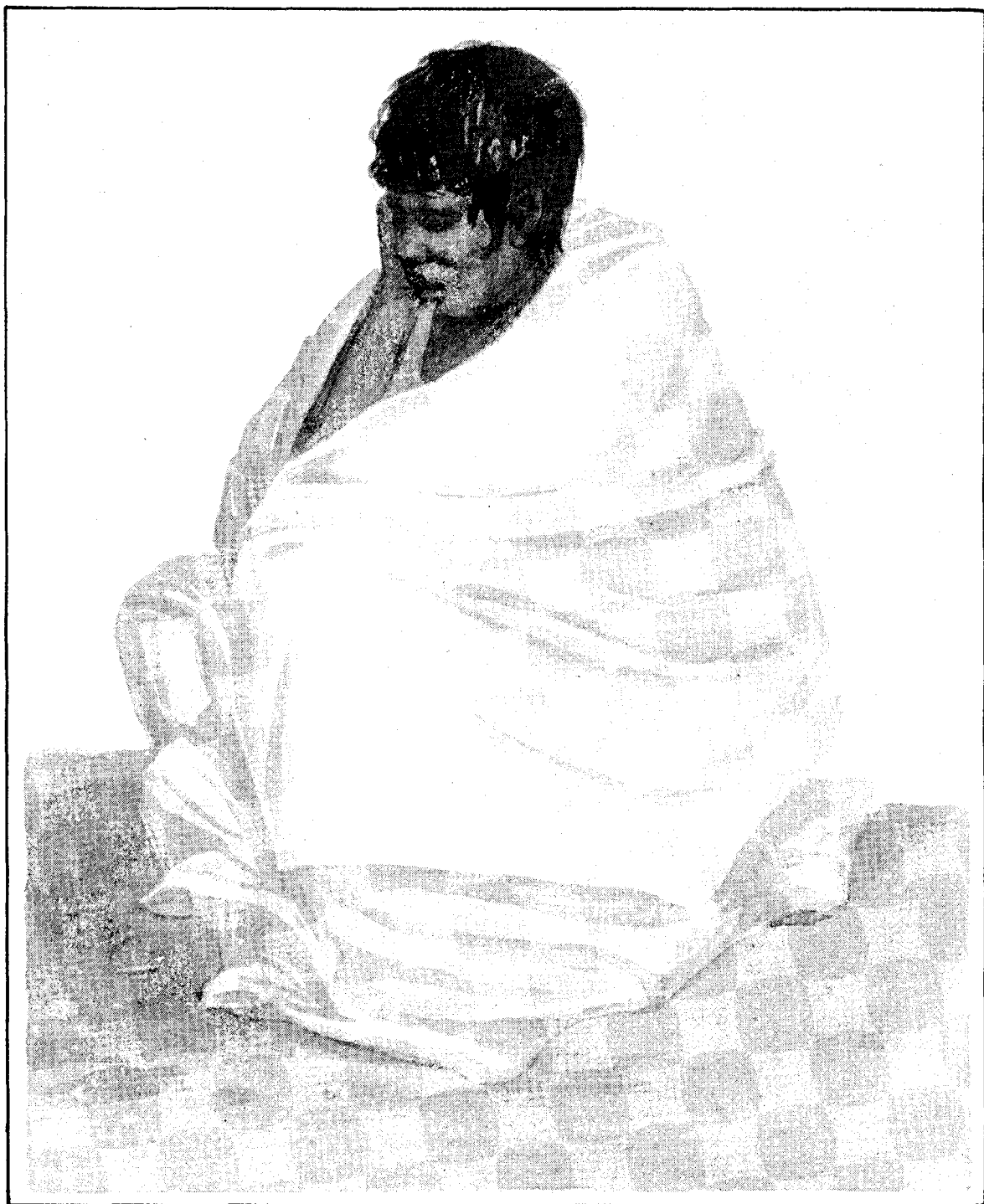


**TABLE A : DESCRIPTIONS OF THE ENVIRONMENT**

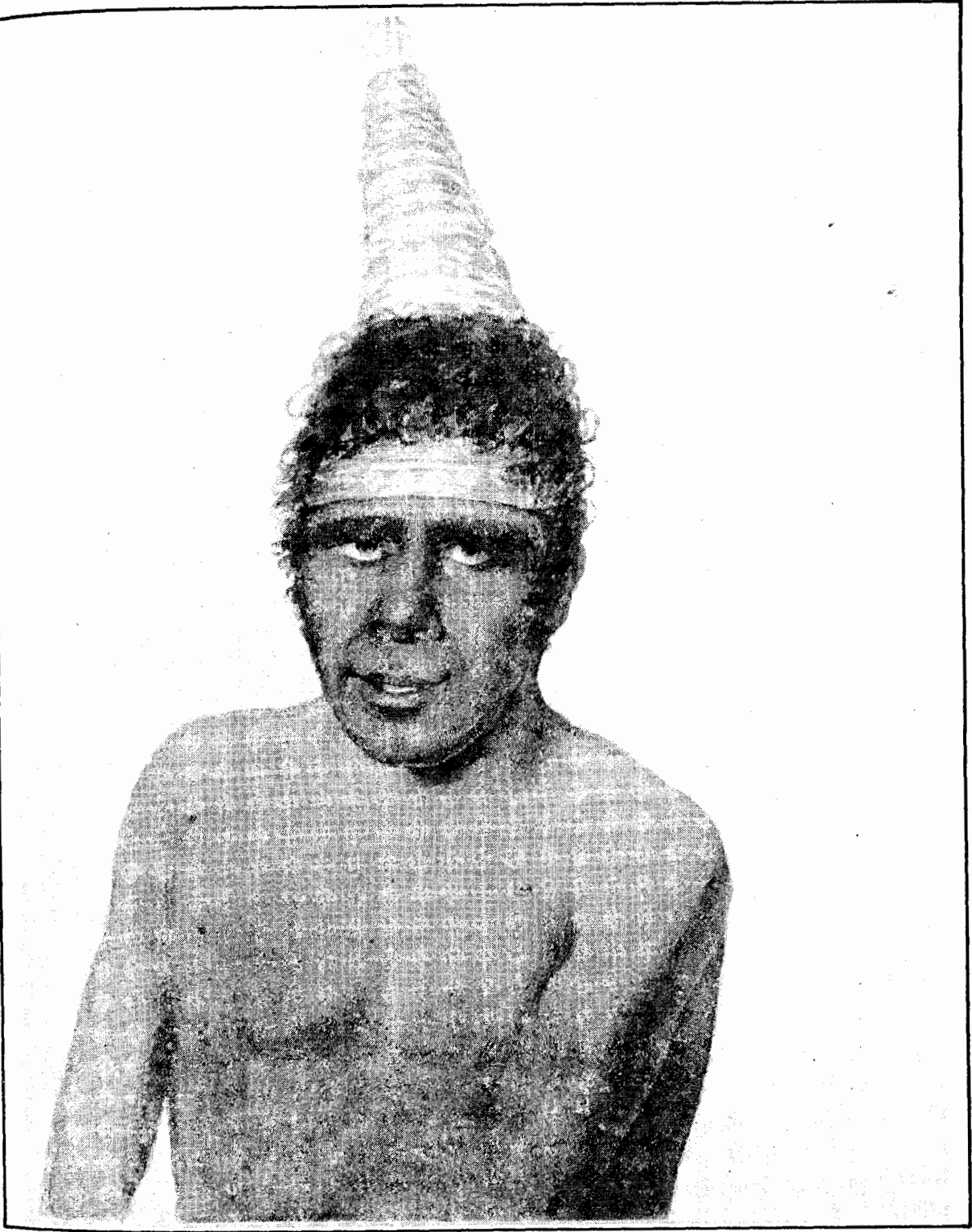
Location	Description	Date of Observation	Reference
Dartbrook	This days journey has taken us over much rich meadow land of an alluvial nature and although the country appears to afford but few ponds to give water to the back country still it is on the whole an eligible tract of country for survey and colonisation.	October, 1824	Dangar Field Book 221
Page River Valley	The next stream to the westward of the Hunter is Page's river, although the valley through which it runs is bounded on the east and west by elevated ranges; the vale affords much good country, thinly timbered, well watered, and possessing deep loam soils.	mid 1820's	Dangar 1828:84-85
Page River near Blandford	We reached the banks of this stream at four o'clock and encamped on a fine flat. The extremities from the mountains on the north descended in long and gradual slopes, are well covered with grass. This was already eaten short by sheep.	3 December 1831	Mitchell 1838:24

TABLE A : DESCRIPTIONS OF THE ENVIRONMENT

Location	Description	Date of Observation	Reference
Hunter between Denman and Aberdeen, and along Dart Brook	The rich alluvial lands on this part of the river, (St. Germain and Twickenham meadows) are without parallel in the known parts of the colony; there being a plain, at alternate sides, the whole distance, varying in breadth from one half to two miles. Some parts are without timber, and others have no more than enhances, rather than detracts from, their value, with an inexhaustible soil, and a natural herbage, but little inferior to the most improved English meadows.	mid 1820's	Dangar 1828:43
Satur, Scone	By and by we passed the deep but empty bed of a creek called Kingdon Ponds. This creek, even in moist season, is now only a chain of ponds; but I was told by a person who was one of the first settlers on the Downs, that on his first discovery of it, about ten years previous to my visit, it was a large running stream, so deep and wide that he had to ride for a mile or two along its banks before he could find a place fit for crossing... One cause, which I have observed, operating to the drying up of ground previously wet and swampy, is the treading of sheep and cattle, by which the soil becomes firmer below at first, and ultimately hardened and baked by the sun, on the surface, inducing the rain afterwards rather to run off than to sink into it.	late 1830's	Henderson 1851:169-170



Pl 1: Augustus Earle, Native of New South Wales, Newcastle 1825.  
Rex Nan Kivell Collection, Australian National Library.



Pl 2: Augustus Earle, Native of New South Wales, Tommy, Newcastle 1825.  
Rex Nan Kivell Collection, Australian National Library.

#### **Social Organisation and Land Tenure**

In Aboriginal society the basic subsistence unit was the local horde or band, consisting of a collection of families, which cooperated in hunting and gathering. Ownership of land rested with larger clans or descent groups (Berndt 1977:139) of which the hordes formed a part. Thus while the hordes or family subdivisions of the clan were those who habitually occupied and collected food within a given area, their movements were not necessarily strictly confined to that area. Each horde had rights to the land of the entire clan, and also to the land of the clans with whom they inter-married, some of whom may have belonged to different language groups. It was therefore not uncommon for wives to speak different languages or dialects from their husbands, the children speaking both, and the languages of adjacent clans were mutually understood.

The tribe consisted of an agglomeration of clans, and the members of each tribe shared the same language, social customs and territory situated within specific but elastic geographical units (Vinnicombe 1980:IV 2).

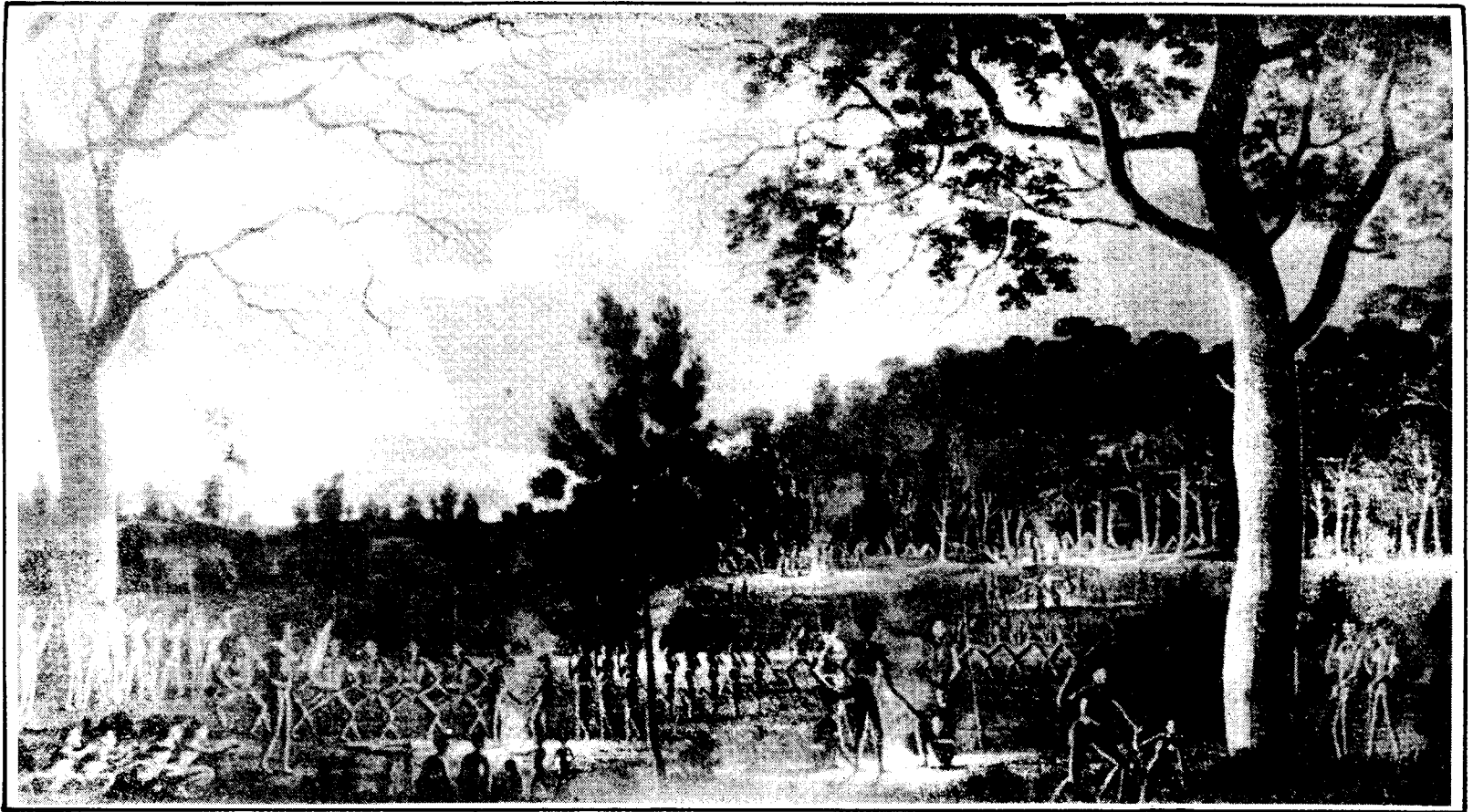
Thus kinship interwove throughout Aboriginal society, creating a very complex dynamic in which every individual had a specific relationship with every other individual, with the food they ate, and with the land. This wide network of kinship ties and obligations extended economic and social links far beyond the core territory in which each horde habitually moved about collecting food, and it meant that others' territories could be visited, for example in pursuit of patchy resources, and when social, marital and other exchanges took place.

These extended rights and ties were promoted and maintained by regular gatherings or corroborees (Pl 3) at which songs and dances were exchanged and at which wives were sought. There was also inter-clan and sometimes inter-tribal participation in specific rituals such as food increase rites and initiation ceremonies. Exchange in goods was an economic expression of these inter-clan and inter-tribal networks.

#### **Tribal Distribution and Affiliations**

The tribal systems in the Hunter Valley Region are not easy to elucidate, since tribal organisation mostly broke down well before any effort was made to record it. It was not until the second half of the nineteenth century that such people as Rev. W. Ridley, A.W.Howitt, R.H.Mathews and W.J.Enright began to interest themselves in Aboriginal tribal organisation.

The early observers used the word "tribe" variously to describe a group of about ten armed men, or mixed groups ranging from thirty-five to five hundred. The Aborigines themselves used a variety of names which might relate to the dialects, or the territory of other groups, and which



Pl 3: James Wallis, Corroboree at Newcastle c1817 (Smith 1960).

might refer to local groups, clans or subtribes, while others referred to groups of allied tribes or "nations" as they are described in the early literature.

One such "nation" is the Kamilaroi (spellings of group and language names used in the text are those most commonly found in early literature references; current phonetic representations may result in different spellings, in this case for example "Gamilaroi"), whose component tribes have never been satisfactorily elucidated. According to Ridley (1864:15) Kamilaroi was spoken

All down the Namoi, along the Barwon from the Mooni to the junction of the Namoi, on the Bundarra northward and the Liverpool Plains and the Upper Hunter southward.

Threlkeld (1892) and Mathews (1903:259) described the Kamilaroi territory as extending as far south as Jerrys Plains.

The first intimation that this part of the Hunter Valley may have been Kamilaroi country was Howe's being told by Aborigines on November 4, 1819, while on the Hunter Range above Doyles Creek, that ahead to the north lay "Coomery Roy", and "more further a great way" (in Campbell 1928:236). Variations of "Coomery Roy" (Wood 1972:10-11) have persisted in the area since then, being today found on Comleroi Road and the Comleroi district west of the junction of Wollombi Brook with the Hunter River.

The Wonaruah, who were closely affiliated with the Kamilaroi, occupied the Valley from here to Merriwa in the Goulburn Valley. Those occupying the eastern side of the valley, from Ravensworth to Murrurundi and the Mount Royal Range, were the Geawegal, who according to Howitt (1904:104) also had the complete subclass system of the Kamilaroi. The Gringai, based on the Allyn and Paterson Rivers (Miller 1985:12-14) may also have had this system.

There is strong evidence of contact between the Kamilaroi of the Liverpool Plains and the Aborigines of the Upper Hunter. That this contact was not always friendly is instanced by Breton's (1833:203-4) account of an affray which took place on the Wollombi, at which "four men and two women of the Comleroy tribe were slain". The contact seems chiefly to have been effected through what is known as Cassilis Gap. Howitt (1904:84) states that they came through the Goulburn Valley, "across from the Talbragar to the Nunmurra waters", adding that a section of the Kamilaroi "occupied the upper water flowing into the Hunter River, and those which formed the heads of the Goulburn River, for instance the Nunmurra Creek". Nunmurra Creek (now Munmurra River) flows into the Goulburn between Kerrabee and Wollar.

Early evidence of contact via the gorges of the upper Goulburn comes from the expressed opinion of magistrates Scott and Macleod that violent acts by Aborigines towards settlers in the Hunter Valley during 1825-26

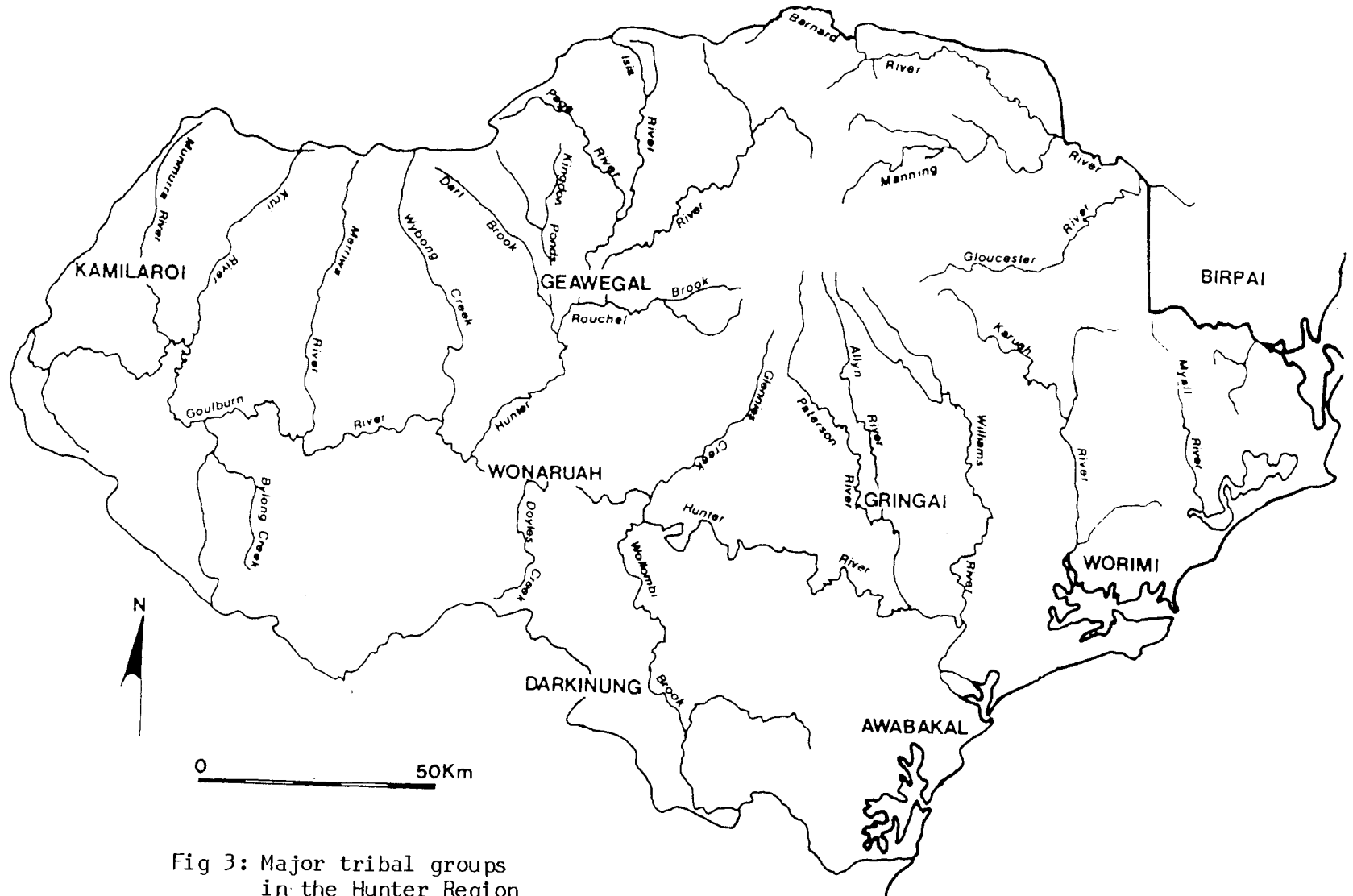


Fig 3: Major tribal groups  
in the Hunter Region



originated in a communication between the Mudgee natives and those of Hunter's River (Darling's Despatches All197 3/6/1826).

