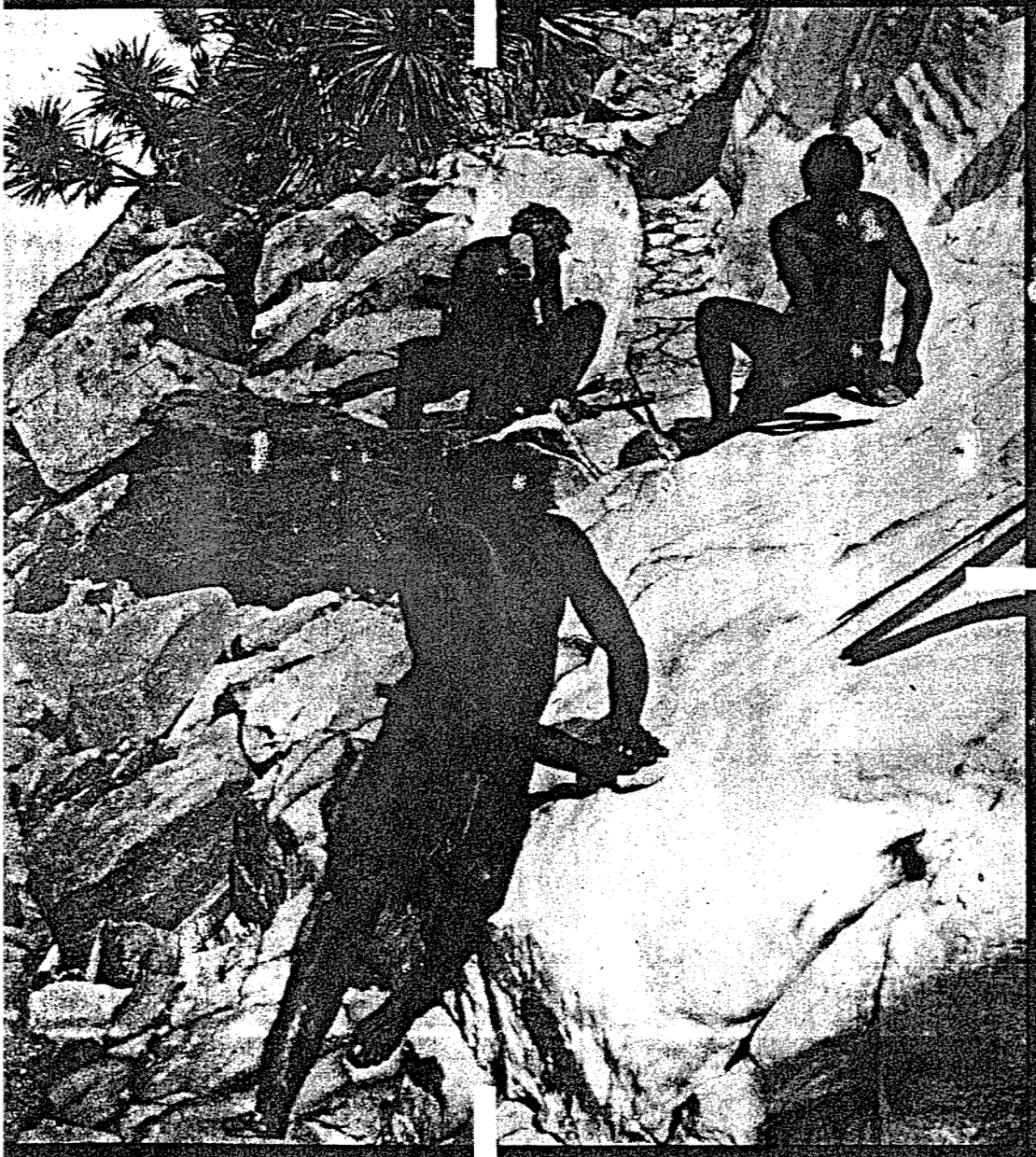
ABORIGINES 15

ABORIGINAL HERITAGE OF THE NORTH COAST



DEPARTMENT OF PLANNING

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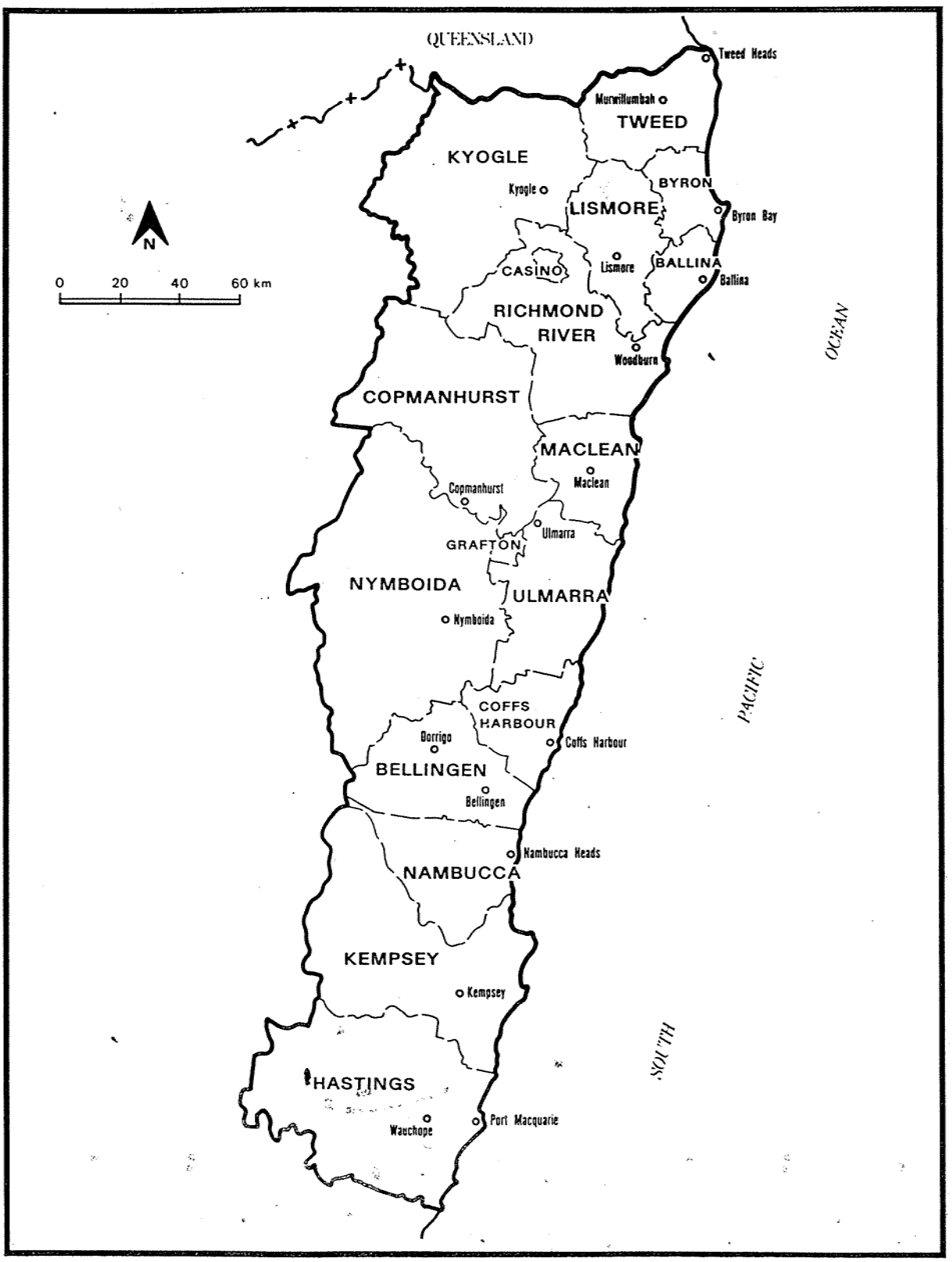
MAP 1
NORTH COAST REGION



1. INTRODUCTION

This discussion paper has been prepared by the Department of Planning and the National Parks and Wildlife Service, based on resource material prepared by Denis Byrne for the National Parks and Wildlife Service in 1988 (Byrne 1988).