Miller (1985:34-36) argues that the Wonaruah uprising of 1826 was carefully planned and executed after advice had been sought from the Wiradjuri people of Mudgee. Their fierce hostility in the Bathurst area had resulted in the imposition of martial law. There is other evidence of communication between the Hunter Valley and Mudgee (Threlkeld 1892:10), and also of Hunter Aborigines visiting the Bathurst area and attending a corroboree which was held there in 1837 (Boswell 1890:4,8).

The Kamilaroi link between the Liverpool Plains and the Goulburn Valley is referred to by Breton (1833:95):

In speaking of the Liverpool Plains, the Aborigines call them Corborn Comleroy, Corborn implying great, as Gammon does small.

The Goulburn area was known as "Gammon Comleroy", and the area about Merriwa became known to the early settlers as "Gammon (or Gummun) Plains" (Fig 2).

There is also some evidence of traffic over the Liverpool Range above Murrurundi, Mitchell crossing in company with some Aborigines from Dart Brook, and being guided by one from the Liverpool Plains (1838:25-26). Earlier, in 1827, Allan Cunningham (in Marriott 1925:548) had noted the marks of iron hatchets in trees at Wallabadah, and assumed that they had been obtained from Aborigines of the Hunter River. Depredations by the bushranger "Clarke of the Kindur" (Boyce 1970:31), who lived with the Aborigines of the Liverpool Plains, as far down as Maitland, until his capture there in April 1831, indicated the facility with which the range could be crossed.

The Kamilaroi had links not only with Aborigines of the Hunter Valley, as Breton (1833:234) stated that the Aborigines of "Corborn Comleroy" had attended initiation ceremonies at Port Macquarie, and according to Howitt (1904:577) they intermarried with Aborigines of Port Macquarie and Port Stephens. Enright (1937:322-33) wrote that they also attended initiations at Port Stephens. It was his belief that the European arrival interrupted a process of Kamilaroi expansion.

I think ...we can safely conclude that the Kamilaroi sectional system was gradually extending.

The coastal areas of the Hunter Region were occupied by the Awabakal centred on Lake Macquarie and its mountainous hinterland; to their north were Gaddang speaking tribes, who included the Worimi centred on Port Stephens, possibly the Gringai of the Dungog area, and the Birpai, who were north of the Worimi. To the south of the Awabakal were the Kuringgai (or Guringgai), living both north and south of Broken Bay. Inland of the Kuringgai and bordering both the Awabagal and the Wonaruah were the Darkinung tribes, whose territory extended from the Hawkesbury River northwards towards the southern drainage of the Hunter River.

Recent linguistic studies indicate that the Awabakal may have had most in common with the Wonaruah (Gunson 1974:3) and possibly although not necessarily were a subgroup of the Wonaruah, the suffix "kal" (or "gal") perhaps indicating a kinship group rather than a full "tribe". They also associated frequently with the Worimi (Threlkeld in Gunson 1974:56, 191). Vinnicombe's research (1980:IV 1-2) indicated that there "was clearly a considerable amount of come and go" between the Awabakal and the Kuringgai to the south, although there was also considerable enmity and ritualised fighting between them.

The earliest suggestion of inter-tribal communication and exchange was Barrallier's (1802:82) comment upon finding hatchets of English manufacture in a canoe near Newcastle, in June 1801:

it is not improbable they obtain them in their incursions having communication with the natives of Hawkesbury passing the mountains near Mount York or with the natives of Broken Bay.

There is a tradition of a trade route from the Hawkesbury along the Boree Track which entered the Hunter Valley near Milbrodale (Moore 1981:423). Another route, by which Aborigines from as far north as Singleton travelled to visit Brisbane Waters for marine foods, visits which were probably returned, was along Wollombi Brook and the Macdonald River to Mangrove Mountain, (McCarthy 1939:407).

There are other indications of links between Aborigines of the coast and the interior. Barrallier met an elderly Aborigine on the lower Hunter in the winter of 1801 "of the class termed here, Bush Natives, who are considered as an inferior tribe by the inhabitants of the sea coast" (Grant 1803:157). The Awabakal (Threlkeld in Gunson 1984:61) made reed spears and exchanged them inland for possum skin rugs and fur cord. A similar exchange was sometimes effected in the Port Stephens area where Dawson (1830:135-36) referred to communication with Aborigines of "the upper districts of the Hunter's River or its branches", continuing

I understand from our natives, that exchanges of articles sometimes took place between the coast natives and those residing in the interior. Iron tomahawks, sea-shells, with which they scrape and sharpen their spears, and pieces of glass, which they use for that purpose whenever they can get them, were thus frequently exchanged for opossum skins, and sometimes for the belts of yarn ready manufactured, as well as a small opossum band of net-work, which they wear on their forehead when in full dress.

Thus at the time of European occupation the dominant influence throughout much of the Hunter Region appears to have been that of the Kamilaroi. Based on the Liverpool Plains, their social systems covered the Goulburn Valley and the Hunter Valley as far south as Wollombi Brook. They also had economic, social and religious links with coastal tribes at Port Macquarie, Port Stephens, the lower Hunter, Lake

Macquarie and at Brisbane Water. There is less evidence of contact between the Kamilaroi and the Darkinung. The Awabakal had contact with the Darkinung (Vinnicombe 1980:V 39), but possibly not so much as with their coastal neighbours the Worimi and the Kuringgai. Overall, however, according to Threlkeld (in Gunson 1974:42),

Communications between distant tribes, although, perhaps, hundreds of miles may intervene, are much more frequent than is commonly imagined by Europeans.

## Campsites

There is little evidence in the literature of where the Aborigines positioned their campsites. No such evidence has been found relating to the Upper Hunter and Goulburn Valleys, only Felton Mathew's observation as late as 1830 of Aborigines camped "in a romantic spot" on the bank of Wollombi Brook, near Broke.

Writing near the turn of the century, J.W.Fawcett said of the Wonaruah,

In choosing the site [for their camps], proximity to fresh water was one essential, some food supply a second, whilst a vantage ground in case of attack from an enemy was a third (1898:152).

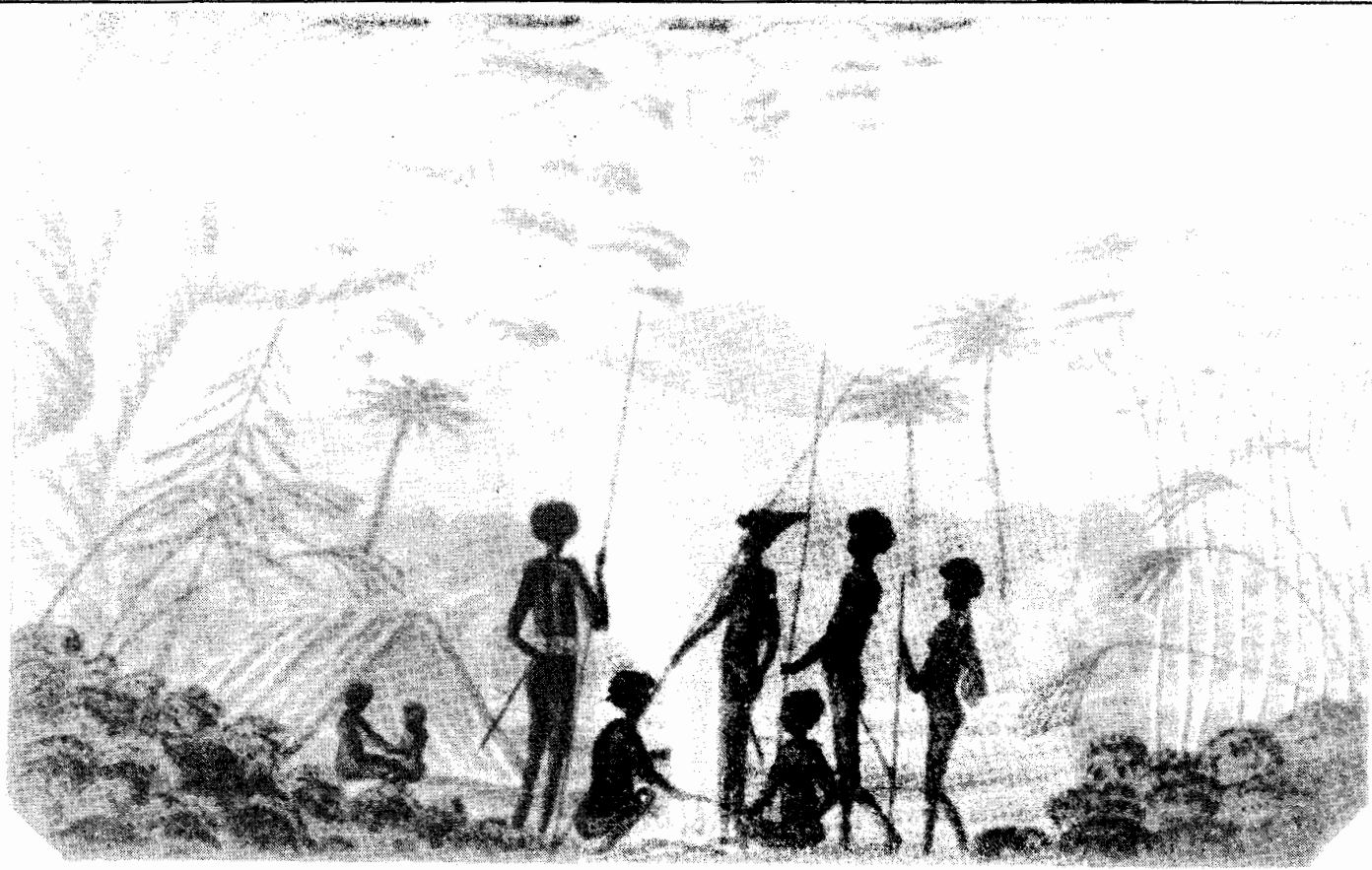
On the lower Hunter in 1801 "the fires of the natives and many individuals" were seen opposite Ash Island, and on the banks of a creek, also in the area of Ash Island, were seen part of a net, the remains of fires and also of a weir in the creek itself (Grant 1803:154-155). At its furthest point Ash Island is about 12.5 kilometres from the coast, the Hunter River being tidal far beyond.

T.R. Browne's illustration of an Aboriginal camp in the Newcastle area (Pl 4) dates to about 1813. Joseph Lycett's water colour painting of Aborigines resting by a campfire near the mouth of the Hunter River (Pl 5) is probably based on a sketch made in the early 1820s and subsequently adapted to suit English contemporary taste in landscape painting (Smith 1960:180). While lacking certain elements of realism, it does provide a rare pictorial impression of an Aboriginal camp on the Hunter and its relationship to the harbour's edge. Both of these illustrators indicate the presence of huts which none of those present in the area during 1801 recorded, although they were there during the winter.

Robert Dawson during his exploration of the Australian Agricultural Company's holding in the Port Stephens area came across a number of Aboriginal campsites. In the Karuah River valley, he wrote,

At the foot of one of these hills, and at the margin of the brook, we met with a native encampment, consisting of eight or ten "gunyers" (1830:171).

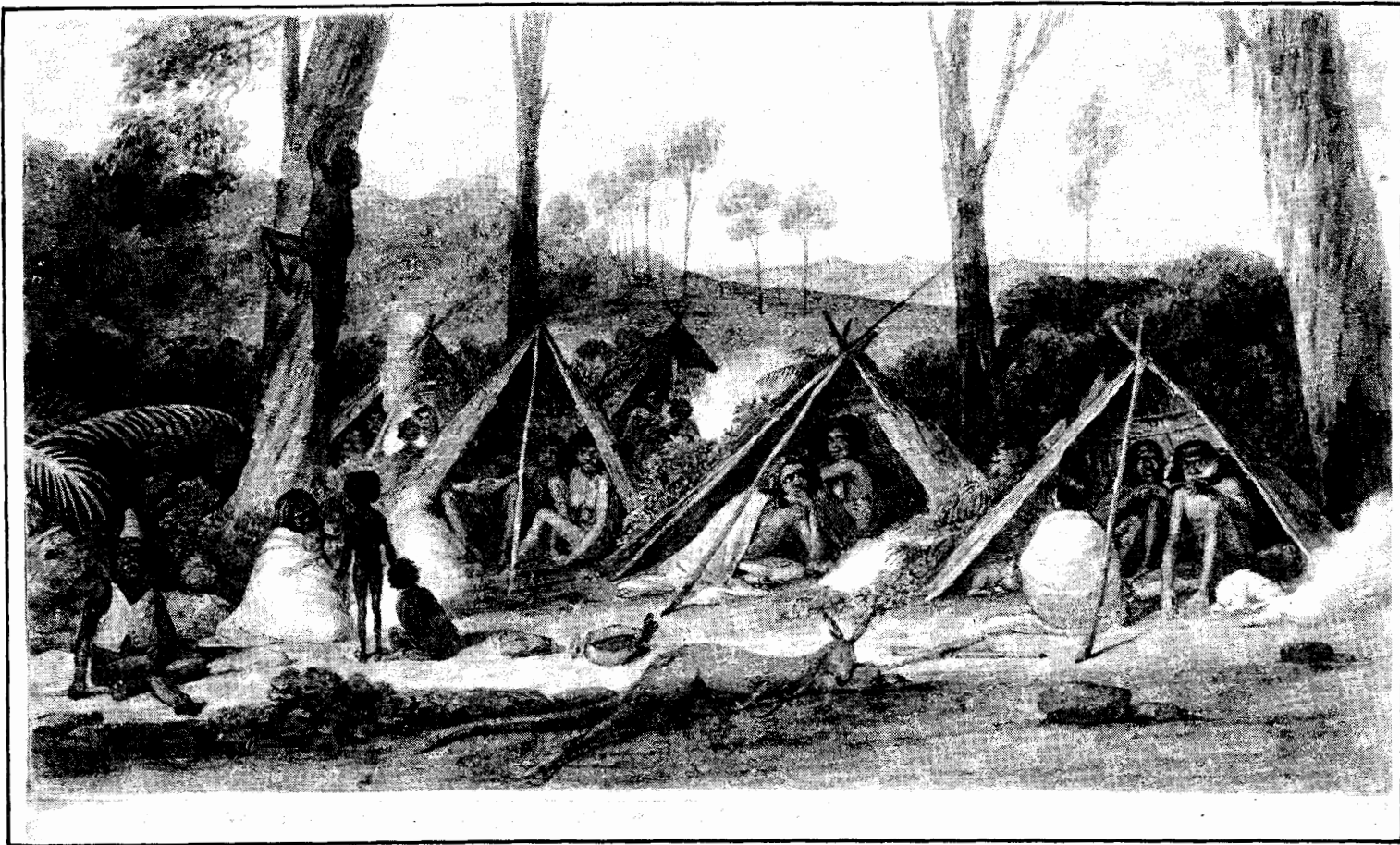
A little further on,



## NEWCASTLE



Pl 5: Joseph Lycett, Aborigines resting by a campfire near the mouth of the Hunter River.  
Australian National Library.



Pl 6: Augustus Earle, 'A Native Camp of Australian Savages near Port Stevens New South Wales'.  
Rex Nan Kivell Collection, Australian National Library.

We...ascended a small rise, on top of which we found an encampment...the gunyers were exactly the same...(1830:182).

Towards the end of this journey, at The Broadwater, he came across

A fire and a row of gunyers...on the border of an extensive lake which connected with the river Myall...a fleet of small bark canoes...was lying moored to some mangrove trees at the back of the encampment (1830:245).

Each hut had a fire in front (Caswell 1841, Dawson 1830:171). Ebsworth (1826-58) wrote of the appearance of the Aboriginal camp at Port Stephens at night -

you are encompassed by twenty or thirty fires, each of which is attended by four or more Natives, according to the number of the family.

The camp at Port Stephens was obviously a large one. Augustus Earle visited Port Stephens in 1826 and recorded his impression of a camp there (Pl 6). Dawson (1830:327) wrote

Each tribe is divided into independent families which acknowledge no chief, and which inhabit in common a district within certain limits, generally not exceeding above ten or twenty miles on any side. The numbers of each tribe vary very much, being greater on the coast, where they sometimes amount to two or three hundred, and I have known them in other quarters not to exceed one hundred.

Just before he crossed from the watershed of the MacDonald River to that of the Hunter in November 1819, John Howe (in Campbell 1928:236) reached a camp of Aborigines, "many of whom had never seen a white man, and more had never seen a horse". This group numbered about sixty.

In the Hunter Valley itself there is little evidence, except on Dart Brook on the night of October 10, 1824, where after having been visited by about 15 Aborigines, Henry Dangar watched the "Native fires 8 or 10 in number at  $\frac{1}{2}$  mile dist." However it is not clear whether the Aborigines he saw lit that number of fires, or whether the rest of their group was with them. In the latter case their numbers would have been similar to those in the camps found by Dawson on the Karuah River.

## Numbers

There is no evidence of the total number of Aborigines who populated the valley of the Hunter and its tributaries before Europeans arrived there, or indeed before any effects from the European arrival at Port Jackson may have been felt in the area. The official report to Britain declared that half the Aborigines between the Hawkesbury and Botany Bay died from smallpox during April and May, 1789, and concluded that the disease must have spread to a great distance (Butlin 1983:20). It is Butlin's

contention that after this the Aboriginal population was greatly reduced and the fabric of their society altered in such a way that no Europeans actually saw the fully traditional Aboriginal life. Sightings of Aborigines in the Hunter and Goulburn valleys are listed in Table B.

The observations made by the party investigating the lower Hunter in 1801 indicate that many Aborigines were present in the area, they themselves and evidence of their presence often being seen. On the basis of the many canoes he saw, Barrallier (1802:81) assumed there were "great numbers" of Aborigines in the area.

But above Maitland the recorded meetings with Aborigines are confined to five John Howe (in Campbell 1928:240) saw near Jerrys Plains in 1819, 15 who visited Dangar's camp on Dart Brook in 1824, and 150 who were later reported to have attacked his party just beyond the Liverpool Range (**The Australian** 3/12/1824). Allan Cunningham was in the Upper Hunter and Goulburn valleys in 1823 and 1825, and only on the latter occasion did he remark on seeing evidence of the Aborigines, not actually seeing any individuals. Felton Mathew saw a group of 60 camped on Wollombi Brook, but that was in 1830, long after the area had been settled by whites. Later still, in December 1831, Sir Thomas Mitchell met what was probably a small group, from Puen Buen on Dart Brook, while on the upper Page River.

However there were more Aborigines in the upper valley than this evidence suggests. A settler at Patrick's Plains in 1824 counted 300 able bodied men in the neighbourhood (Wood 1972:16). The official report of an attack on Merton, near the junction of the Hunter and Goulburn Rivers, in April 1826, indicated that over 200 Aborigines were believed to have participated (Darling HRA 1/12:574). Reporting on this and other cases of violence over the preceding ten months, two magistrates, Robert Scott of Glendon and Alexander McLeod of Luskintyre, wrote on June 3, 1826,

The disturbances are confined to the Upper Districts of Hunter's River, principally occupied by three Tribes, whose numbers we should suppose to exceed Five hundred (Darling's Despatches 1826 A1197).

The Aborigines were present in sufficient numbers for "soldiers of the Mounted Police" to be deployed at several upper Hunter stations (Wood 1972:130), and **The Australian** reported on August 26 that most of the settlers went about armed.

Some of the earliest official population figures come from the register of Aborigines taken at various stations during the annual distribution of blankets. These were not a totally reliable indication of the numbers of Aborigines, as some would not turn up, while others, it was thought, turned up at more than one station and so were counted twice. Returns from a number of distribution stations between 1833 and 1844 are listed in Table C.

There is a similar lack of evidence relating to the lower Hunter. Threlkeld set out to establish his mission station on Lake Macquarie in May 1825 in the expectation that about three hundred Aborigines would



assemble there. In fact "we had one tribe about us consisting of about 50 persons" (Gunson 1974:45,60). Gunson remarks that the figure of 300 was obviously meant to include all the neighbouring tribes in the Hunter district, not simply that which was localised at the Lake, the authorities being unaware of the Aborigines' relationship to their land and being deceived by the large numbers assembling at intertribal gatherings.

In 1826 Ebsworth (1826:57) estimated that the "tribe of natives belonging to Port Stephens amount to nearly two hundred men, women and children". In the same year at the Myall lakes Dawson (1830-309) saw not less than a hundred...strangers from the upper districts of the Myall [River]", amongst whom were women and children.

In his annual report of 1837 Threlkeld (in Gunson 1974:135) wrote

The various tribes at Port Stevens and its vicinities the returns of which contain about 500 Blacks; Hunter's River and its dependencies having about 300, and other contiguous tribes, consisting of about 200 more.

The large figure for the Hunter presumably included the Wonaruah and others located in the valley.

Howitt (1904:85) provides an estimate of those Aborigines whose territory

extended up the valley of the Williams and its tributaries to their sources, and southwards for about eight miles below Dungog...In 1840 the blacks in this tract of country numbered about 250 all told.

The return of Aborigines at Dungog in 1838 was 152 according to Threlkeld's figures (Table C:CSIL Special Bundles 4/1133.3).

In December 1831, while at Segenhoe in the upper Hunter, Mitchell expressed the view that "the natives have almost all disappeared from the valley of the Hunter" (1838:20), though some who lingered "near their ancient haunts" were occasionally to be met on the larger stations. Threlkeld's figures and those of the blanket returns, in the light of Mitchell's remark, suggest that fewer Aborigines remained in the upper Hunter than was the case nearer the coast. Members of the American expedition, while north of Maitland in December 1839, reported that there were "no wild tribes in this vicinity" and that the Aborigines were being "rapidly exterminated" by the whites (Wilkes in Gunson 1974:158). Many of those who remained had in fact been "hewers of wood and drawers of water" for some years (Backhouse 1843:389).

While Wilkes suggested that the principal cause of the decline in the Aboriginal population was deliberate strategy employed by the whites who were "not over-scrupulous as to the means", starvation and disease also took a significant toll. Earlier, in February 1830, the surveyor Felton Mathew had visited the first camp of Aborigines he had seen, on the bank of Wollombi Brook not far from Broke. There were about 60 men, women and children, and Felton remarked

many of them are highly loathsome from dirt and starvation and I have observed several who appeared to have defective eyes.

Butlin contends that the role of European diseases, particularly small pox and venereal disease, had a critical effect on the Aboriginal population. With regard to the former he cites (1983:24) pock marking observed on the lower Hunter in 1810. No other evidence has been found of the disease occurring in the region until, only days after leaving Segenhoe in December 1831, Mitchell came across Aborigines from Puen Buen who were extremely ill. Having just crossed the Liverpool Range above the Page River, at the first watercourse he came to were members of this tribe from Dartbrook, others of whom had accompanied him thus far,

apparently to join some of their tribe who lay extremely ill at this place, being affected with a virulent kind of small-pox. We found the helpless creatures stretched on their backs beside the water, under the shade of the wattle or mimosa trees, to avoid the intense heat of the sun (1828:36).

This was obviously an instance of the second small-pox epidemic, which flourished amongst the Aborigines in the period 1829-31. James Backhouse (1843:402), at Wallarobba, just south of Dungog, in July 1836, wrote that the Aborigines

have been reduced, in this neighbourhood, by various causes, among which has been the Small Pox, from about 200 to 60.

Prior to this Dawson (1830:323) had commented that amongst the Aborigines of the Port Stephens area "neither small-pox, measles, nor hooping cough are known". The disorders which chiefly affected them, especially the old people, were "catarrhs and the consequences which frequently follow the neglect of them - such as inflammation of the pleura and lungs, and bilious colics, which frequently carry them off".

Certainly the Aboriginal population of the Hunter Valley was declining in a very noticeable way. Members of the American expedition referred to "the blacks...rapidly dying off". They came across several Aborigines who were pointed out as

the remnant of the tribes which about forty years ago wandered in freedom over the plains of the Hunter and around the borders of Lake Macquarie.

They cited Threlkeld's reference to a tribe which occasionally visited Lake Macquarie and consisted at the time of his arrival of sixty, being reduced by December 1839, after a lapse of fifteen years, to twenty, only five of whom were females (Wilkes II 1845:245-6).

Threlkeld was concerned at the increasing imbalance of the declining Aboriginal population: the decreasing numbers of women, and in particular children, which the returns listed in Table C indicate to be

widespread. Venereal diseases, notably gonorrhoea and syphilis, reduced the women's fertility and ability to produce live children (Butlin 1983:40).

Backhouse and Walker (in Gunson 1974:124) were informed by Threlkeld's assistant, McGill (also known as Biraban), that the Aborigines on the lower Hunter were afflicted with venereal disease, although he thought his people had it before they became acquainted with the whites -

and this view is somewhat supported by the fact, according to the same informant, of their having a native remedy, which they apply externally, in a hot and fluid state; it consists of the red-gum that exudes from the Blood-tree, a species of Eucalyptus that abounds in the forests we passed through today.

The effect of such diseases was apparent. Emily Caswell wrote from Raymond Terrace in October 1841:

As the White People increase so the blacks seem to decrease when we first came all round the Beech [sic] we saw nothing but their camps and canoes but now there are not more than a dozen left of our tribe.

William Cleveland was in the Millers Forest area, opposite Raymond Terrace, in June 1840. He wrote in his journal,

I was struck with the circumstance of there being so few children of the Aborigines; among 20 or 30 on Millers Forest I only saw one child and that was half cast and I am told the greater number of the children are of that description.

Miller (1985:63) suggests that the Aborigines of the Hunter Valley, in particular the Wonaruah, were probably the first to allow the children of mixed parentage (ie white father and Aboriginal mother) to live, and that this decision was a critical factor in the survival of Aboriginal groups throughout much of Australia.

\* \* \* \* \*

The ethnographic literature leaves largely unanswered questions about the location of Aboriginal camping sites within the Hunter Valley. It does refer to more spectacular sites such as ceremonial grounds and carved trees (see Chapter 6), but these represent only a small proportion of the sites occurring in the Hunter Valley. Over half the sites which do occur are open campsites, but on these the literature throws no light.

The literature does indicate that in the Hunter Valley as elsewhere Aboriginal numbers were quickly and greatly reduced by European derived diseases. The dearth of recorded sightings, particularly in the upper

Hunter and Goulburn River valleys, does leave open the possibility suggested by Butlin (1983) that after the smallpox epidemic in 1789 at Port Jackson, which quickly spread to other areas, the Aboriginal population was in fact so reduced and the fabric of the society altered in such a way that no Europeans actually saw the fully traditional Aboriginal life.

The tribal systems in the Hunter region have not been easy to elucidate since tribal organisation was devastated before any attempt was made to record it. Nevertheless it is apparent that the major inland tribal group was the Kamilaroi on the Goulburn; the Wonaruah and the Geawegal and probably the Gringai in the central and upper Hunter were part of the "Kamilaroi nation", whose component tribes are reported to have covered an area extending several hundred kilometres to the northwest across the Liverpool Plains. On the coast were the Worimi north of the Hunter River and the Awabakal centred on Lake Macquarie. There was apparently considerable contact between all of these groups and others to the north and south; contact took place along the coast and between coast and inland. Kamilaroi social links extended right to the coast, and there is an indication that their sectional system was in the process of permeating further into the valley when interrupted by the European arrival.

Late in the 19th century the Hunter Valley Aboriginal population contracted to the Singleton area, with people of Wonaruah-Geawegal-Gringai descent numbering less than 80 (Miller 1985:66). Now there are Aborigines living in most towns although only some are of local descent, and the tribal names live on in the Local Aboriginal Land Councils, for example the Wonaruah at Muswellbrook and the Awabakal at Newcastle.

TABLE B : OBSERVATIONS OF ABORIGINES

Location	Comment	Observation	Reference
Newcastle	In my excursions in this charming spot the Natives were seen, and in great numbers, judging by the different kinous [sic] I saw, for they never allow us to approach them	June 1801	Barrallier 1802:81
Newcastle	We...were surprised at seeing a young native who was looking for the roots of Fern.	June 1801	Barrallier 1802:83
Newcastle	a Creek... On its banks we found part of a net... We likewise found marks of fires having been lighted there; and in the stream the remains of a weir.	June 1801	Grant 1803:154
Newcastle	The fires of the natives and many individuals of them were to be seen on the side of the harbour opposite to Ash Island.	June 1801	Grant 1803:155
Newcastle Ash Island	I saw some natives at a distance, but could not get near them.	19 June 1801	Paterson 1801-2:175
Newcastle	met with a native... an elderly man, of the class termed here, Bush Natives, who are considered as an inferior tribe by the inhabitants of the sea coast.	23 June 1801	Grant 1803:156-157

TABLE B : OBSERVATIONS OF ABORIGINES

Location	Comment	Observation	Reference
Lower Hunter River	We... descried some of them at a distance, who fled on our approach. We came to a spot which they had just quitted, and observed the marks of children's feet. The ground was covered with the shells of fresh water fish, of the sort found in the rivers of England and Scotland, and called the horse muscle, having sometimes small pearls in them.	July 1801	Grant 1803:161-162
Lower Hunter River	We saw several traces of the natives, both young and old, and passed some canoes, which are small and rudely put together.	8 July 1801	Grant 1801:173
Below Maitland	On our passage [down the river], we saw several natives with their canoes. In many of them we saw fires, and in some of them observed that kind of eatable to which they give the name of cabra: it appears to be abominably filthy, however when dressed it is not disagreeable to taste.	July 1801	Grant 1803:162-163
Below Maitland	We saw several of the natives at a small distance.	July 1801	Grant 1803:163
Jerrys Plains	Stop for the night and before we could unload the horses we are surprised by a strange native... About half an hour afterwards we saw five cross the river about half a mile below and come nearly opposite to us to watch us, and left about night-fall.	5 November 1819	Howe in Campbell 1928:240

TABLE B : OBSERVATIONS OF ABORIGINES

Location	Comment	Observation	Reference
Maitland	Here I found Bungaree, chief of the Boan Native Tribe, with all his own family, and 30 more of his tribe, waiting my arrival, having come on purpose to meet me... Bungaree and his tribe entertained us with a Karaburie after dinner.	15 November 1821	Macquarie 1956:219
Dart Brook	Have been visited by a tribe of Natives Abt 15 in number in the evening they appear'd to have great confidence in us by not evincing any fear as the [sic] approach'd us. Should conceive they have had no communication with White People - as everything shewn them causes them to make gestures and evince much surprise... kept watch all the night. Saw the native fires 8 or 10 in number at 1/2 Mile dist.	10 October 1824	Dangar, Field Book No. 221
Four miles north of Liverpool Range above Dart Brook	They met with a large body of natives, in number, as they suppose, about one hundred and fifty, by whom they were attacked unawares:- one of their party (which only consisted of four) having been struck by a spear in the head, before they knew the natives were near them.	October 1824	<b>The Australian</b> 3 December 1824 re Henry Dangar's party.
Lower Goulburn River	We have met with no natives, altho' their recent marks on the Trees, and fired country, show they have traversed the forest a few days past.	16 April 1825	A. Cunningham Journal 1825

TABLE B : OBSERVATIONS OF ABORIGINES

Location	Comment	Observation	Reference
Upper Goulburn River	In all our journey we have seen no natives, their late marks on the trees are proof of their existence in and having passed thro the forests of the neighbourhood, and it is more than probable they have seen us and have studiously avoided us.	23 April 1825	A. Cunningham Journal 1825
Maitland	It rained so heavily that night that in the morning, the whole plain was flooded, and, in a lagoon where the plain had been, we saw blacks paddling in canoes made of bark, the ends tied with curridgeon bark, and sealed with grass-tree gum.	January 1826	Mrs Ellen Bundock's Memoirs ML MS 1120
Merton, near the junction of the Hunter and Goulburn Rivers	We suddenly saw the whole hillside covered with blacks all armed, except the chief, Jerry, who was most amiable to us, a fine dignified type of man. He was clothed in a possum skin rug, and strips of fur round his loins.	August 1826	Mrs Ellen Bundock's Memoirs ML MS 1120
Lochinvar	I saw... something of the habits of the wild natives, several of whom we saw perfectly naked, on one of their hunting expeditions, crossing our track, and in the act of forming themselves in a circle round their kangaroo game. They were acquainted with Mr. Dangar...	c 1826	Dawson 1830:8



TABLE B : OBSERVATIONS OF ABORIGINES

Location	Comment	Observation	Reference
Broke	<p>Visited the first camp of natives I have seen. there were about 60 men, women and children. I remained with them about an hour, and saw them retire for the night, each party or family kindling its own separate fire apart from the others. The place they were encamped in was a romantic spot on the bank of the Wollombi... They were very curious in observing every article of my dress and everything about me, and were particularly amused with my watch and a pocket compass, especially the latter, the use of which they appeared in some measure to comprehend.. one of them named "Wednesday" was really a very fine man - but many of them are highly loathsome from dirt and starvation and I have observed several who appeared to have defective eyes.</p>	<p>11 February 1830</p>	<p>Mathew, Journal 1830-32</p>
Murrurundi	<p>I rode a little beyond our encampment, and chanced to fall in with a tribe from Pewen Bewen on Dart Brook, one of whom afterwards visited our camp, but he could tell us little about the interior country... In the evening a native of Liverpool plains came to our tents.</p>	<p>4 December 1831</p>	<p>Mitchell 1838:25</p>

TABLE B : OBSERVATIONS OF ABORIGINES

Location	Comment	Observation	Reference
Just north of Liverpool Range above Murrurrundi	We reached at length, a water-course called by the natives "Curringai", and encamped upon its bank, beside the tribe from Dart Brook, which had crossed the range before us, apparently to join some of their tribe who lay extremely ill at this place, being affected with a virulent kind of small-pox. We found the helpless creatures stretched on their backs beside the water, under the shade of the wattle or mimosa trees, to avoid the intense heat of the sun.	5 December 1831	Mitchell 1838:26
Wollombi	Some miles from the inn we fell in with several of the aborigines, and the farther we rode the more we saw, until at length there were not less than sixty with us... These people consisted of the two tribes, one from Illarong, the other belonging to the Wallombi [sic] and were on their way to wage war with another tribe. Some of them were diligently employed in painting their sable bodies in a most fantastic manner, with a substance that resembled pipeclay.	1832	Breton 1833:90-92

TABLE C: RETURNS OF ABORIGINES FROM SELECTED BLANKET DISTRIBUTIONS

YEAR	DISTRIBUTION STATION	USUAL PLACE OF RESIDENCE	ADULTS		CHILDREN	
			MALE	FEMALE	MALE	FEMALE
1833	Williams River		16	10	6	
	Lake Macquarie		62	38	6	
	Cassilis		50	30	22	
1834	Williams River	Williams River, Port Stephens	20	8	1	
		Patersons River				
	Patricks Plains	Patricks Plains, Fal Brook	34	24	12	
	Paterson	Patersons Plains	18	10	2	
	Port Stephens	Gloucester, Stroud, Barrington River, Tahlee, Carrabean, Tellegara, Boorall, Port Stephens, Myall Creek	208	177	94	
1838	Paterson		29	20	6	
	Lake Macquarie		15	8	2	
	Raymond Terrace		24	13	2	
	Dungog		76	46	15	
	Stroud-Port Stephens		102	76	16	
	Gloucester		26	22	16	
	Patricks Plains		51	13	-	
1839	Paterson		27	11	3	
	Raymond Terrace		24	12	-	
	Merton		40	14	1	
	Dungog		43	25	7	
	Stroud, Port Stephens, Gloucester		171	95	42	
1840	Paterson		39	4	6	
	Lake Macquarie		15	7	3	
	Williams River		22	6	6	
1841	Scone	Scone, Murrurrundi	47	20	17	
1843	Scone	Segenhoe, Murrurrundi, Aberdeen				Total 85
	Cassilis		72	Adults	12	
	Patricks Plains	Patricks Plains, Glendon, Wollombi, Falbrook	43	7	6	
1844	Merton	+ an additional 20 persons	18	7	7	
C.S.I.L. Special Bundles -		4/6666 B.3: 1833, 1834				
		4/1133.3 : Remainder (1838-1840 L.E. Threlkeld)				

## Evidence from the Literature

The ethnographic literature indicates some of the elements of the environment which the Aborigines put to use in the manufacture of their huts, canoes, weapons and other equipment. Variations in resources between inland and coastal areas is reflected in the goods manufactured in these areas, and to a degree nullified by exchange in these goods.

Of the raw materials available bark appears to have been one of the most widely used, and one of the most adaptable.

**Huts**, or "gunyers" as they are frequently called in the literature, usually involved the use of bark. Threlkeld (in Gunson 1974:45) described the sleeping places of the Aborigines near his mission station as "mere erections of boughs of trees, or sheets of bark placed upright supported by stakes". At Raymond Terrace they were "made by sticking three sticks...in the ground and covering them with bark (Caswell 1841), while at Port Stephens their construction was

supported by three forked sticks (about three feet long) brought together at the top in a triangular form: the two sides towards the wind are covered by long sheets of bark, the third is left open...When the wind shifts the gunyer is shifted also. (Dawson 1830:171).

Illustrations of huts at Newcastle by Browne (Pl 4) and Lycett (Pl 5) indicate how the bark is folded, but neither shows the supporting sticks, although these are evident in the huts at Port Stephens drawn by Earle (Pl 6).

Peter Cunningham (II 1827:17) suggested that from Port Stephens northerly began "a better order of things", amongst which he implied construction of superior huts. According to Dawson (1830:172) this did not mean greater sedentism -

they seldom, however, stay more than a few days at these places, frequently not more than one night.

Cunningham stated that tea tree bark (**Melaleuca quinquenervia**) was used in the construction of the huts. Eyre, who spent part of 1833-34 in the "Comleroi" district, above the junction of Wollombi Brook with the Hunter River, wrote

The bark was cut from Box or stringy bark trees by the Blacks who are very skilful and expeditious in doing it...[it was] stripped off in one unbroken piece forming when stretched out flat a sheet from six to twelve feet square according to the size of the tree. To prevent the bark from cracking when being thus stretched out it is heated inside with fire just as a cooper heats a cask to make the staves bend as he wishes..When dry these sheets of bark retain their flat

shape - are from an inch to an inch and a half thick - quite impervious to rain and of course most useful in the construction of temporary dwellings. (Eyre 1859: 50-51).

Dawson (1830:19) described a similar procedure in the Port Stephens area, the tree being ascended by means of a forked pole laid against the trunk, and the end of a spearthrower being used to prise off the bark.

The same methods were used to obtain and treat bark for **canoes** at Lake Macquarie (Threlkeld in Gunson 1974:54), and on the middle Hunter, Eyre continued,

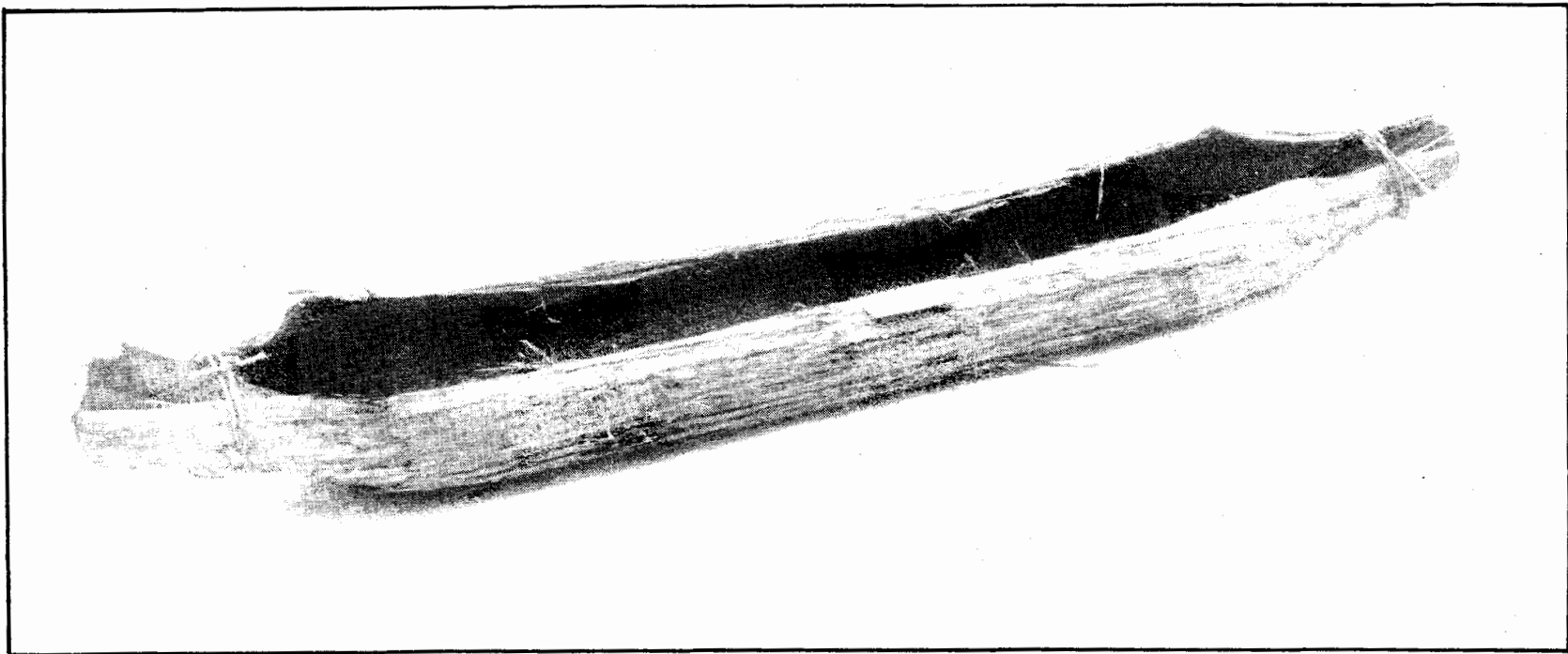
The same means are used to bend the bark into shape when required for a canoe, though for this purpose the bark is cut somewhat differently in the first instance - I have often seen canoes made of a single piece of bark capable of holding from six to eight people. Generally these were cut from large river gum trees (eucalyptus).

Canoes (Pl 7) at Port Stephens were "nothing but a sheet of Bark pressed and tied together at either end" (Ebsworth 1826:82), and at Maitland they were "made of bark, the ends tied with curridgeon [sic] bark, and sealed with grass-tree gum" (Mrs Ellen Bundock ML MS 1120). Those seen on the lower Hunter by Barrallier (1802:81) were propelled along the river by a long pole, and went well against the current. In deeper water "short battledor like paddles" were used, one in each hand (Threlkeld in Gunson 1974:54; Dawson 1830:79).