It provides information on the Aboriginal Heritage of the north coast with the intention that this information will form the basis for discussion and provide a direction for future policy on the protection of this heritage.

This document will also play a role in the regional planning process. The Department of Planning is currently preparing an environmental study leading to the development of regional policies and, ultimately, a North Coast Regional Heritage Plan. For this reason it also contains basic information on the legal status of Aboriginal sites and policies for Aboriginal site management.

1.1 Legislation and Aboriginal Sites

The National Parks and Wildlife Act 1974 contains provisions relating to the protection of relics and Aboriginal places. A 'relic' is any deposit, object or material evidence (including skeletal remains) relating to the Aboriginal occupation of New South Wales. An Aboriginal place is an area which is gazetted by the Minister administering the National Parks and Wildlife Act if, in the opinion of the Minister, the area is or was of significance to Aboriginal culture.

Under the provisions of the National Parks and Wildlife Act it is an offence to collect artifacts from, or excavate an Aboriginal site without a permit from the Director of National Parks and Wildlife (sections 86 and 87). It is also an offence to damage, deface or destroy a relic or Aboriginal place without first obtaining the written consent of the Director (section 90). Furthermore, anyone who discovers a relic must report the discovery to the Director within a reasonable time of the discovery (section 91).

The Environmental Planning and Assessment legislation also recognises the need to protect the cultural and natural heritage of New South Wales. Under the Environmental Planning and Assessment Act 1979 there is provision for environmental planning before development. This act also obliges local councils to consider the impact of development on Aboriginal sites before granting development consent. Under Part V of the Act an environmental impact statement is required where development by a public authority is likely to have a significant effect on the environment. Such an environmental impact statement must contain an assessment of the likely impact of development on Aboriginal sites (Environmental Planning and Assessment Regulations, 1980, section 56e).

Aboriginal sites are also protected by federal legislation. The Aboriginal and Torres Strait Islander Heritage Protection Act 1986 provides for the preservation and protection of areas and objects of particular significance to Aborigines in accordance with Aboriginal tradition. The major purpose of this act is to allow Aborigines to apply to the Minister administering the act to seek the preservation or protection of significant areas and objects. This act operates concurrently with State acts but also allows the federal minister to halt development which will destroy or damage significant areas and objects if State legislation is not able to protect the areas or objects of concern.