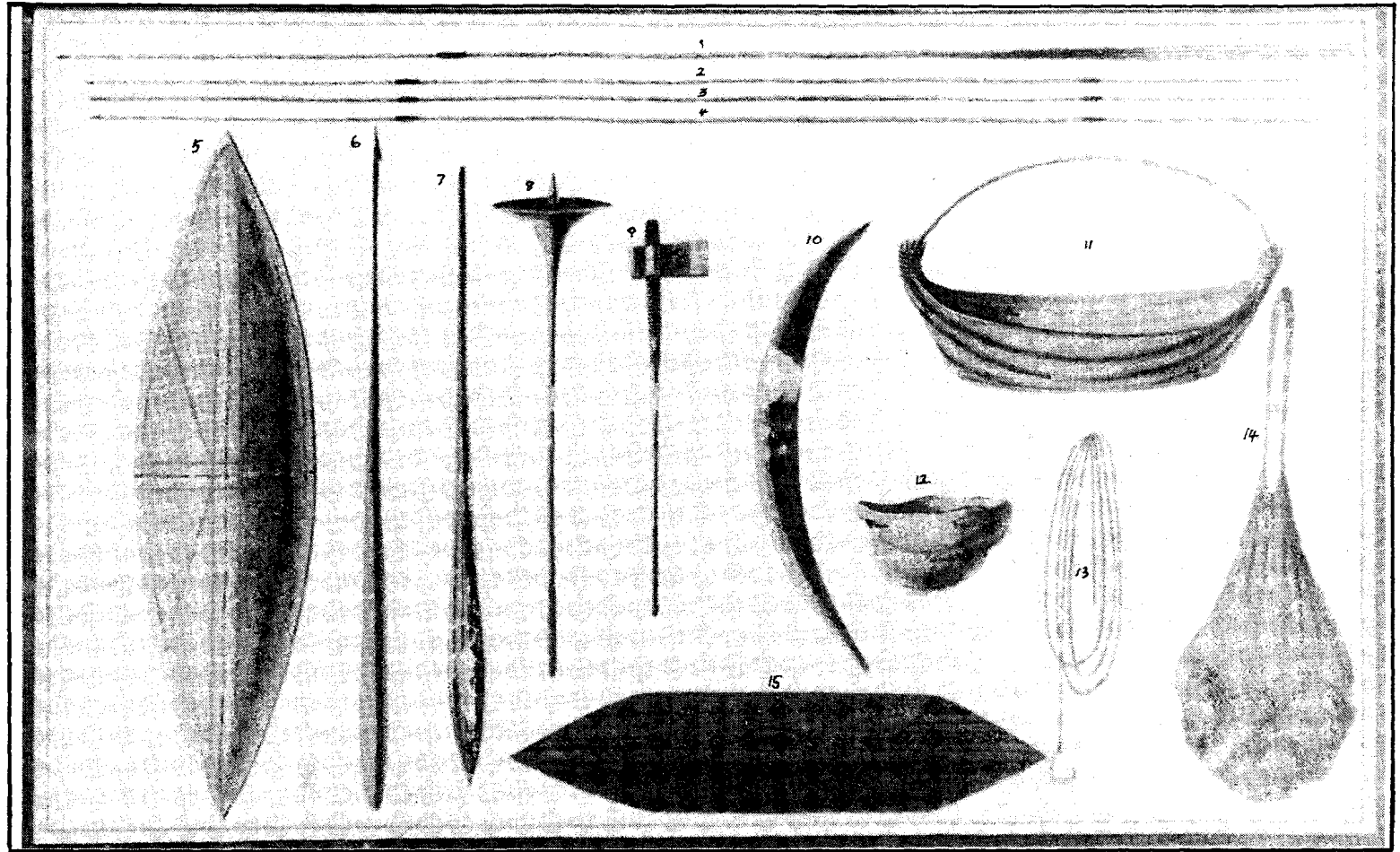
Threlkeld wrote of the manufacture of the canoes, how the bark was softened and shaped by the use of fire and tied at the ends with vines. Stays were placed across at either end and a vine cord tied across the centre to maintain the shape. A hearth of clay was made in the centre for cooking freshly caught fish and a source of warmth and light at night, and "The wild vines of the bush formed their cables and a heavy stone was the substitute for an anchor". He described how a leaking canoe was repaired with patches of tea tree bark, which were

sewed...to the canoe, through and through, applying the end of the thread to a stick of fire, burning the end to charcoal in order to harden it and thus form a substitute for a needle. The shank bone of a Kangaroo, ground to a point, pierced the bark, and was used in the stead of an awl. The grass tree gum was melted by the application of the fire-stick, and smeared over the holes and stitches.

**Cord** used for purposes such as sewing up a canoe, **fishing lines** and **nets** (Pl 8:13,14) was usually made from the bark of various trees. The bark of the cabbage-tree (**Livistona australis**) formed the thread used to repair the canoe (Threlkeld in Gunson 1974:191). The bark of the kurrajong (**Brachychiton populneus**) was used to tie the ends of the canoes seen at Maitland, and it was also used for fishing lines, nets,



Pl 7: E.78217 Bark Canoe. Australian Museum.



Pl 8: R. Browne, Native arms of the Newcastle district 1813. Skottowe Manuscript, Mitchell Library.

- |      |                         |       |                                       |       |  |
|------|-------------------------|-------|---------------------------------------|-------|--|
| No 1 | Mooting or Fish Gig     | No 8  | Cadgawang or ditto                    | No 12 | Cooroonang - or Calabash in which they carry water |
| No 2 |                         | No 9  | Hyba or Hatchet                       | No 13 | Heringung or Fishing Line                          |
| No 3 | Camoy or Spears         | No 10 | Wamering - thrown to disperse a crowd | No 14 | Genyang - a Net                                    |
| No 4 |                         | No 11 | Tundi or Basket                       | No 15 | Murribe - for warding off blows of the Battle Club |
| No 5 | Hylliman or Shield      |       |                                       |       |  |
| No 6 | Womra or Throwing Stick |       |                                       |       |  |
| No 7 | Waddy or Battle Club    |       |                                       |       |  |

and binding for spear shafts (Scott 1929:40,43). Barrallier (1802:82) noted on the lower Hunter,

The natives are not more advanced in art than those of Sydney, unless it is in making lines to fish, and sacks three feet circumference and one deep netted, of a new species of Coregeau which they prepare by soaking the bark and afterwards beating it with a wooden mallet.

Also on the lower Hunter, Paterson (14/7/1801) observed "a new hibiscus, which the natives use as flax for making their nets and for other purposes".

Barrallier, Ebsworth (1826:79) and Dawson (1830:67) described how the women made string from bark. In Ebsworth's words,

they twist and roll the bark in a curious manner with the palm of the hand upon the leg; with this string they form nets of curious workmanship. In some the meshes are very small and neat, and the whole knit without a knot, excepting at its completion.

The nets described by Ebsworth and Dawson at Port Stephens and illustrated by Browne at Newcastle (Pl 8:14) were worn by the women around their foreheads and hanging down their backs. They were used like work bags or reticules to carry fish hooks, prepared bark for string, gum for gluing spears, and items of food.

In addition to nets, Dawson (1830:250) indicated that tea tree bark was sometimes used to make small **baskets** (Pl 8:11), but

they use it by folding and tying it in a peculiar manner for drinking vessels more frequently than for anything else.

Threlkeld (in Gunson 1974:67) described similar **drinking vessels** used at Lake Macquarie - "sheets of bark which are tied up at each end, and a bent twig forms the handle". He noted, however, that when honey was mixed with the water a wooden bowl (Pl 8:12) was used. This bowl was

formed from some large protuberance of a growing tree, which they chop round, formerly with stone, but now with iron hatchets, and disengage it from the trunk on which it grew. These wooden bowls they carry about with much care...

Dawson (1830:183) found several such wooden vessels amongst other items at a temporarily deserted camp on the Karuah River.

**Shields** used in the Hunter region appear also to have been made of both wood and bark. Threlkeld (in Gunson 1974:68) described a shield used at Lake Macquarie as being made from a buttress of the nettle tree (**Urticaceae**) or the giant fig tree (**Ficus** sp), and



usually about three feet long by eighteen inches, or so at most; lozenge-shaped, pointed at top and bottom, and pigeon-breasted rather than flat. The thickness in the centre may be an inch, not more, and thins off to about a quarter of an inch to the edge. On the inside of the shield, in the centre, a piece of tough wood is bent and inserted like the handle of a basket, just sufficiently large to hold by, and a soft piece of tea-tree-bark is fixed on which to rest the knuckles and preserve them from abrasion.

These shields were painted white with pipeclay on which were red lines, often in the form of a cross. Ebsworth (1826:75) described a shield of this type in use at Port Stephens, as did Dawson (1830:64,280), the latter even to its decoration and suggesting that it was made of thick bark hardened by fire.

Of the later writers Enright (1923:4) referred to a broad shield of this nature made of wood (mangrove wood, *Avicennia officinalis*, being favoured on the coast) or bark, and a narrow one of hard wood, only about 3 inches in breadth. One of the latter kind of shield, along with several other weapons, was recovered from a swamp about five miles from Raymond Terrace (McKiernan 1911:890). It had an irregular pattern of serpentine design incised on both sides.

The existence of two types of shields was widespread on the coast (Curr I 1886:146). The wider shield appears to have been used against spears (Dawson 1830:64), and the narrow hard wood one against clubs. Browne illustrated both types of shield at Newcastle (Pl 8:5,15). The only reference to shields away from the coast is that by Breton (1833:212) to a shield made of wood used by Aborigines of Gammon Plains in the Merriwa district.

Several types of **clubs** have also been described in the Hunter coastal region, all of hard wood. One, usually called a "waddy" (Pl 8:7), was "like a large kitchen poker, and nearly as heavy, only much shorter in the handle" (Dawson 1830:66), or "a short stick like a constable's staff only tapering from the middle to the end" (Threlkeld in Gunson 1974:54). It was generally made of iron bark wood (probably *Eucalyptus crebra* or *E. paniculata*) (Ebsworth 1826:77).

Threlkeld witnessed waddies being thrown at bandicoots at short range. The waddy was apparently also used in battle or in single combat when the offence was slight and it was not wished that any of the parties should be killed (Lang Papers 1815-29:61). The same source indicated that a heavier club, sometimes referred to as a "nullanulla", was employed when the offence had been greater, death sometimes but not often ensuing from its use. The nullanulla appears to have been a mushroom-like club with a flattish circular head (Pl 8:9; also Enright 1900:117, Pl 4, fig 9).

Threlkeld (in Gunson 1974:68) described an instrument of warfare which he termed a "wooden sword", not unlike a boomerang but with "a handle at one end with a bend contrary to the blade". He thought the difference of shape between the sword and the boomerang was "only an accidental

circumstance arising from the natural growth of the tree whence the wooden sword was taken".

Of hard wood also were the women's **yamsticks** which they used in their daily forage for food and which were status symbols sometimes also used during altercations. Up to 2 metres long and about 4cm in diameter, yamsticks were fire-hardened, but usually not decorated. Enright (1900:117, Pl 3, fig 7) collected one in the Port Stephens area, but none of the early observers described them in any detail, being more interested in weapons than mundane domestic artefacts, especially those used by women who tended to stay in the background in contact situations.

**Boomerangs** were of hard wood (Breton 1833:237), one recovered from the Raymond Terrace swamp was of iron bark (McKiernan 1911:892) and Sokoloff (1973:146) indicates that myrtle (*Acacia myrtifolia?*) was also used. Browne (Pl 8:10) described the boomerang as "thrown to disperse a crowd". Threlkeld (in Gunson 1974:69) implied that the same instrument was used, either in its returning mode as a source of entertainment. or for the purpose of destruction, "whether at man or beast", when it was thrown so that its points hit the ground. Fawcett (1898:153), however, suggested that the boomerang used for the latter purpose was of different design and non-returning.

**Spears** for all purposes appear in the Hunter region to have been of composite manufacture, usually comprising lengths of grass tree (*Xanthorrhoea australis*) to which were affixed points of hard wood. Threlkeld (in Gunson 1974:67) described three kinds of spears in use at Lake Macquarie, the fishing spear, the hunting spear and the war spear, and Browne has illustrated three kinds (Pl 8:2-4). Information from the Port Stephens area (Dawson 1830:16,244; Scott 1929:43-44) indicates that there they were manufactured in a similar manner, and there is evidence from both areas that large numbers of these spears were traded to inland Aborigines (Dawson 1830:135-36; Threlkeld in Gunson 1974:42,206). Threlkeld reported that in the winter of 1826 Biraban, his Aboriginal assistant, "went to the mountains with upwards of 60 spears to exchange for opossum cord made of the fur".

The fishing spear, according to Threlkeld,

is made from the stem of the grass tree, at the end there are four pieces of hard wood about two feet long, [which] are fastened with a bark-thread covered with the grass-tree gum, heated in the fire until at melting point, when it is worked round the thread fastening it...The three or four shorter spears thus fastened to the long stem of the grass tree, of about six feet length, becomes thus somewhere nigh eight feet in the total length of the weapon. Small wooden wedges are inserted betwixt the attached short spears just at their base where they are tied and likewise gummed over firmly ... The point of each skewer is hardened in the fire, by charring: and when hot, covering it with a coating of the grass-tree gum, fastening at the same time a barb of bone at the point.

The hunting spear was made in a similar manner from the stem of the grass tree, but had only one joint of hardened wood fixed to the end. This spear could be from fourteen to eighteen feet long (Threlkeld in Gunson 1974:190); Barrallier (1802:81) had also noted the spears to be of this length. The war spear was probably of a similar size. It was

made of the same material, but often with the addition of pieces of sharp quartz stuck along the hard wood joint on one side so as to resemble the teeth of a saw.

Threlkeld (in Gunson 1974:61, 67) noted that bone points were fixed to some spears, and also that the use of glass instead of quartz to barb the war spears resulted in their inflicting terrible lacerations.

**Spearthrowers** or wommeras (Pl 8:6) were used with all types of spears (Threlkeld in Gunson 1974:67). The one recovered from the Raymond Terrace swamp (McKiernan 1911:890) appears to be typical, being over three feet long and about 1.5 inches wide. The point, of wood, was fixed to the shaft with gum on the broader side. The proximal end was spatulate and used

to open an oyster, split up a cray-fish, embowel an opossum, or split a piece of rotten wood in order to obtain the large grubs therein for lunch (Threlkeld in Gunson 1974:68).

They were also used, as we have seen, to prise bark from tree trunks (Dawson 1830:19).

Another composite tool was the **hatchet**, a small axe or tomahawk, used for various purposes - to climb trees (Grant 1803:158), to chop possums, other small animals and honey from logs and trees, and also to remove bark. A letter to the **Maitland Mercury** (October 23, 1877) concerned them.

I am now living in the Upper Hunter, and the axes here are of a heavy black stone, which takes an edge so sharp that you could cut your fingers with one that I have seen. I am informed that they were used with green withes as a handle, one turn being taken round the axe, and that very effective work could be done with them.

Dawson (1830:202-03) noted that the head was grooved where the withe went around, and that the withe handle was closely fastened round the head by adhesive gum from the grass tree. The stone was usually basalt or diorite, ground at the edge, and in some the remainder of the surface has been roughened or "pecked". These stone hatchets were quickly replaced by ones of European manufacture (as is evidenced by the European axe in Browne's 1813 illustration, Pl 8:9), the latter being traded from coastal to inland areas.

**Gum** or resin from the "mimosa" (**Acacia** sp, Dawson 1830:203) and the grasstree (**Xanthorrhoea** sp) was used in the manufacture of much of the

Aborigines' equipment. According to Dawson it

undergoes some refinement before it is used, and forms a part of the stock which the gins carry in their nets. It easily melts on the fire, but does not, like pitch, appear to be softened by the heat of the sun (Dawson 1830:203).

There is evidence that **scrapers** of shell were employed, for example to sharpen spears (Dawson 1830:16), and that glass soon came to be preferred, but there is no reference to stone scrapers. Oyster shells ground into shape were used for fishhooks (Threlkeld in Gunson 1974:54; Caswell 1841).

**Awls** of kangaroo bone were used to repair canoes and also in sewing together possum and kangaroo skins to make cloaks with a **thread** of sinew (Boswell 1890:6; Fawcett 1898:153).

European tomahawks, shell scrapers, pieces of glass (Dawson 1830:135-36) and "large bundles of manufactured spears" (Threlkeld in Gunson 1974:42) were exchanged with inland tribes for skeins of spun possum fur, possum skins and possum fur **headbands** such as that given to Grant by an Aborigine at Newcastle (1803:163).

Materials from possums and kangaroos provided nearly everything that was worn by the Aborigines of the Hunter. The women of Gammon Plains, in the Merriwa district, usually had

kangaroo or opossum skins thrown loosely about them, which is the case also with the men in cold weather; indeed they sometimes make kangaroo cloaks with no little neatness (Breton 1833:19).

The chief of the Aborigines who attacked Merton, near Denman, in April 1826, was clothed in a possum skin rug, and had strips of fur round his loins (Mrs Ellen Bundock ML MS 1120). **Skin cloaks** (Pl 9) were also recorded at Lake Macquarie (Threlkeld in Gunson 1974:53) and at Raymond Terrace (Caswell 1841).

The men always wore a **belt** of opossum fur "spun or twisted like coarse yarn into skeins to the length of five or six yards", into which they stuck their waddies and tomahawks. They sometimes bound their hair with possum yarn, wearing a small pointed kangaroo bone in the hair above the ear which functioned as a **comb** (Dawson 1830:115-16).

\* \* \* \* \*

The ethnohistorical literature shows the Aborigines to have manufactured a range of artefacts from a variety of raw materials, supplementing articles of their own manufacture by exchange with those from other resource zones. That the literary evidence is not complete is

demonstrated by lack of detail, for example in the description of the yamsticks, and by gaps in the record illuminated by other sources of evidence. For example, apart from the pieces of quartz used to barb spears and the stone hatchets, the literature makes no reference to the stone artefacts which are found in great numbers and which in much of the Hunter region are the main source of evidence available to the archaeologist (see Chapter 7). Their absence from the literature may indicate that stone scrapers and knives were not being used at the time of European contact, having been replaced by shell, wood or bone, or merely that they escaped the notice or interest of the early observers. Certainly the greatest concentrations of stone artefacts occur in areas of the region where the literature offers least information about the Aborigines.

### **Evidence from the Collections**

In an attempt to locate artefacts of Aboriginal manufacture, other than those of stone which remain widely spread about the valley, enquiries were made of the major museums in the eastern states and some local museums in and near the Hunter region.

There are no such artefacts from the Hunter in the national ethnographic collection held in Canberra, nor in the National Museum of Victoria, the Queensland Museum or the Macleay Museum at Sydney University. Local museums listed in the NRMA Museums Guide as having Aboriginal artefacts were contacted, but none of these artefacts was from the Hunter. Only at the Australian Museum were any such artefacts found, less than twenty having been definitely provenanced to the Hunter area.

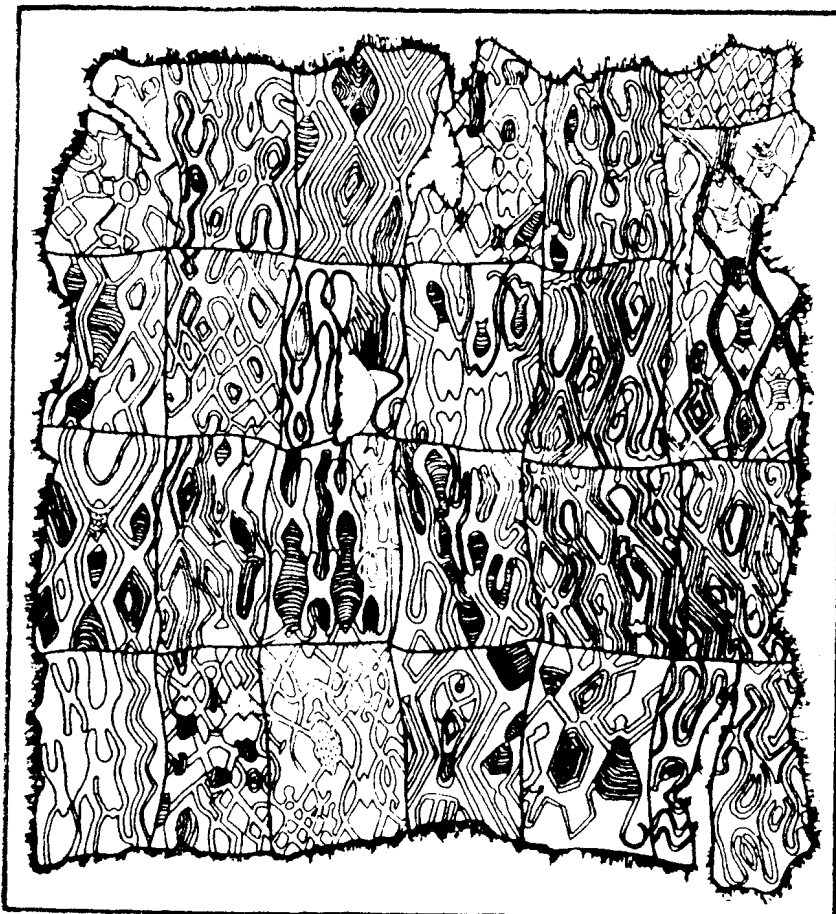
This dearth of artefacts is in part a result of historical developments particular to the Hunter area and in part an element of a more widespread phenomenon.

The fact that the Hunter Valley was settled so early and so quickly, resulting in an equally rapid disruption of the Aboriginal economy, meant that production of these artefacts would have ceased sooner than in areas settled at a later period. Those parts of north Queensland, for example, which were not settled until the late 1850s have a much better representation of artefacts in Australian museums than is the case for the Hunter (Brayshaw 1977).

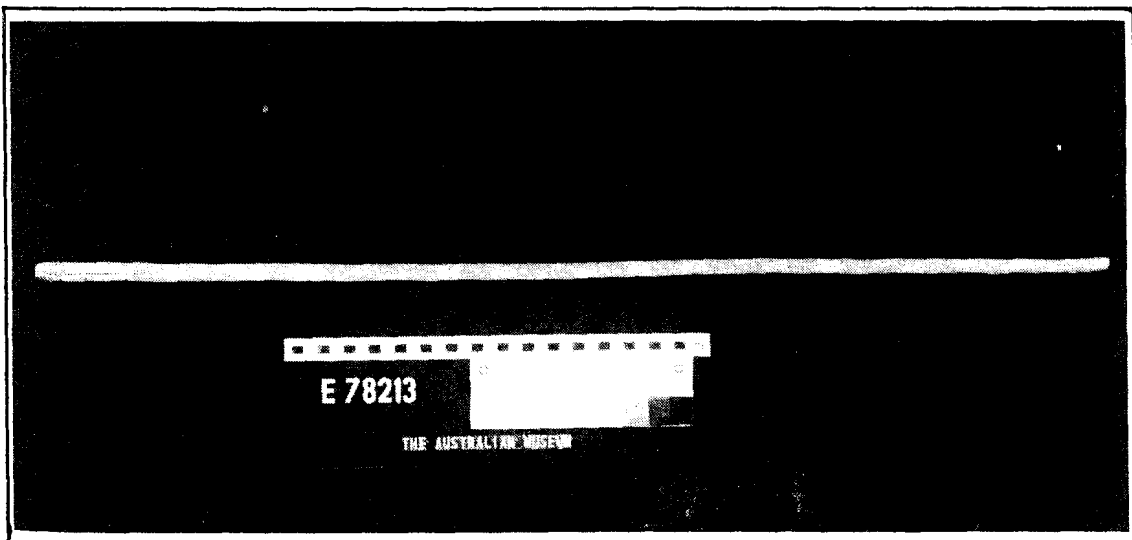
On the wider front, there was for many years a steady stream of Aboriginal artefacts leaving the country, particularly in the latter years of the nineteenth century.

It is probable that no Aboriginal artefact of wood or other perishable material in any Australian Museum is older than about 1840, while they are rare even up to 1870 (D.J.Mulvaney 1983, quoted in R.Mulvaney 1983:15).

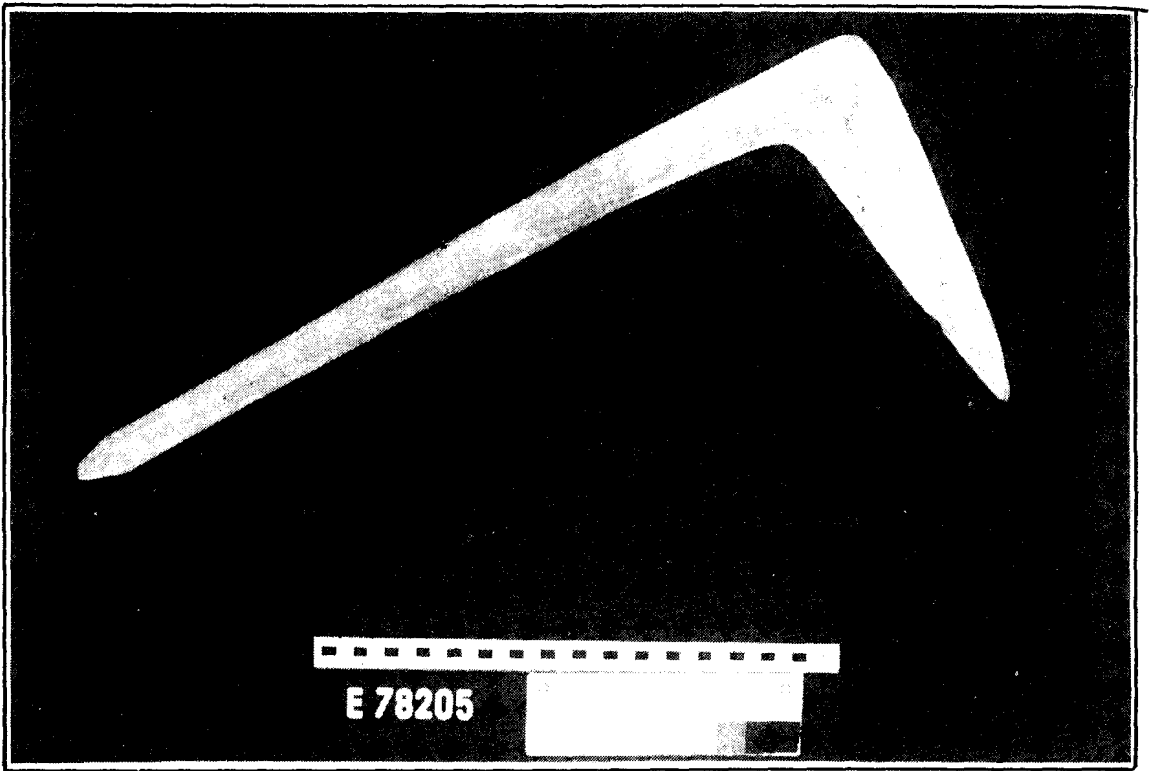
This project has not encompassed the pursuit of these artefacts through the catalogues of overseas museums, though obviously their location and examination are warranted.



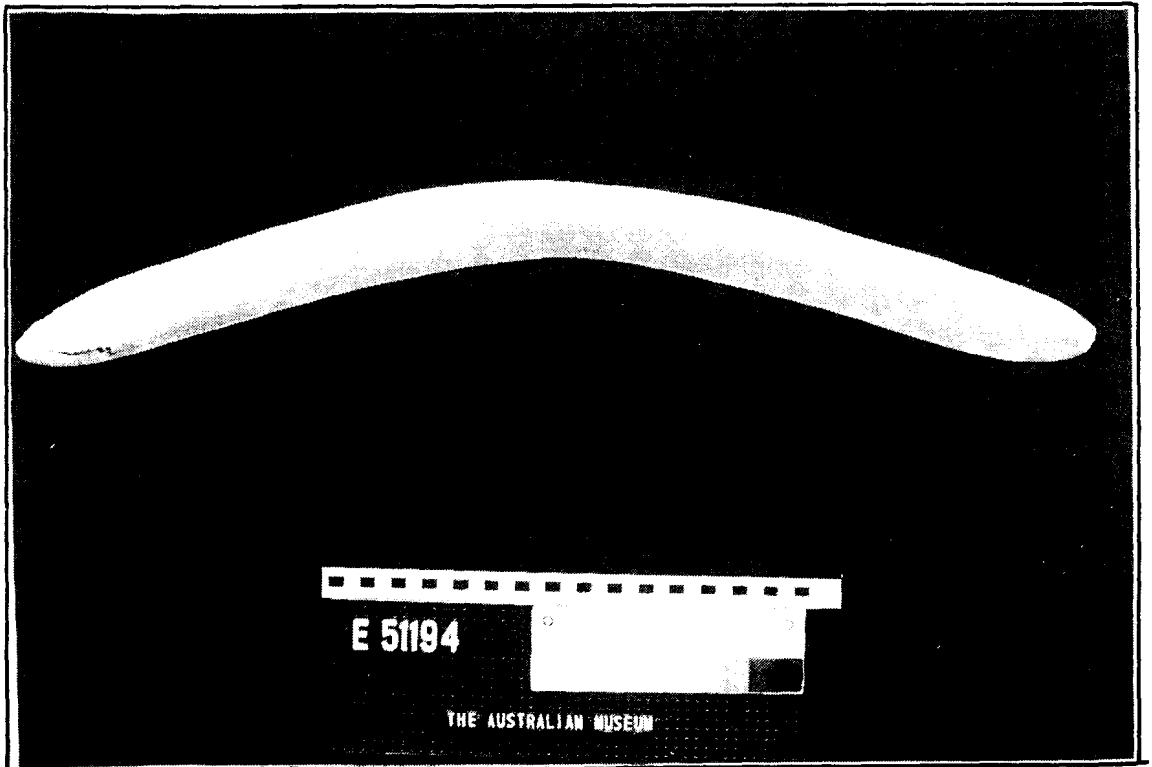
Pl 9: Skin rug from the Hunter River. Smithsonian Institution Washington D.C. (Mountford 1963).



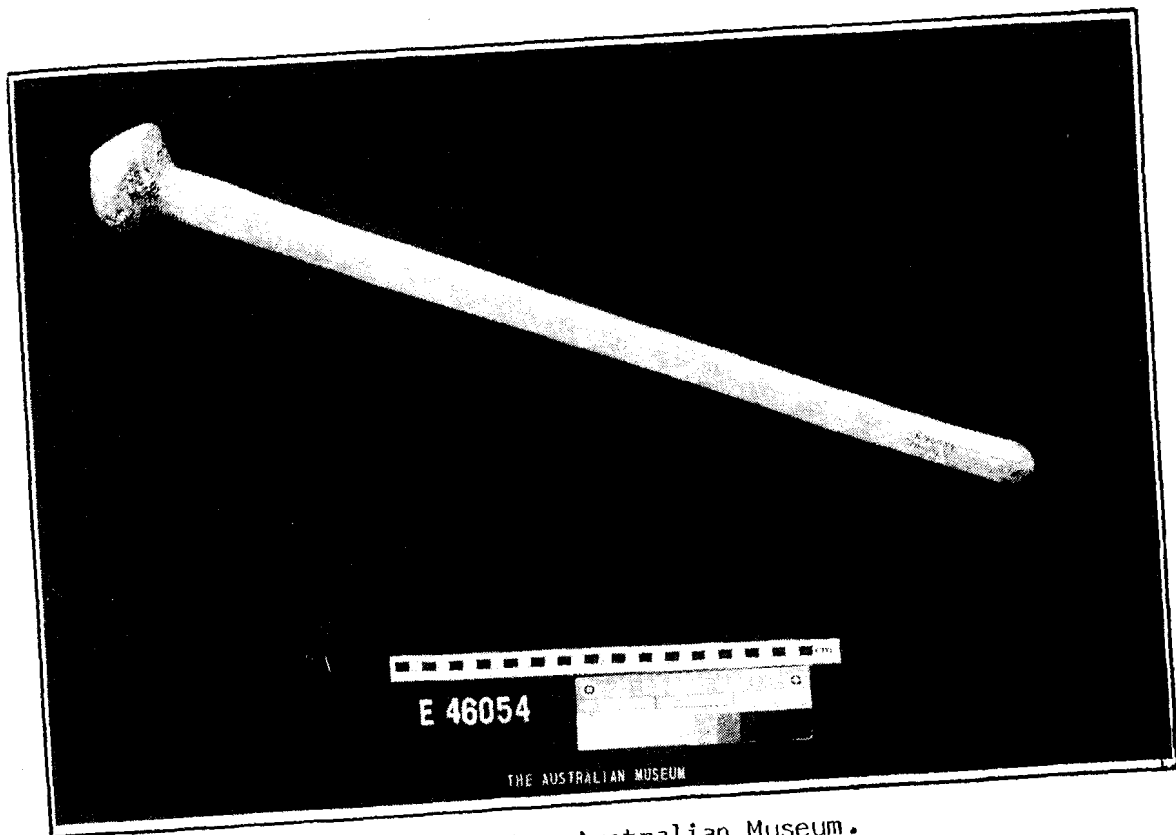
Pl 10: E.78213 Spear. Australian Museum.



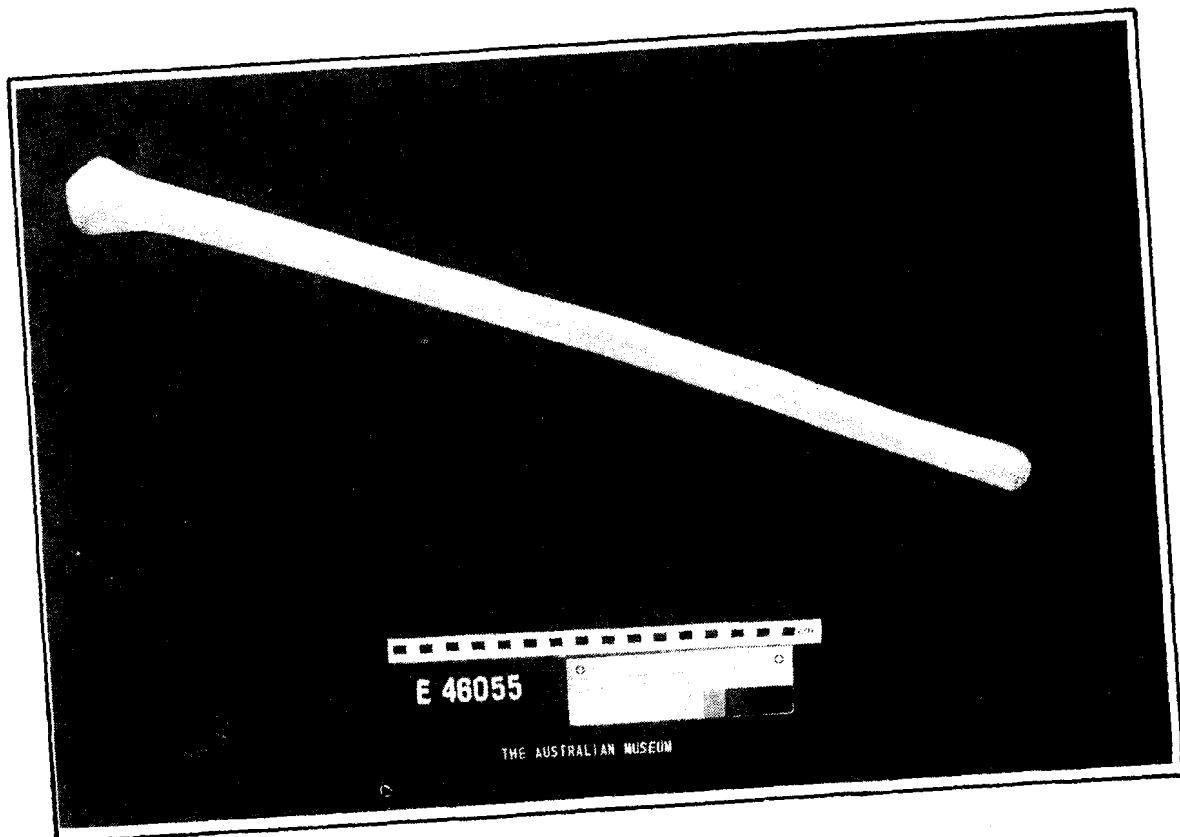
Pl 11: E.78205 Wooden "Pick". Australian Museum.



Pl 12: E.51194 Boomerang. Australian Museum.



Pl 13: E.46054 Club. Australian Museum.



Pl 14: E.46055 Club. Australian Museum.



Two artefacts from County Gloucester are known to be held in the Pitt Rivers Museum, Oxford (Sokoloff 1973:150c, details courtesy of Prof I. McBryde). PR.157, a club decorated with red and white pigment and bands of darker colour. Like many clubs throughout Australia it is hatched at the grip, and there are also tooling marks at the butt. The club is lenticular or biconvex in section. This artefact is similar in shape to the "wooden sword" described by Threlkeld (in Gunson 1974:68). PR.147, a boomerang, painted orange red. It is very flat with squarish ends.

The literature indicates that another artefact is housed at the Smithsonian Institution in Washington D.C. This is a skin rug (Pl 9) from the Hunter River collected by Commander Wilkes on the United States exploring expedition of 1838-42 (Mountford 1963:540). The rug, which has an incised pattern, is 148cm long and 127cm wide. It contains "22 regularly cut skins of the brush-tailed opossum, *Trichosurus vulpecula*, a smaller piece of the same material and a skin of the great grey kangaroo (*Macropus canguru*)". The skin rug or cloak was used throughout most of southeastern Australia but not in the Sydney area. The incised patterns tended to be unique to the owner and sometimes red pigment was applied to the incisions.

The bulk of the Hunter material held in the Australian Museum, Sydney, is part of the Morrison Collection which the Museum acquired in 1982. This collection, assembled at the end of the nineteenth century by a resident of the Singleton area, includes:

E.78217, a tied bark canoe (Pl 7), made by an Aborigine from Port Stephens. It closely resembles that described by Ebsworth (1826:82) at Port Stephens, by Ellen Bundock (ML MS 1120) at Maitland and by Threlkeld (in Gunson 1974:54) at Lake Macquarie.

E.78213, a spear of grass tree and hard wood, originally barbed (Pl 10).

E.78214, E.78215, spears of grass tree and hard wood, unbarbed.

E.77639 - E.77643, returning boomerangs.

E.77645 - E.77650, clubs.

E.78205 (Pl 11), a club with white on much of the head and in a stripe across the handle. Although painted rather than incised, this artefact is not dissimilar from the lil-lil type of club found in western New South Wales (Moore 1980:63), and if its provenance is correct it may reflect inland cultural links in the Hunter region.

The only other Hunter material in the Museum consists of three clubs made in 1938 by a Worimi Aborigine from the Port Stephens area, and three returning boomerangs, two, E.51194 and E.51196 from the Singleton area, acquired in 1944, and E.68358 from the the same area acquired in 1983. E.51194 (Pl 12) is dark brown, biconvex, slightly wider at one end and has diagonal striations. E.51196 is also dark brown and biconvex, but it has a smooth surface.

Of the clubs E.46054 (Pl 13) has a knobbed head which is more pronounced

than that of E.46055 (Pl 14), and may have derived from the mushroom head in Browne's illustration (Pl 8:8), while E.46056 is of the "constable's staff" variety described by Threlkeld (in Gunson 1974:54), with a slightly bulbous head (Pl 8:7).

\* \* \* \* \*

The ethnohistorical records indicate that the Aborigines of the Hunter region manufactured a wide range of artefacts. It also indicates how meagre a representation of the Hunter material culture is held in Australian museums. While all of the artefact types represented in the collections are described in the literature, only a third of those described in the literature are represented in the collections.

It is likely that many more artefacts from the area are held in overseas museums, and the searching out of these would be of interest to local Aboriginal communities and to any one else interested in local Aboriginal traditions.

As with all aspects of Aboriginal history in the Hunter Region, evidence relating to diet is almost exclusively related to the coastal areas. While it is likely that many of the foods eaten on the coast were also eaten inland when they were available, of this there is no direct evidence, and exploitation cannot be assumed from availability.

### Plant Foods

The bias towards the coast applies to plant foods as to others, and this aspect of the evidence makes impossible any comparison between the relative importance of plant foods in coastal and inland environments.

Barrallier (1802:81-82) observed at Newcastle that the Aborigines ate "the roots of Fern [which he surprised a youth in the act of collecting] and a sort of root or yam". The rhizome of this fern, probably **Blechnum** sp. (Vinnicombe 1980: VI 4), was also eaten at Lake Macquarie (Threlkeld in Gunson 1974:55) and in the Dungog area (Ebsworth 1826:71), where it was called "Bungwall". It was roasted in the ashes and pounded to a paste between two stones.

There are indications that yams (**Dioscorea transversa**) were eaten elsewhere on the coast. (Scott 1929:41) and Backhouse (1843:399) noted that in the Raymond Terrace area,

In the more fertile spots by the sides of brooks, there was a species of Yam, the root of which was eaten by the Aborigines.

Backhouse also noted the Giant Lily (**Doryanthus excelsa**) flourishing along the route from Newcastle to Threlkeld's mission on Lake Macquarie.

These stems are roasted, and eaten by the Aborigines, who cut them for this purpose, when they are about a foot and a half high, and thicker than a man's arm. The Blacks also roast the roots, and make them into a sort of cake, which they eat cold (1843:380).

The seeds of **Zamia spiralis** were soaked in a creek or swamp for several weeks, pounded and then roasted (Threlkeld in Gunson 1974:55; Backhouse 1843:380). Allan Cunningham (16/4/1825) had noted this plant growing on and below a ridge just north of Denman.

Two days prior to this, while in the Jerrys Plains area, Cunningham had noted "Exocarpus [Native Cherry] and Sterculia heterophyllus [Kurrajong - NSW Herbarium] appearing in every part of the Forest". The latter, he continued, were

of robust growth and at this season of the year laden with its clustered Capsules...which I am informed are gathered by the Aborigines, who roast and eat them after the manner of Maise.

Many years later Enright (1937-40:91) wrote of having been given a grinding stone which had been found on the bank of the creek at Milgarra, near Bunnan. Of basalt (maximum dimensions 13x8x2.25 inches), the stone was flat on both sides, one having been worn smooth by constant rubbing. The upper stone was 8oz in weight, a water-worn basalt pebble flattened on one side only from use:

It was used for grinding seeds, including those of the Kurrajong...and it is the first I have seen from eastern New South Wales.

The literature makes no reference to grass seeds having been ground, although **Themeda australis** was widespread (Bigge Evidence BT Box 5:2028-30, 2033) and it provided seeds suitable for grinding and baking into seed cakes (McBryde 1976:65), as may the "kind of oat-grass" seen by Cunningham (Journal 7/5/1823) in the upper Goulburn Valley.

Other plants indicated by the literature to have been exploited for food in coastal regions include various fruits (Caswell 1841), including a "sort of wild plum" (Threlkeld in Gunson 1974:55) and the stalk of the water lily (Scott 1929:41; Fawcett 1898:152). The blossoms of the honeysuckle provided nectar, as did that of the grass tree, and of the latter children were especially fond (Dawson 1830:244).

Vinnicombe (1980:Table 3) lists an extensive array of plants occurring around Brisbane Water of which a number are known to have been eaten, and indicates their seasonal availability. Most of these plants would have occurred somewhere in the Hunter Region, and probably constituted part of Aboriginal diet in those areas.

## Shellfish

Shellfish formed a particularly significant element of the diet of coastal Aborigines. At Lake Macquarie, Threlkeld (in Gunson 1974:55) wrote,

Cockles were the every day dish on the lake, not because they are the favourite food, but, because they can be at all seasons, most easily obtained.

He continued,

These are roasted and eaten, squeezing them first in the hand to press out the superfluous liquor contained within them, but they are a tough morsel.

Crayfish, on the other hand, were a favourite food, and he indicated that the Aborigines put themselves at considerable risk diving amongst the rocks to get them.

That substantial amounts of oysters were consumed on the coast is attested by the party from the Lady Nelson finding "the shore covered to a great depth with oyster-shells" on the Hunter estuary (Grant 1803:155). Caswell (1841) confirmed the consumption of oysters on the

lower Hunter, as did Dawson (1830:67) at Port Stephens. At Lake Macquarie in 1836 G.W.Walker (in Gunson 1974:127) observed Aborigines collecting oysters, of which there were three varieties, "all good eating": the mud oyster, the rock oyster, "and a species called by the inhabitants the 'drift-oyster'". At this time, however, the oysters, together with fish, were exchanged for flour and tobacco.