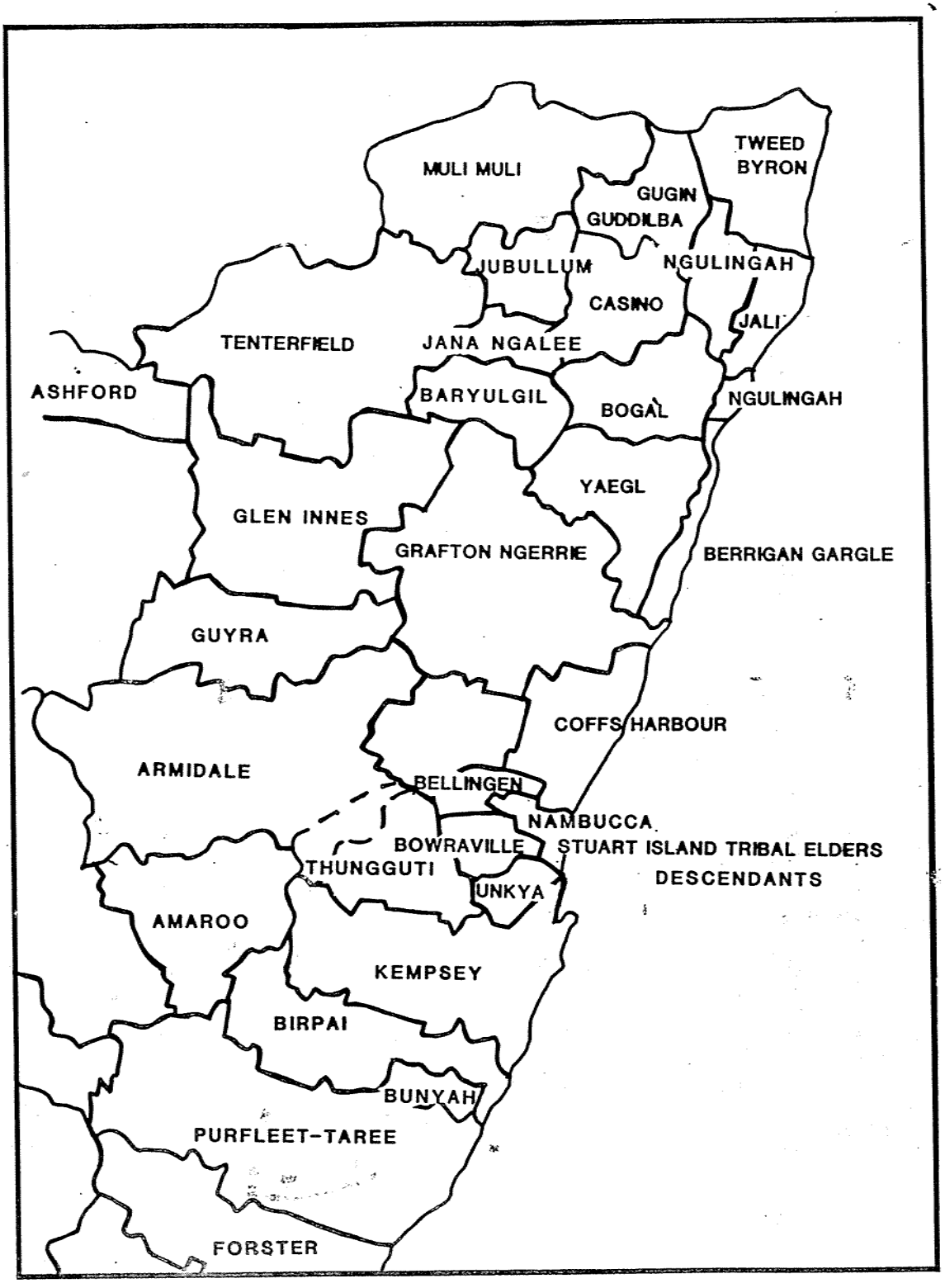
1.2 Land Councils and Aboriginal Heritage

The Aboriginal Land Rights Act 1983 established the Aboriginal Land Council system in New South Wales.

Land Councils represent Aboriginal community views on a range of issues, including Aboriginal heritage matters. Land Councils may also make claims for unoccupied Crown land which is not needed, or likely to be needed, for an essential public purpose. Private or leasehold land cannot be claimed under the Aboriginal Land Rights Act. Further, the act does not allow land claims to be made on the basis of the presence of Aboriginal sites. Nevertheless, Land Councils have taken a strong interest in the existence of such sites in their areas and have begun to maintain their own records of the location and condition of sites. The Councils see the sites as having an important role to play in the education of their young people.

All adult Aborigines in the state are eligible for membership of a Local Aboriginal Council, from which Regional Councils are elected. Regional Councils in turn elect the State Council. There are 30 local Aboriginal Land Councils in the North Coast Region.