There is no direct evidence as to who traditionally collected the shellfish. However, Fitzpatrick (1914:45) remembered that it was the women who collected oysters, cockles and pippis, and who dived off the rocks in search of crayfish. Vinnicombe (1980:V 37) indicates that although available all year, most shellfish species were markedly most plentiful, and readily accessible due to low tides, during the summer months.

Just above Maitland, on the Hunter River, having dragged their boats over rapids, Grant (1803:161) and his party saw some Aborigines at a distance, and then

came to a spot which they had just quitted...The ground was covered with the shells of fresh water fish, of the sort found in the Rivers of England and Scotland, and called the horse muscle, having sometimes small pearls in them.

According to Wood (1972:44), Aborigines left heaps of mussel shells on the banks of Muscle Brook, hence its name and that of the town of Muswellbrook.

## **Fish**

Early observers believed that fish constituted the main item in the diet of coastal Aborigines, being replaced inland by possums and other animals (Ebsworth 1826:80).

Various methods of catching fish appear to have been employed. The hook and line, not used on the north coast of New South Wales (McBryde 1976:51) and believed to have come into use further south only within the last 2,000 years (Flood 1983:212), was used in the Hunter region. The hook was "of a shell ground down on a stone until it became the shape they wished" (Threlkeld in Gunson 1974:54). Both Ebsworth (1826:79) and Emily Caswell (1846) state that the shell used was oyster.

This mode of fishing was usually undertaken by the women in canoes, a fire lit on clay in the centre to roast the bait, which might be cockle, a piece of starfish or other fish, and to roast the fish as soon as it was caught. This fire also served as a light for fishing at night and to warm the women's feet and hands -

It was a pleasing sight on a calm summer's evening to see a number of the native canoes on the glass-like surface of the Lake, sending up their straight columns of smoke from the centre of the barques, shewing an appearance of a fleet of small steamers at anchor in

the stream. [But] Naked and shivering the women used to be seen in the winter seasons suffering severely from the effects of the bleak wind until a sufficient supply of fish was obtained.

Fish were also speared by the men, sometimes from canoes, in coastal waters and possibly also inland streams (Pl 15).

Weirs were used. Grant (1803:154) came across the remains of one in a small creek flowing into the Hunter estuary; part of a net made of strong grass was lying on the creek bank. The net he assumed to be of European manufacture, but the weir was "the work of the native inhabitants, this being one of their principal devices for taking fish". Threlkeld (in Gunson 1974:190) describes a method of

planting sprigs of bushes in a zig-zag form across the streams, leaving an interval at the point of every angle where the men stand with their nets to catch what others frighten towards them by splashing in the water.

Hand nets were also used in shallow waters by means of forming a circle and enclosing the fish.

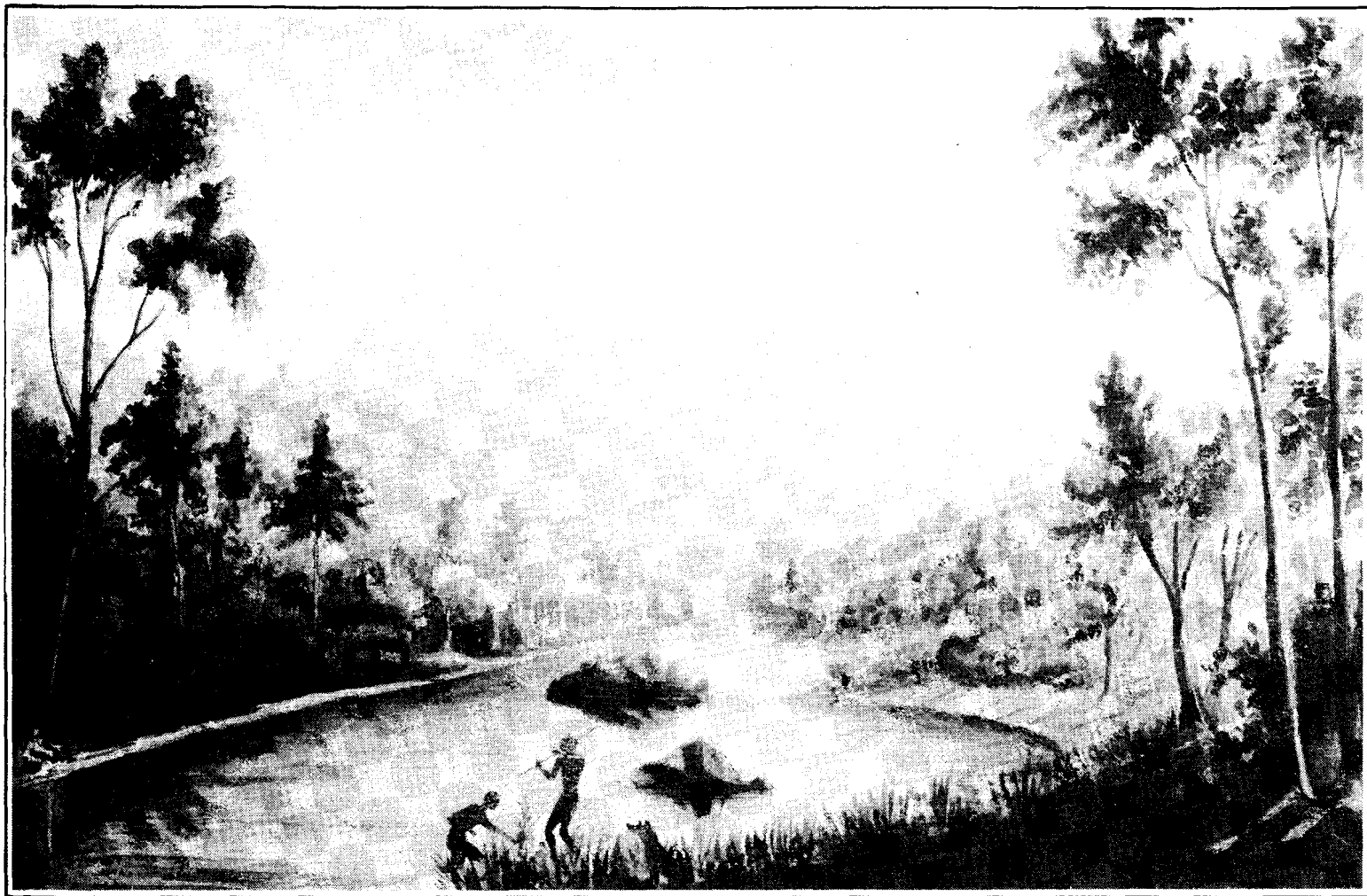
It is possible that nets were used further up the river, near Morpeth, where the lagoons of Wallis Plains "swarmed with delicious fish". Peter Cunningham (1827:151) noted that during the dry summers, when the water was low, the Aborigines would wade in "and actually drag out **cartloads** thereof, including immense eels".

Large scale netting of fish is said to have been unknown on the central coast (Lawrence 1969:147), and if it had been, surely nets would have been used to catch the shoaling mullet. Instead, in the Port Stephens area, to use the words of Scott (1929:72),

the fishermen, generally about half a dozen at once, would rush into the water up to their middles, with spears and womerahs all poised ready, then when the school was within striking distance, the leading fisherman would give the word "muh" (now) and the spears would all be launched together.

According to Vinnicombe (1980:V 36) the shoaling of the sea mullet begins in late March and continues through April and May. Grant (1803:154-55) remarked on their being very numerous at Newcastle even in June and July. Overall fish tend to be most numerous in summer and least so in winter.

Apart from sea mullet and freshwater eels, there is evidence of a variety of other fish species being consumed in coastal areas, including perch, flathead, bream, schnapper, whiting and flounder (Sokoloff:1973:142). Stranded whales represented a feast for Aborigines, and Threlkeld (in Gunson 1974:55) noted that on these occasions messengers were despatched to all the neighbouring tribes who gathered to partake. Porpoises also were eaten if occasion presented them, although there is no evidence of their being actively pursued.



Pl 15: View on the Upper Hunter New South Wales 1864. Rex Nan Kivell Collection  
Australian National Library.

## Animal Foods

Apart from kangaroos, "small kangaroos" and occasionally wallabies, the literature generally fails to differentiate between species of macropod occurring in the Hunter Region and being hunted by the Aborigines.

These animals were sometimes speared by an individual huntsman (Dawson 1830:17), but more frequently their capture was a group exercise. Threlkeld (in Gunson 1974:191) accompanied some Lake Macquarie Aborigines on a hunting expedition to see them

procure a small species of kangaroo. We mustered about thirty persons armed, with spears...After travelling a few miles, we arrived at the top of a high hill, the party separated, some going to the bottom, while we continued to the top. A deep valley was before us. The men arranged themselves in different parts, on rocks or stumps, or any little eminence waiting the appearance of game, which the party below, women chiefly, alarmed by their shouts. Seven or eight animals were obtained in less than two hours.

Mrs Felton Mathew (in Havard 1943:237) described a similar hunt for wallabies which she witnessed on the Macdonald River in the autumn of 1834. On the Karuah River Dawson saw (and heard) kangaroos being driven towards a bend in the river, and near Lochinvar in the Hunter Valley he came across Aborigines in the act of forming themselves into a circle in order to catch kangaroos (1830:8,182).

Smaller animals, such as the echidna (Fitzpatrick 1914:43) and the bandicoot (Ebsworth 1826:80) were also part of the Aboriginal diet, often caught as a result of such group cooperation (Threlkeld in Gunson 1974:190). Sokoloff (1973:136-39) has identified a number of animal species in the Port Stephens area referred to in the literature as being part of the Aboriginal diet.

Fawcett, writing as late as 1898 (:153), remarked that amongst the Wonaruah kangaroos, wallabies and also emus were sometimes caught by means of nets which were particularly useful in wooded areas, being fixed in semi-circles amongst the trees. He also suggested that when kangaroos and wallabies were to be hunted,

The grass in certain districts was first burnt off, and about a month afterwards, when the young grass had sprung again, these animals all congregated there to eat the sweet young pasturage.

Evidence from Threlkeld (in Gunson 1974:206) corroborates the deliberate burning off of grass to attract kangaroos to the new growth: in 1826 the Aborigines from his mission went to the mountains to attend rituals including a kangaroo hunt, for which preparation was made by burning off "a large part of the country".

Possums, generally captured by chopping holes in the hollow branches of



trees, were far more numerous inland than on the coast (Dawson 1830:68,136; Threlkeld in Gunson 1974:206), and appear to have been hunted in relatively greater numbers. Emily Caswell (1841), however, noted that at Raymond Terrace some Aborigines refrained from eating the possum.

Flying foxes, congregating in vast numbers in the summer months (Vinnicombe 1980:V 31), but also present at Raymond Terrace during winter (Backhouse 1843:398), were another element of diet. In the Myall Lakes district Dawson (1830:309)

came quite unexpectedly upon a large tribe of natives, not less than one hundred of them. They were strangers from the upper districts of the Myall, and were sitting round their fires, roasting and eating the flying foxes, which they had speared from the trees in a jungle by the side of a creek.

At Lake Macquarie, however, the men had great veneration for the flying fox (Threlkeld in Gunson 1974:206,73 n29), believing "if a man were to kill one purposely, he will also be killed". They would not look at it nor speak its name. The women were unaffected by the flying fox, but had a similar relationship with a small bird like a woodpecker.

There is very little evidence as to the place of birds in the diet of Hunter Aborigines. Of those in a position to observe directly only Grant and Threlkeld indicate that the Aborigines ate them at all.

Threlkeld (in Gunson 1974:55,65) wrote in 1825 of the mutton bird which,

at a certain season is highly esteemed, they are found on Nobby's Island at the entrance of Lake Macquarie, where you may tread upon their nests, which are in small holes, nearly buried in a snuff-like-substance-soil, perhaps guano, covered with a particular sort of sea weed.

The young and the eggs were eaten. The mutton birds were guarded by laws the transgression of which was punishable by death.

He also implies that wildfowl such as ducks, geese, swans and pigeons were eaten.

The elderly man of the class "Bush Native" who came on board the Lady Nelson, while she was at anchor in Newcastle harbour (Grant 1803:156-7), happily consumed "a crow of the carrion species" which had, however, been shot by one of the crew.

Higher up the valley there is Fawcett's (1898:153) statement, albeit rather late to be "evidence", that the Wonaruah sometimes caught emus with the aid of nets.

Goannas were eaten in the Port Stephens area (Dawson 1830:203) and doubtless elsewhere as well. Threlkeld (in Gunson 1974:55) remarked

that at Lake Macquarie they were "a favourite article of food for the privileged class of society, amongst the aborigines". Also,

Snakes form another tit-bit, when roasted, for a certain description of Elders among the tribes; and as for the flesh of the wild dog, that is a dainty dish fit to set before their king! No uninitiated person dare presume to taste the forbidden food under the penalty of "standing punishment" for the "breach of privilege".

Larvae were a popular additive to the Aboriginal diet. In canoes in the lower Hunter Valley Grant (1803:162-3) observed

that kind of eatable to which they give the name of cabra: it appears abominably filthy, however when dressed it is not disagreeable to the taste.

The cabra (also known as "cobra") he described as a species of worm breeding in wood which was immersed in water and therefore found along the river where trees had fallen. This is the shipworm **Teredo nautalis** which was also recorded as being eaten on the Macleay River (Campbell in McBryde 1978:97). Terenid shipworms were found in an excavated midden at Wombah on the northern bank of the mouth of the Clarence River (McBryde 1976:54). Other references to larvae include that of Dawson (1830:209) to incisions made in the bark of trees to remove a large variety, and Ebsworth (1826:79) also referred to a "kind of grub found in decayed wood".

Honey from two varieties of native bee (Gunson 1974:67,124) was eaten, and it was also mixed with water to form a drink (Breton 1833:195; Dawson 1830:60; Scott 1929:34-35).

\* \* \* \* \*

On the basis of the seasonal availability of various species Vinnicombe (1980:V37-39) postulated that shellfish gathering and fishing, particularly spear fishing by the men, would have been most efficient in the summer months, and that conversely many terrestrial animals were more numerous and more readily caught in winter months. She found that this picture reinforced Poiner's (1971, 1976) model for intensified terrestrial usage during winter. On the north coast historical sources indicate that large numbers of Aborigines used to congregate in summer to crop the oyster beds, (Wombah midden on the Clarence River is a specialised oyster-gathering site, consisting almost entirely of oyster shells); in spring and also in winter there were seasonal movements connected with the schooling of salmon and mullet, although coastal Aborigines spent most of the winter months inland (Sullivan in McBryde 1978:107).

Amongst the ethnographic evidence adduced by Vinnicombe in support of this seasonal dynamic in the Hunter region is Threlkeld's report that his Aboriginal assistant Biraban attended a ritual kangaroo hunt of some

considerable organisation "in the mountains" in 1826, which the evidence suggests was in winter (Threlkeld in Gunson 1974:204-6). She added that in the summer of 1840 J.F. Mann described an occasion near the mouth of Wyong Creek on Tuggerah Lake when inland Aborigines from Wollombi participated in a corroboree organised in their honour.

Thus inland Aborigines visited the coast during summer when marine foods were at their most plentiful, and coastal Aborigines went inland to participate in ritual kangaroo hunts during the winter.

The only additional evidence of this nature found relating to the Hunter region is Dawson's (1830:309) reference to seeing over a hundred Aborigines, "strangers from the upper districts of the Myall", who were visiting the Myall Lakes. This was probably in summer, as they were eating flying foxes.

Although the literature relates predominantly to the coastal regions, it does seem likely that there was a greater variety of food resources available in the coastal and estuarine areas than was the case in the inland. There is little seasonal information relating to the upper Hunter and Goulburn Valleys although winter kangaroo hunts suggest the availability at that time of macropods, and the fruit of the Kurrajong is ripe from July to October (Boland et al 1984:640). Of other available resources **Zamia spiralis** fruits between October and December, while the grasses seed in late summer.

## 6 RITUAL LIFE

The sacred and ceremonial activities practised by the Aborigines of the Hunter Valley were closely integrated with their relationship to the land which was also their link with the Dreaming. This was the Aboriginal Genesis when ancestral spiritual beings took earthly form as people or animals with human-like characteristics. They wandered over the land giving it form and features, and giving life to people and to all other living things.

In central and northern Australia many of these ancestral beings were believed, after the creative period, to have entered the earth and transformed into topographical features. The places of their deeds and final rest are geographically distinctive and regarded forever afterwards as sacred sites. In south-eastern Australia the ancestral beings went up to the sky at the end of the Dreaming and remained there.

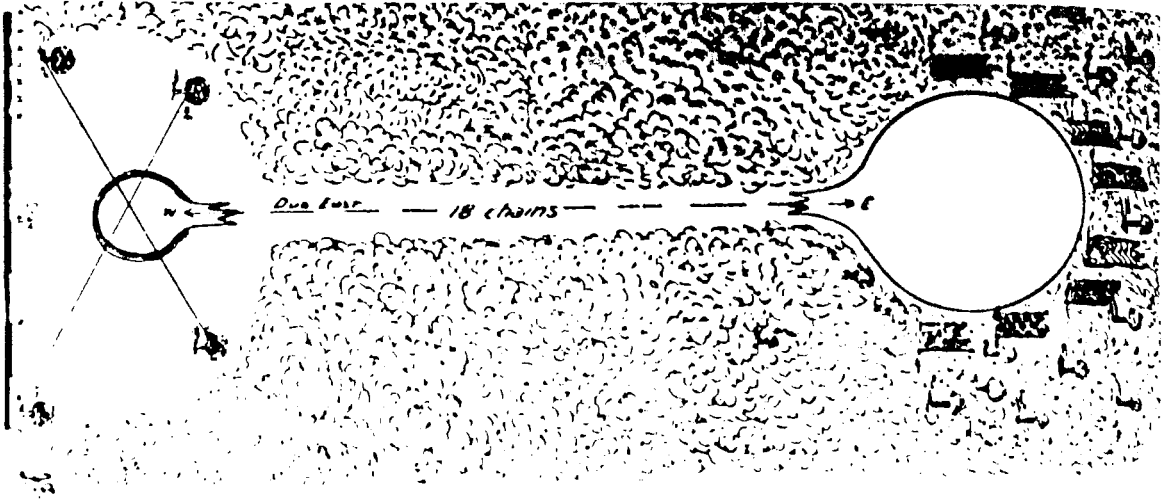
Throughout south-eastern Australia there was a belief in an All-Father sky deity who appeared under a variety of names. Over a large part of inland New South Wales he was called Baiame. He had two wives, Biragnulu and Gunambali, and a son called Daramalan. Along the south and central coast the cult hero was Daramalan, or sometimes Goin. Other tribes had beliefs in similar beings but called them different names. Baiame, together with most of the other personalities, could return to earth to work magic or to punish transgressors of marriage rules. Baiame and Daramalan were thought to return to earth during certain initiation rituals (Berndt 1947-8:334-6), and are often depicted in rock engravings or paintings (Pl 21).

Attention in this work is confined to written records of those rituals practised in the Hunter region which are most likely to have resulted in archaeological manifestations, namely those relating to male initiation ceremonies and to burial.

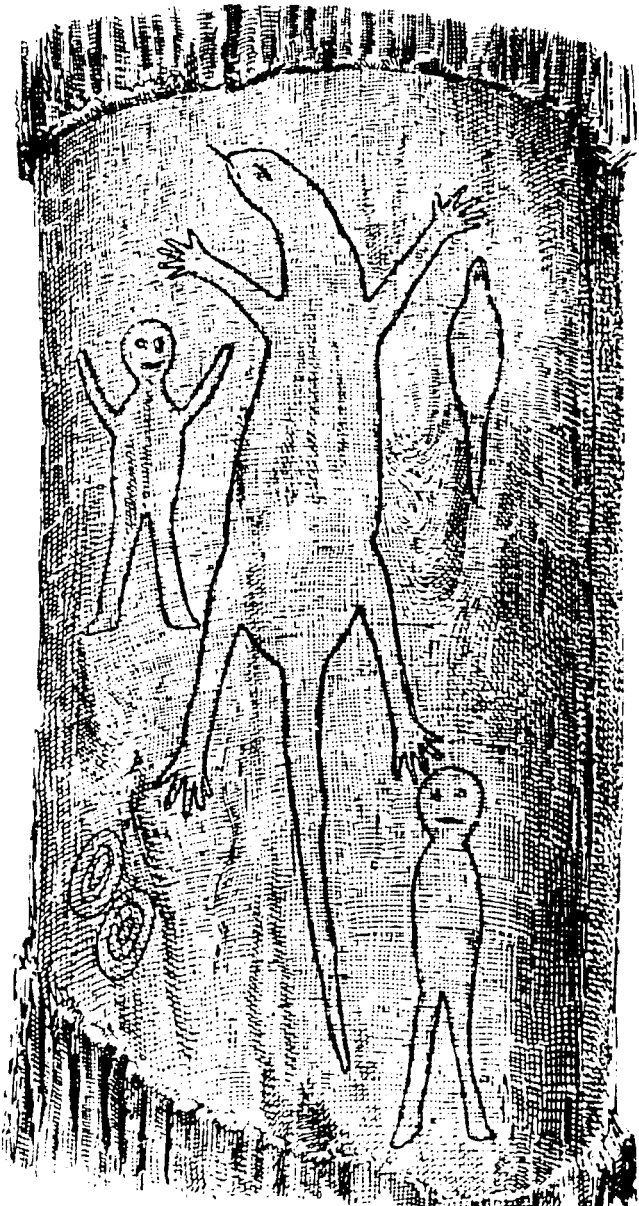
### Initiation

The initiation ceremony involved the use of one or two cleared circles. Where there were two circles they were often some 350 metres apart. Around the circles the trees were carved and in some cases figures of raised earth were created on the ground.

In November 1825 Threlkeld (in Gunson 1974:50-51,63-5) attended a ceremony "preparatory to removing the front tooth of several young men who would then be capable of marrying a wife". The site of this ritual he called the "Mystic Ring, or Porrobung". It was a circle "thirty-eight feet in diameter. Every particle of vegetation was pulled up within the ring," and in the centre was a small hillock. The trees near the ring were marked with "representations of locusts, serpents &c on the bark chopped with an axe, and similitudes of the nests of various quadrupeds [were] formed on the ground near the spot". This circle was out of bounds to the non-initiated, but another nearby, which he did not describe, was not.



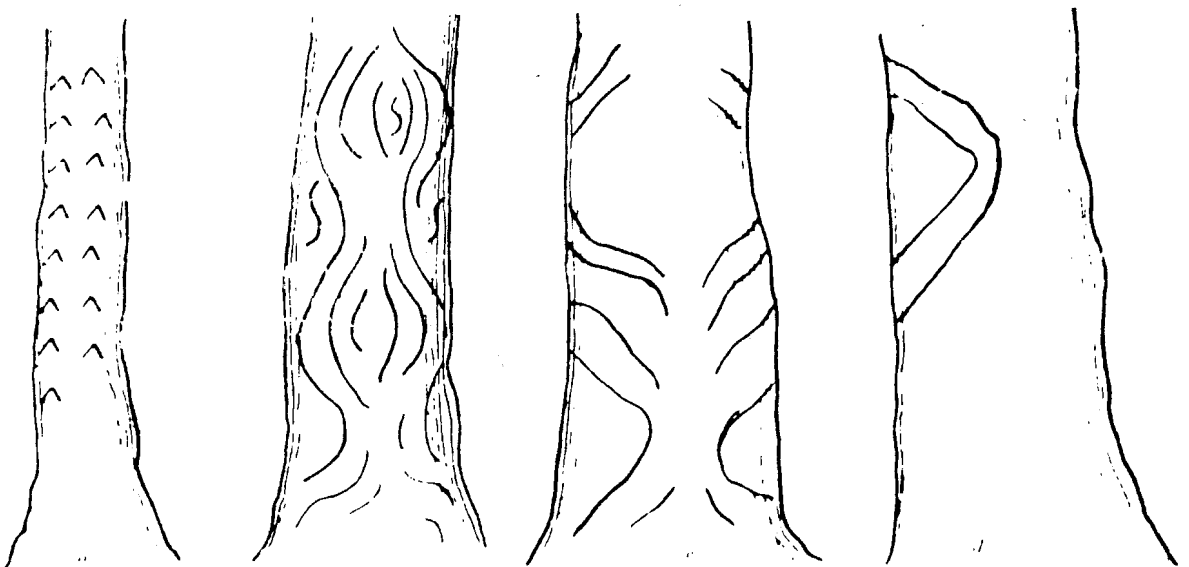
Pl 16: Sketch of a Bora Ground near Gloucester (Etheridge 1918).



Pl 17: Sketch of a Carved Tree near Gloucester (Etheridge 1918).



Pl 18: Sketch of Carved Trees near Gloucester (Etheridge 1918).



Pl 19: Sketch of Carved Trees at the junction of the Page and the Isis Rivers (MacDonald 1878).

Illustrations and descriptions of initiation circles and associated carved trees (Pls 16, 17, 18) in the Gloucester/Dungog area (Etheridge 1918, Mathews 1896:321-22) are very similar to that described by Threlkeld, except that they do not indicate earth figures as being present, while another, which according to Fawcett (1898:154) was used by the Wonaruah, does. At Minimbah near Wallis Lake (Gilbert 1954:121-22) was found a carved tree and one circle with a smaller one inside.

Two sites described in the upper Hunter appeared to have only one circle, one at "Kelvinside" near the junction of the Page River with the Hunter, on which cattle yards had been built by 1927 (Bridge, **Scone Advocate** 4/11/1927), and the other at the junction of the Isis River with the Page (Ridley 1875:156; MacDonald 1878:255-58) (Pl 19). At both sites surrounding trees had figures carved in their trunks, but earth figures, very much in evidence at the latter site, were not mentioned in relation to the "Kelvinside" site.

The occurrence of carved trees throughout the region and of earth figures at sites from Lake Macquarie to the upper Hunter indicates a degree of cultural unity. It was Mathew's (1896:322) belief that the creation of earth figures at such sites was a Kamilaroi practice.

## **Burial**

Several forms of disposal of the dead have been recorded, involving varying degrees of ritual. Burial in the earth is the procedure most commonly recorded; the position of the body was varied and could be extended or flexed, face down, on its side or face up. The use of bark as a burial shroud was widespread. No evidence has been located in the literature of cave burials, although such burials have been found in the Upper Hunter. Evidence of cremation is limited (Threlkeld in Gunson 1974:99), however archaeological excavations on the western side of the Swansea headland by Dyall and Bentley (1973, 1975) located a burial ground containing twelve simple extended cremated burials which have been radiocarbon dated to about 2,000 years old. Breton (1833:228-29) described platform burial followed by cremation practised by Aborigines near the mountains to the west of Port Macquarie, but there is no evidence of this in the Hunter region.

In the Lake Macquarie area Threlkeld attended the burial of a little girl in June 1825 and of a man in October 1828 (in Gunson 1974:47,89,100). In the case of the little girl, the grave was dug by four women "in the soft sand on which they were encamped", which was "on a barren sand hill covered with bushy scrub". The body, wrapped in tea tree bark, was lowered onto a soft bed of branches and shrubs, and the women then filled the hole with sand, using their hands as shovels. The old man who had put the body in the grave trampled the sand down firmly. The hole was filled, the surface was smoothed level and a few branches were spread over it "in order that the place might not be readily noticed".

Spades were borrowed to dig the grave of the man, though there is no indication of the location or the soil at the place where he was buried. Before being wrapped in bark the body was painted red. "Every spear was

broken into short pieces tied up into a bundle, and placed by his side, his hatchets, and every other article also which he possessed". There followed certain rituals and then interment, the details of which Threlkeld does not provide.

An earlier account, collected by the London Missionary Society deputation in 1824 (in Gunson 1974:338), was as follows:

When one dies a natural death, the corpse, shrouded in pieces of bark, is laid on the ground, and four small fires are lighted at the head and feet and on either side: a grave is scratched up in the ground and another fire lighted in the hole, which is allowed to burn out; the body of the deceased is then laid upon the ashes, with any little property which belonged to him, - his club, his spear, his clothes, - and the earth is heaped over all. But if the person fell in war, or his blood was shed by murder or chance-medley, his body is not buried, but burnt to dust.

An undated account describes the burial in about 1850 of a woman at "a sandy spot between the junction of the Bulga and Parson's Creek", where over the years other Aborigines had apparently been buried (Eather nd). The arms were bound with strips of kurrajong bark to the sides with the hands folded across the breast. The legs were doubled up with the knees drawn in a sitting position, also bound with strips of bark, and the body was lying on a sheet of bark. Men dug up the loose sandy soil with their boomerangs while the remainder of the funeral party made a mound over the body with their hands. The mound was then covered with logs and sticks.

Scott (1929:46) described a burial at Port Stephens:

One of a small camp of blacks about a quarter of a mile from our house died, and they borrowed a spade...to dig the grave - This was placed a few yards above high water mark...The corpse was neatly encased in a sheet of "paper bark" from the giant Titree (Melaleuca) and tightly bound with vines from the scrub - Then in an outer casing of a freshly stripped sheet of stringy bark, also bound up with vines.

Although Scott makes no reference to it, the interring of weapons and other personal effects was widespread, being also reported in the upper Hunter, at Raymond Terrace and in the Dungog area (MacDonald 1878:256-57; McKiernan 1911:889; Howitt 1904:464-65).

Threlkeld indicated that the Aborigines deliberately left little indication on the surface of the burial beneath. It seems likely that this was a practice in which the coastal Aborigines differed from those inland, although this difference may only reflect the earlier breakdown of society and traditional practices among coastal Aborigines.



Breton (1833:203-04) described the burial of four men and two women of the Kamilaroi tribe who were killed near Wollombi Brook. Rather than being placed in a hole, they were covered with mounds of earth, the men together in the shape of a cross, and the women in cones. A circle was cleared around the site, about thirty feet in diameter, and another made around that, with pieces of bark being laid end to end in the space between. Four waddies were stuck in the centre of the cross. The trees for some distance around were carved with figures representing kangaroos, emus, possums and weapons. The carvings sometimes extended twenty feet above the ground.

In many respects this burial is typical of the Kamilaroi procedure (Howitt 1904:446; Sturt 1833:14). While only branches were left on the surface of the coastal burial, the inland burial was usually marked by carved trees.

There is one reference to a variation in the procedure at Raymond Terrace, where the head was severed prior to the body being wrapped in bark and tied with cords of kurrajong bark and then buried (Lang Papers 1815-29:62).

### Other Sites

Threlkeld (in Gunson 1974:63-66) referred to a number of other sites which were of religious significance to the Aborigines of Lake Macquarie. These included "a few consecrated places, temporally [sic] used as occasion serves...The bark of the trees are marked for a certain space around the spot chosen for the ceremonies and none but the initiated Males dare venture therein". Threlkeld never saw any of these places.

He also referred to the site where they got the red ochre which was used on important ceremonial occasions as well as for other purposes. This was a volcano "up the River Hunter", where they obtained a "reddish earth, which they wet, mould up into balls, and then burn them in a strong fire, in which the balls change into a brilliant red pigment".

Threlkeld described a number of natural sites in the Lake Macquarie/Newcastle area which were of importance, some sacred, to the Aborigines there. Of his own observations he wrote,

The only thing I have ever noticed, as rather puzzling to account for on a high hill, or rather range of hills, was a circular erection of stones, of about 5 or 6 feet in diameter, and two or three feet high, evidently built but not cemented with anything. At first I thought it was a burying place, and searching a little distance on, say a quarter of a mile, another mound, and afterwards several more were discovered. I took two or three heaps to pieces and dug expecting to find the remains of a human body, but there was nothing of the kind.

On enquiring he was informed by Biraban that they had been brought there by eagle-hawks.

\* \* \* \* \*

Colonial observers generally had a minimal awareness of the beliefs and ritual practices of the Aborigines, and this is reflected in the literature. However in spite of this it is possible to discern elements of Kamilaroi influence pervading almost the entire valley, notably the creation of earth figures at initiation sites and mound burials marked by carved trees.

In July 1981 the National Parks and Wildlife Service site register contained records of 1,050 archaeological sites in the Hunter Region (Brayshaw 1981a). Largely as a result of archaeological surveys undertaken as part of environmental impact and planning studies associated with mining, urban and other development, the number had by September 1984 increased to 1,650 sites. This is about 12% of the 13,000 or so sites listed for the whole state of NSW, of which in area the Hunter region represents only 2% (Hughes 1984). Over 50% of the sites are in the central lowlands area of the Hunter Valley, 26% are in the Goulburn Valley, 10% in the southern mountains (Wollombi/Bulga area), 6% in the coastal zone, 6% in the northeastern mountains and only 2% on the Merriwa Plateau. The number of sites in each area is very much a reflection of archaeological consulting investigations associated with development, which have resulted in the location of 77% of the sites in the region.

Aspects of the nature and distribution of Hunter sites are discussed below, excluding **Aboriginal Places** which are sites of importance to Aboriginal people today and which may be natural features of the landscape rather than archaeological sites.

### **Site Types and Distribution**

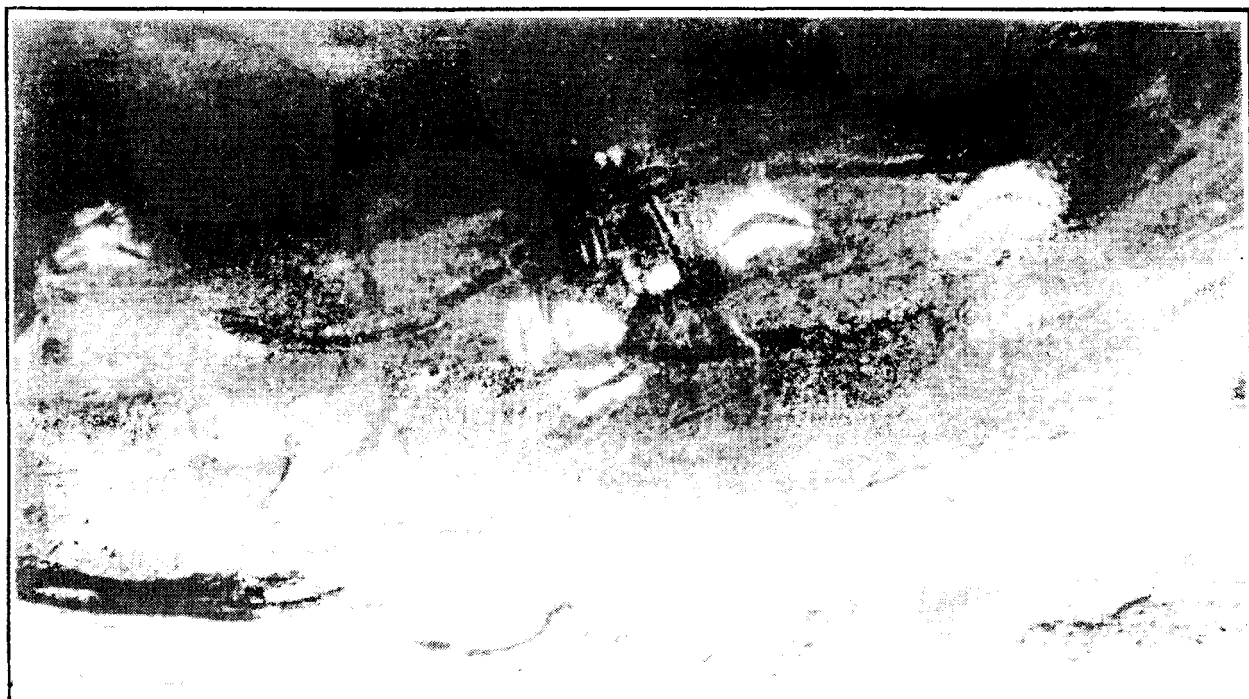
While some types of sites may occur anywhere the distribution of others is affected by environmental and cultural factors.

**Scarred Trees** are distributed throughout the area, having been found at Cassilis and Ulan (Pl 20), on the Isis River, in the Belltrees area, Muswellbrook, Rouchel Brook, Singleton, Maitland, Carrington on the north shore of Port Stephens, Nelson Bay, and near Lake Macquarie. Scarred trees are so called when the scar is the result of the removal of bark, using a stone hatchet or in the nineteenth century a metal axe, for the production of items such as shields, water containers, canoes and roofing for shelters. Scars may also result from the extrication of possums or honey from trees, and be in the form of toe holds in the trunk or larger branches. Many layers of bark have grown on these trees since they were cut by Aborigines, so that the margins of the scars tend to be deep and rounded.

**Carved Trees** were often associated with ceremonial grounds and in areas of strong Kamilaroi influence also with burial grounds. Designs were carved on wood of the trunk exposed by first cutting back the bark. Sometimes representations of animals (Pl 16), these designs were more usually geometric and linear patterns in motifs which included circles, spirals and concentric lozenges, and diamonds (Pls 18, 19). They resembled the patterns with which wooden weapons and skin cloaks (Pl 9) were also decorated. The latter were described by early observers as indications of ownership, and the marks carved on trees at a grave may



Pl 20: Scarred Trees at Ulan.



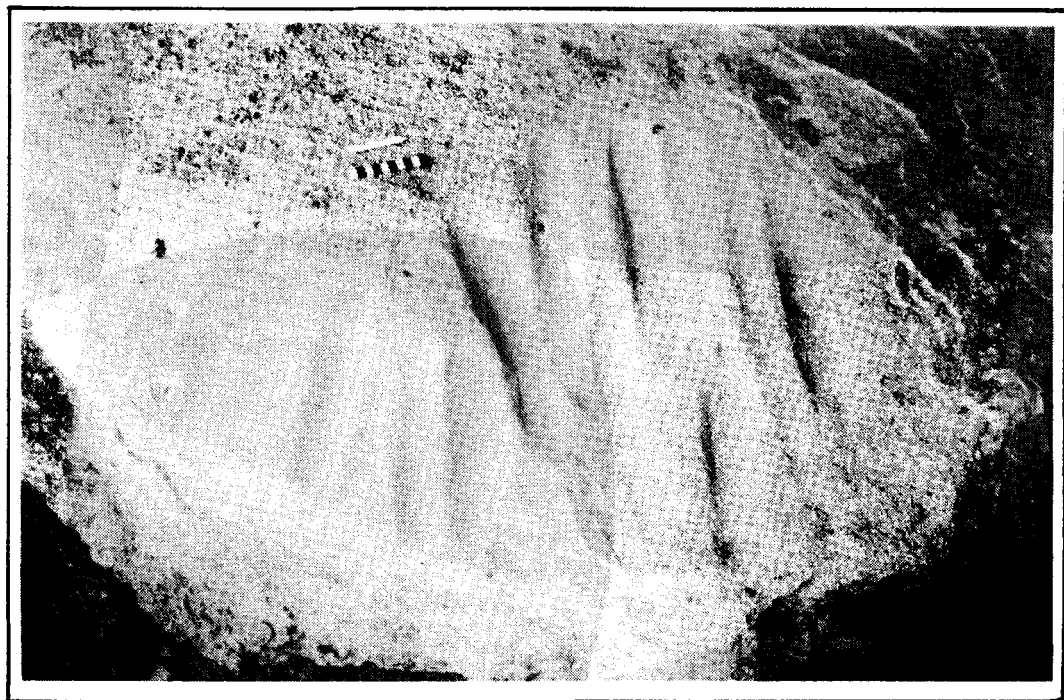
Pl 21: Rock Paintings at Milbrodale (McCarthy 1962).

have signified the kinship or totemic affiliations of the deceased. Few carved trees still exist anywhere in their area of distribution - eastern and central New South Wales and south-east Queensland - and none are known in the Hunter area. A survey of carved trees undertaken primarily from literary sources (Bell 1982) indicates past locations of carved trees in addition to those already referred to at "Kelvinside" and at the junction of the Page and the Isis Rivers - near Wybong, south of Bulga, near Ellerston and Gresford, several in the Gloucester area, another at Minimbah on Wallis Lake, and at North Arm Cove on the north shore of Port Stephens. Trees of various species, including iron bark and smooth barked eucalypts and box, were so scarred and carved. Scarred trees represent 2% and carved trees even less of the total number of sites in the region.

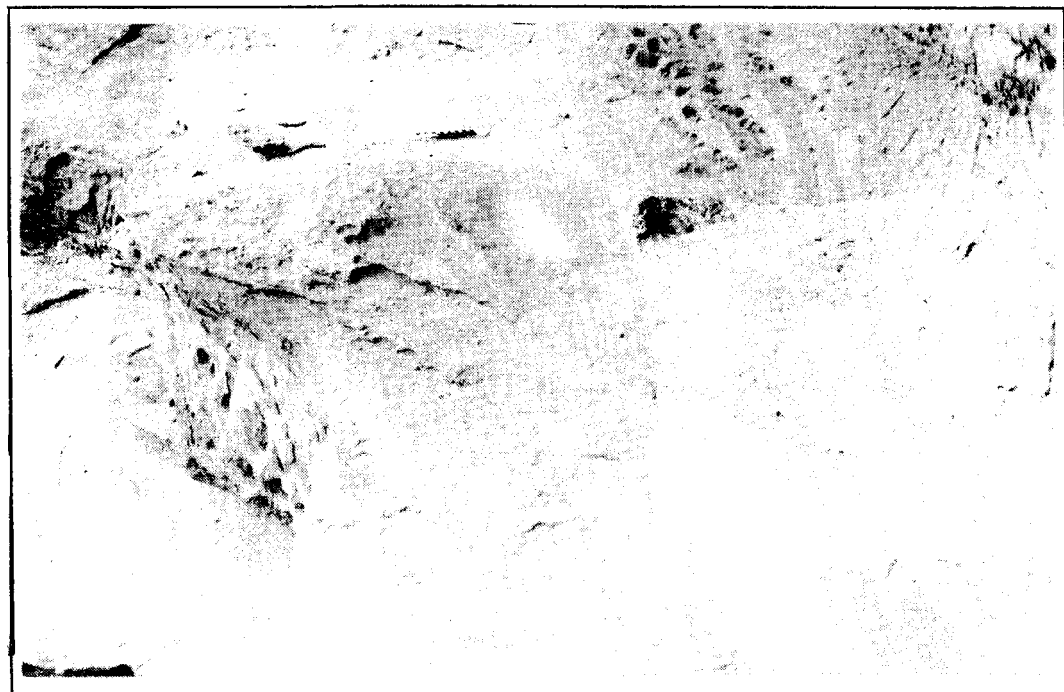
**Burial** sites may be of individuals or they may form complex burial grounds, and those found in the region have been of two types. A number of burials have been exposed in coastal sands - at Swansea, Anna Bay, Fingal Bay, and at several other locations between Tea Gardens and Forster. There have been instances, for example at Williamtown, of only skulls being found. Burials have usually only been found by accident as a result of excavation, as happened during the construction of a new housing division at Singleton, or erosion, as they are rarely associated with enduring surface features. The other form of burial was in caves, where there is suitable rock outcropping. This method is not referred to in the early literature, but such burials, with the body wrapped in bark, have been found near Owens Gap and Denman.

Ceremonial or **Bora Grounds**, consisting only of one or two (Pl 16) cleared circular areas enclosed by low earth mounds and linked by a path, are vulnerable sites, and many have disappeared under the plough and bulldozer. Often difficult to distinguish after all this time, they are most likely to be visible after a fire or during a drought. One site has been identified near Gloucester, but many others, for example at Stroud, Port Stephens, Gresford, Wybong and Bulga, can no longer be precisely located. **Stone Arrangements** are sometimes associated with ceremonial grounds, and at North Arm Cove and Carrington structures have been found which may be of Aboriginal origin; other sites were reported east of Wallis Lake and on Broughton Island during the 1940s.