MAP 2
LOCAL ABORIGINAL LAND COUNCILS: 1987



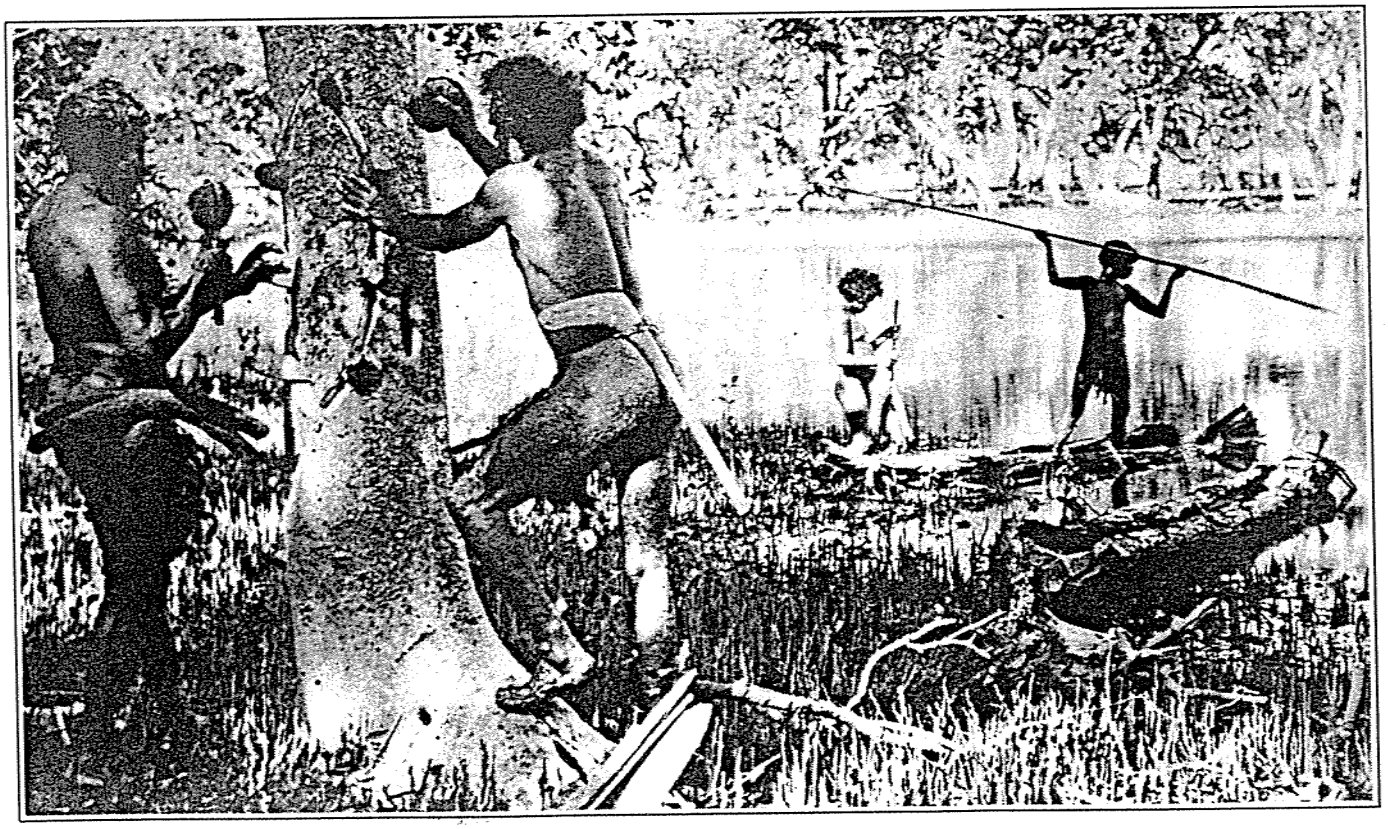
2. PREHISTORY

The earliest human presence in Australia has been dated to 38,000 years ago during a low sea level phase in the Pleistocene era when the sea stood 30-60 kilometres off the present New South Wales coast. It is likely that the earliest sites on the north coast are now tens of kilometres out to sea, being drowned as the sea crept inland about 14,000 years ago following the last glaciation.

During Pleistocene times the present coastal zone was probably little used. There are no sites in the region dating back to the Pleistocene and, of the many radio-carbon dated sites in eastern New South Wales, only two have Pleistocene dates - Burril Lake (20,000 (before present)) and Bass Point (17,500 BP). Occupation of these sites indicated only sporadic visits.

A Pleistocene site dating to 21,000 BP has recently been found on Stradbroke Island, near Brisbane. This indicates that occupation of the Moreton Region - and by extension the north coast of New South Wales - by Aborigines has a long history. Unfortunately, the unstable coastal landforms in the north coast region make preservation of sites of such antiquity unlikely. The oldest sites recorded in northern New South Wales are Seelands Rockshelter near Grafton and Stuarts Point shell midden near Kempsey: both are approximately 6,500 years old.