**Cave Paintings** are found on the walls of sandstone rock shelters. Such sites occur towards the north west, on Narrabeen sandstone formations, in the Goulburn Valley at Ulan and Kerrabee, on the Merriwa River and on Widden Brook. Many are also known on Narrabeen and overlying Hawkesbury sandstones of the mountains which constitute the southern boundary of the Hunter region, around Milbrodale (Pl 21) and more particularly in the Wollombi Brook catchment. Overall they represent 9% of the sites occurring in the region. The simplest and most common motif is the hand stencil. The hand is held against a rock face and stencilled by blowing or spraying pigment around it to make an outline. Feet, weapons and other equipment were also sometimes stencilled in this way. The pigments - red and yellow ochre, white pipeclay or gypsum and charcoal - were ground up, mixed with water, and applied with fingers or twigs; sometimes dry pigments were rubbed directly onto the rock, making a "drawing" rather than a painting. Charcoal drawings are common in the Sydney region and also occur on the Merriwa River. Subjects depicted



Pl 22: Axe Grinding Grooves on the Goulburn River near Kerrabee.



Pl 23: Ovate Grooves near the Merriwa River.

included supernatural and human figures, animals, birds and linear patterns and designs. As yet no detailed investigation has been made of the art of the region to determine any affinities of art in surrounding areas.

**Rock Engravings** are with few exceptions confined to Hawkesbury sandstone formations to the south of the region, none occurring north of Broke except one unconfirmed site reported near Gundy (Badier 1939), and they represent only 1% of the total. In the Sydney-Hawkesbury region many thousands of motifs were engraved on outcropping flat sandstone surfaces. Outlines were made by pecking a row of pits which were joined up by rubbing to form a continuous groove. Some appear to represent human, animal or mythical figures, tracks weapons or implements, while others are apparently abstract designs or patterns. Some figures are very large, several metres in length.

**Axe Grinding Grooves**, produced during the manufacture of edge ground artefacts, occur on flat areas of sandstone. They are generally adjacent to river or creek beds as water is essential to the grinding process. Their distribution is not nearly so formation-specific as engravings - they occur on both Hawkesbury and Narrabeen formations, as well as on sandstones present in Singleton, Newcastle and other Permian Coal Measures. They represent 5% of the sites in the region. Where there is no suitable rock outcropping transportable pieces of stone were used. There are many such sites in the Hunter Region, for example on the coast south of Port Stephens, within the City of Newcastle, around Lake Macquarie and Wollombi, and near Branxton, Lochinvar, Singleton, Jerrys Plains, Kerrabee (Pl 22) and Ulan. Such grooves can occur singly or in groups of up to several hundred, as they do at one site on one of the relatively rare sandstone outcrops in the Merriwa basalt country, on the bank of the Munmurra River, where over 300 grooves were counted (Koettig 1984). Wider, almost ovate grooves, which have been found on loose slabs and on rock shelves inside shelters at Ulan, on the Merriwa River (Pl 23) (Haglund 1981a, 1981b) and at Hebden near Ravensworth, were most probably used for grinding seeds. Upper grindstones or mullers have been found on the Goulburn and Merriwa Rivers and also near Warkworth.

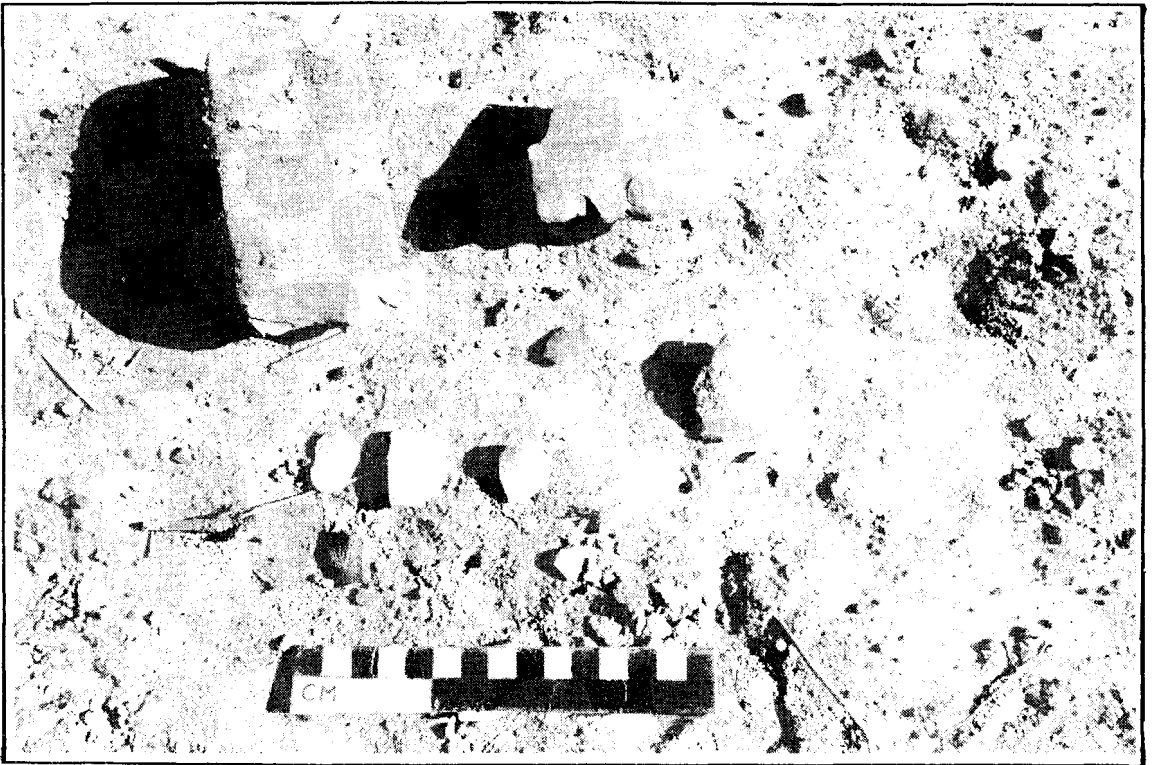
**Quarries** are sites where outcrops of bedrock have been used by Aborigines as raw materials for the manufacture of stone artefacts. Exposures of quarried silcrete, chert, quartz and volcanic rock have been found near Kerrabee, at Rosebrook and at Nelsons Plains. Only four quarries are known in the region, possibly because the most widely used raw materials, namely indurated mudstone and silcrete, are readily available in the gravels of the Hunter and other major streams.

**Wells** are usually rock waterholes about 50cm in diameter which are probably natural in origin, but which the Aborigines have used and maintained, often covering them with a stone slab. Examples have been found on the Merriwa River.

Any brush weirs, such as that observed by Grant (1803:154) or rock **Fishtraps** erected in streams by the Aborigines would soon have been destroyed by the big floods for which Hunter streams were noted. Only on Broughton Island does evidence remain of stone structures devised to strand fish carried in on the tide.



Pl 24: Midden deposit exposed in a steep bank on the western shore of Lake Macquarie.



Pl 25: Stone artefacts found on Ramrod Creek near Muswellbrook.



The most commonly occurring sites in coastal and estuarine regions, of which 58 were known in September 1984, are **Middens** which are deposits consisting mainly of shells - the remains of meals of shellfish. Numerous middens occur intermittently along the coastal strip of the Hunter Region, around the shores of Lake Macquarie (Pl 24), the Hunter estuary, Port Stephens and Wallis Lake. In the Hunter Region middens are confined to the coastal areas, although they can occur wherever freshwater mussels were to be found, on the banks of streams and swamps. Middens may also contain fish, animal and bird bones and charcoal from cooking fires. Stone flakes and tools are often present, particularly in larger sites. Midden deposits can occur in shelter sites, as is frequently the case in the Hawkesbury sandstone outcrops of the Gosford-Sydney region. In the Hunter area however fewer habitable shelters occur near shellfish resource zones. Other food remains and stone artefacts do occur in **Occupation Deposit** found in many shelters in the Goulburn Valley and in the southern mountains, particularly around Wollombi. Midden and other occupation deposit may be stratified and permit by archaeological investigation the determination of datable sequences of occupation.

In the central lowlands area of the Hunter Valley the predominant archaeological site type is the **Open Site** or **campsite**. Sixty percent of all sites in the Hunter region are open sites and of these the majority have been found in this area. These sites, which have archaeological remains in the form of stone artefacts and sometimes also hearths, usually occur as scatters of artefacts (Pl 25) in areas where the ground surface is exposed because of lack of vegetation, or where it has been lowered by erosion or disturbed for example by ploughing. Artefacts and hearth material might also occur embedded in sediments and be exposed in sections, and such sites are described as being stratified. They can occur anywhere not too far from water but the bulk of them have been found on the floor of the Hunter Valley, in the Singleton-Muswellbrook-Jerrys Plains area, especially along the creeklines and commonly at creek junctions, where there are extensive areas of flat well-drained land suitable for campsites. The fact that so many sites have been found there arises largely from the number of archaeological surveys undertaken in association with mining development. Another factor is the degree of ground visibility resulting from the extensive sheet and gully erosion occurring on soils covering the Permian Singleton Coal Measures (comprised of sandstone, shale, mudstone, conglomerate and coal seams) which underly this area, extending north along the valleys of Kingdon Ponds and the upper Page River to Murrurrundi at the foot of the Liverpool Range.

Typically in this section of the Hunter Valley lowlands there are two major soil depositional units. An upper grey to buff Unit A, which commonly contains gravel but more generally fine sand and silt, is distinctive from the underlying unit. It is usually less than 50cm thick and is in the "cumulic" stage described by Walker and Coventry (1976). This unit, which tends to be discontinuous especially on hillslopes, overlies a brown to red gravel rich clay Unit B, with evidence of deep weathering and strongly contrasted horizons. Profiles in the cumulic stage are generally modern to Holocene in age (ie less than 10,000 years old), whereas high contrast solum profiles tend to be

Pleistocene in age. Open sites tend to occur within Unit A deposit and are exposed often only when this is disturbed or, if it is absent, artefacts can be found resting on the Unit B surface. So far no artefacts have been found in situ within the Pleistocene deposit.

Thus in the mining triangle, where many archaeological surveys and a number of excavations have now taken place, large numbers of stone artefacts have been found exposed in the erosion occurring along gully banks. However surveys north east of Muswellbrook, along the upper Hunter River to the eastern watershed, have indicated much less erosion and much less evidence of Aboriginal campsites (Brayshaw 1981b, 1982). From this one might conclude that the relative dearth of Aboriginal sites indicated a very small or only transient occupation of the area by the Aborigines, were it not for the ethnographic record. Early descriptions of ceremonial and burial grounds, rock art, carved trees and ground art suggest a sizeable and persistent Aboriginal presence with established ritual sites and procedures.

Variation in the number of visible artefacts is undoubtedly influenced by soil erosion, the degree and nature of which is very much a function of bedrock formations and associated soil types. Bedrock in the north eastern mountains area is of older Carboniferous, Devonian or Ordovician formation, with superimposed Tertiary basaltic lava on the Mount Royal Range. Some of the soils overlying these formations are very resistant to erosion under natural conditions, losing only about 300 kilogrammes per hectare per year, compared with dry matter production of about 3 tonnes per hectare per year. Thus throughout much of the region any artefacts left by the Aborigines would be progressively covered over at a faster rate than would be the case with less stable soils, and exposed less often. Pasture improvement would increase the rate of aggregation. Aerial spreading is mostly used in the area, but the once only ploughing otherwise associated with the process would be unlikely to expose artefacts so covered.

A similar lack of soil exposure, with a low number of artefacts, has been found on the Tertiary basalts of the Merriwa Plateau (Koettig 1984), where many areas of high artefact potential had been ploughed since the 1830s.

Open sites do occur on these formations, also on Permian Newcastle and other Coal Measures lower down the valley, on Triassic sandstone formations of the Goulburn Valley and south of the Hunter River, and on Quaternary alluvials along major watercourses and on the coastal plains. In none of these areas does the nature and extent of erosional exposure compare with that of the Singleton Coal Measure formation of the central lowlands, and in none of these areas have so many open campsites containing so many stone artefacts been found.

Detailed archaeological investigations and raw material analysis undertaken over the last two years have indicated that, while different suites of raw materials were available in different areas throughout the Hunter region, local sources were used almost exclusively (Hughes 1984). An implication of this is that since the rocks available in the northeastern mountains are harder than those found for example on the Singleton Coal Measures, they would have been more difficult to

quarry and to shape, and also more durable, and possibly therefore less numerous.

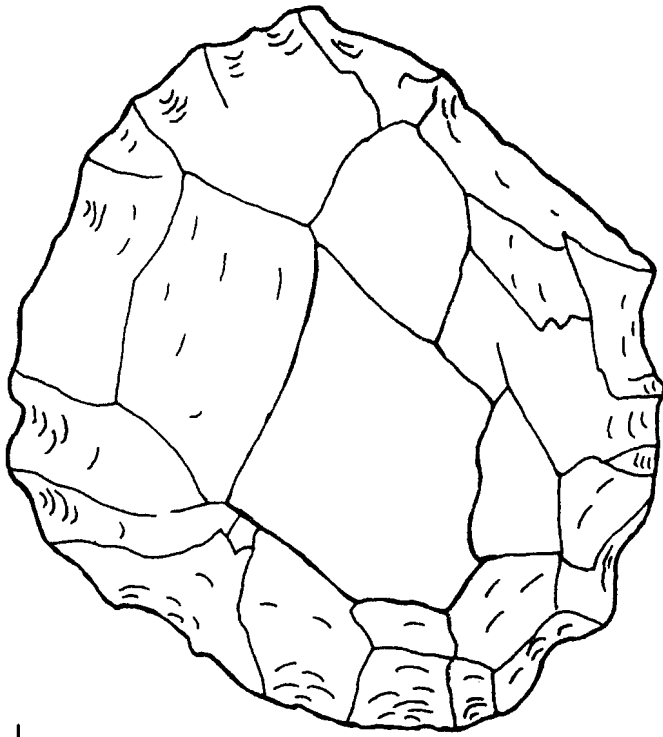
The degree to which the occurrence of so many open sites in the central lowlands is a function of the landform and bedrock, or whether it represents a relatively large population, or a population with a particular interest in stone artefacts, or some other cultural activity such as burning of the landscape which has contributed to the nature and visibility of the archaeological record, has yet to be determined.

The raw material analysis demonstrated that the same suite of raw materials occurred throughout the central lowlands, at least up from Branxton, and in the central Goulburn Valley. The stone artefact assemblages are also very similar, including the distinctively large horsehoof cores (Fig 4) which occur in many sites in these areas. Large ovate grinding grooves also occur in both the central lowlands and the Goulburn Valley. Since the grinding of seeds, in particular grass seeds, is such an important element of Aboriginal subsistence economy on the grassy plains to the northwest and west, it is tempting to see these large grooves as cultural pervasion of the region from the inland. Also to be viewed in this light is the occurrence of stone artefacts called "tulas" at Aberdeen, Ravensworth (Fig 4) and Warkworth. Tulas were hafted and used for cutting, shaving and incising. They have long been regarded as an important technological and cultural indicator on archaeological sites. Both their known distribution at the time of contact and their archaeological occurrence is focussed in central Australia (Mulvaney 1975:77).

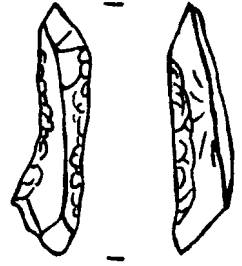
The archaeological record therefore, in indicating links between the Hunter central lowlands - Goulburn Valley area and inland regions, substantiates to some degree the picture drawn by the ethnographic literature of Kamilaroi systems and practices being well entrenched in the Goulburn and upper Hunter Valleys, permeating even to the coast and still in the process of expansion at the time of the European arrival.

## **Regional Prehistory**

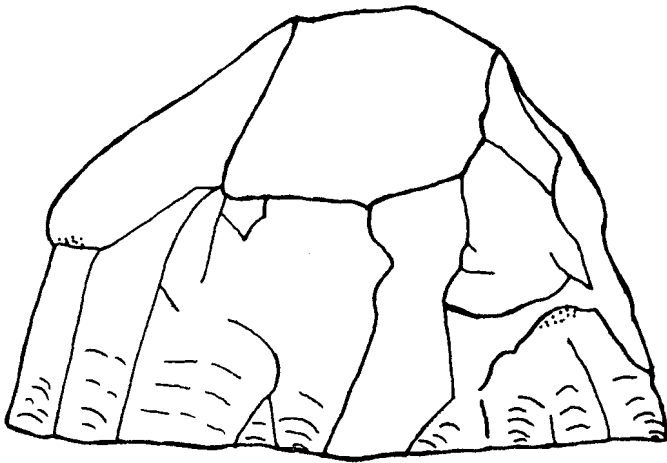
The prehistory of Australia is generally divided into three chronological phases on the basis of differing assemblages of stone tools (Lampert 1971, Mulvaney 1975). Pleistocene and early Holocene assemblages are characterised by large stone cores and flakes. Between 4500 and 5000 BP (before present), a variety of small finely chipped stone implements called backed blades (Fig 4) (including geometric microliths, eloueras, and Bondi points, which may have been used as spear barbs) occur as an additional component to the older industry in sites across the continent. The period from about 1500-1000 BP to the time of European settlement is marked by a gradual reduction in the number of backed blades and other finely retouched pieces, and an associated proportional increase in the use of non-specialised small tools and quartz as well as organic less preservable raw materials such as bone, wood and shell for tool making. Regional variants of these assemblages have been documented, nevertheless the three phases are recognised in sites widely scattered throughout the continent.



a) Tula



b) Core



(all actual size)

c) Bondi Point



d) Geometric Microlith



Fig 4: Some stone artefact types found in the Hunter Valley  
 a) on the bank of Bayswater Creek near Ravensworth  
 b-d) near Rix's Creek north of Singleton.

The earliest records of work undertaken in the Hunter region have been provided by R.H. Mathews, a surveyor working in NSW and Queensland between 1879 and 1910. While based at Singleton he recorded a number of shelter sites containing paintings and engravings in the Bulga-Milbrodale-Wollombi area (Moore 1970:29). In 1939 McCarthy made an archaeological reconnaissance of the area as a result of which he described an assemblage of stone tools collected from eroded surfaces along the "200 foot contour" near the Hunter River to the south west of Singleton (McCarthy and Davidson 1943).

In 1965 Moore commenced a long term research project in the Hunter Valley at the end of the first stage of which three sites had been excavated - two in the Hunter Valley itself and one on the divide near the headwaters of the Goulburn River. The latter part of the research programme was concentrated on the location of datable archaeological sequences in the Wollombi and lower Macdonald River valleys (Moore 1970, 1981). Other shelter sites have since been excavated in the Goulburn River area by Haglund (1981a, 1981b). On the coast the base occupation layer of the midden at Swansea excavated by Dyall and Bentley (1973, 1975) was dated to about 7,850 BP; disturbance of the deposit and the possibility of contamination of the dated material makes this date somewhat tentative. All of the shelter sites within the Hunter Valley, including Haglund's on the Goulburn, had basal dates of no more than 4000 years BP, while the site on the divide had a basal date of 5-6000 BP.

Artefacts at the inland sites included backed implements characteristic of Bondaian assemblages of south eastern Australia. Analysis of the assemblages from Sandy Hollow I, excavated by Moore (Hiscock 1984) has shown three discernable technological phases. From the base of the deposit upwards these were a) pre-Bondaian without backed blades, b) phase I Bondaian with numerous backed blades and c) phase II Bondaian with few backed blades. Radiocarbon dates obtained by Moore (1970) indicate the transition from a to b occurred at about 1300 BP and the b-c transition about 800 BP. Evidence from other shelter sites tends to confirm the timing of these transitions. At Sandy Hollow I there is no evidence for later occupation without backed blades, as for example at Mangrove Creek (Attenbrow 1982) to the south east and at Capertee to the south west (Johnson 1979), and backed blades have also occurred near the surface of shelter and open site stratified deposits elsewhere in the Goulburn Valley and in the upper Hunter (Haglund 1981b, 1982). This suggests that the Bondaian industry may have become established relatively later in the Hunter region and persisted into relatively recent times.

Assemblages of a number of open sites in the Hunter central lowlands have been compared with the technologies seen at Sandy Hollow I, and most of the sites dated to phase I Bondaian, but a small proportion dated to pre-Bondaian (Hiscock and Koettig 1985). Hiscock (1984) suggests that there is no evidence that the pre-Bondaian assemblage is older than 5,000 years.

The occupation of the Hunter region has to be seen in the context of the known history of occupation of south eastern Australia of at least 20,000 years. Attenbrow (1982) found, in the upper Mangrove Creek

catchment, less than 10km south of the watershed between the Hawkesbury and Hunter Rivers, that most of the evidence for occupation of the valley dated from the last 5,000 years. However three of the 16 shelters she investigated contained older evidence and one, Loggers, extended back beyond 11,000 years. On the Liverpool Plains to the north west, around the margins of springs, occupation has been shown to have occurred well back into the Pleistocene period, from at least 19,000 years ago (Gorecki et al 1984).

It seemed most unlikely that this "spacious, fertile and beautifully picturesque valley" (Dangar 1828:43) would have remained unoccupied for thousands of years while people were living as close as Mangrove Creek and the Liverpool Plains. For a period of time archaeologists felt themselves to be merely scratching at the surface of Hunter Valley prehistory, as evidence of earlier occupation continued to elude them. Recently, however, with a Pleistocene date of >20,200 BP (Beta 50056), derived from charcoal associated with a hearth found a metre below the surface of an alluvial terrace on Glennies Creek, the Hunter region has assumed its expected place in the developing picture of ancient Aboriginal Australia.

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