Recent research has suggested a dramatic increase in human population after about 5,000 BP. This may explain not only the large number of sites along the north coast which were first occupied after that time but also the increased intensity of use evident at a number of them. Most of the pipi middens on the north coast date from about 1,000 years ago and many from 300 to 500 years ago or even more recently. In prehistoric terms it seems reasonable to conclude that most



Removing a bark dish or shield from a tree using stone axes and wedges.
Photograph from Thomas Dick Collection, courtesy of the Australian Museum.

archaeological sites in the region are relatively recent.

Because they survive much better than any other prehistoric remains and because they were used by Aborigines from the time they arrived on the continent, stone artefacts have been used as chronological markers by archaeologists. In the deposits of many excavated sites, including those on the north coast, it has been possible to observe an early reliance on large tools with steep flaked cutting edges in the period before 6000 BP, after which they were replaced or supplemented by small 'microlithic' points and blades many of which probably served as spear points and barbs. The small backed blades continued to be used on the north coast until recently.

These changes show that Aboriginal lifestyle in the past was not unchanging. Aborigines did not simply adapt to the environment, they actively set about changing their habitat to suit their needs. Most spectacularly, they used fire to hunt animals and to encourage open woodland and grassland at the expense of closed forest. In some areas, the natural vegetation pattern may have been entirely altered by Aboriginal firing.

3. BACKGROUND

3.1 Tribal Boundaries

The distribution of Aboriginal tribes in the region is shown on map 3, taken from Tindale's (1974) 'Aboriginal Tribes of Australia'. The name spellings shown are those which have been most recently accepted. Tindale attempted to delineate tribal boundaries as they were at the time of European contact.

A major problem in delineating boundaries is that 'contact' produced rapid changes in Aboriginal territorial organisation. What is known of the original tribal distributions comes from the observations of early settlers who often had little idea of what a tribe was, often confusing tribes with clans and language with dialects, as well as using a variety of spellings for tribal names.

For the area of the Richmond and Tweed Valleys it has been suggested that Tindale's map might be modified by extending the boundary of the Kitabal tribe further south of Tabulum, giving wider boundaries to the Minjangable and extending the territory of the Jukambe tribe. Therefore Tindale's map should be taken very much as a general approximation of tribal/group distribution requiring considerable refinement.

During the first decades of European contact in the region, as a result of massacres by Europeans and introduced disease, some tribes lost all or most of their members. A smallpox epidemic in 1829-31 killed about 40 per cent of the population, particularly women and children. Later, in the 1880s, reserves were established and the remnant populations of different tribes were forced together. Later still many of these reserves were closed and their inhabitants placed in one of a number of larger reserves. This caused further mixing of tribal groups but, compared with Aboriginal communities elsewhere in New South Wales, those on the North Coast have survived well. Many groups were settled on reserves within their traditional territory and contact with the land and its known sites continued well into this century. As an example, ceremonies to increase fish species were taking place on the Richmond River in the 1920s and the last extensive initiation ceremonies in the region were held at Bellbrook and Nambucca as late as 1935.

Compared to some parts (eg, arid and desert areas) of Australia the tribal territories in the region are small, in keeping with the richness of the environment: the abundance and variety of food resources offered by the coastal waters and estuaries, the rainforests, woodlands etc. and the general ready availability of water.

3.2 Hunting, Fishing and Gathering

The nature of the diet changed with distinct changes in the environment in which people lived. On the coast fish were netted, speared and caught in stone traps. There is considerable variation in material culture associated with fishing along the coast. For instance, multi-prong spears were used in the Macleay Valley and south, but were unknown in the Clarence and Richmond valleys where a single, unbarbed wooden shaft was employed. Fish hooks were also used in the southern parts of the region but had no place in the toolkit of those further north.

Shellfish beds provided a huge store of high quality food and there is evidence that people could afford to specialise on one food type at a time - for example over ninety per cent of the midden at Wombah consists of oyster shells from the Clarence estuary. These coastal resources may have allowed people to congregate in large numbers and even permitted village-type settlements to be occupied for long periods.

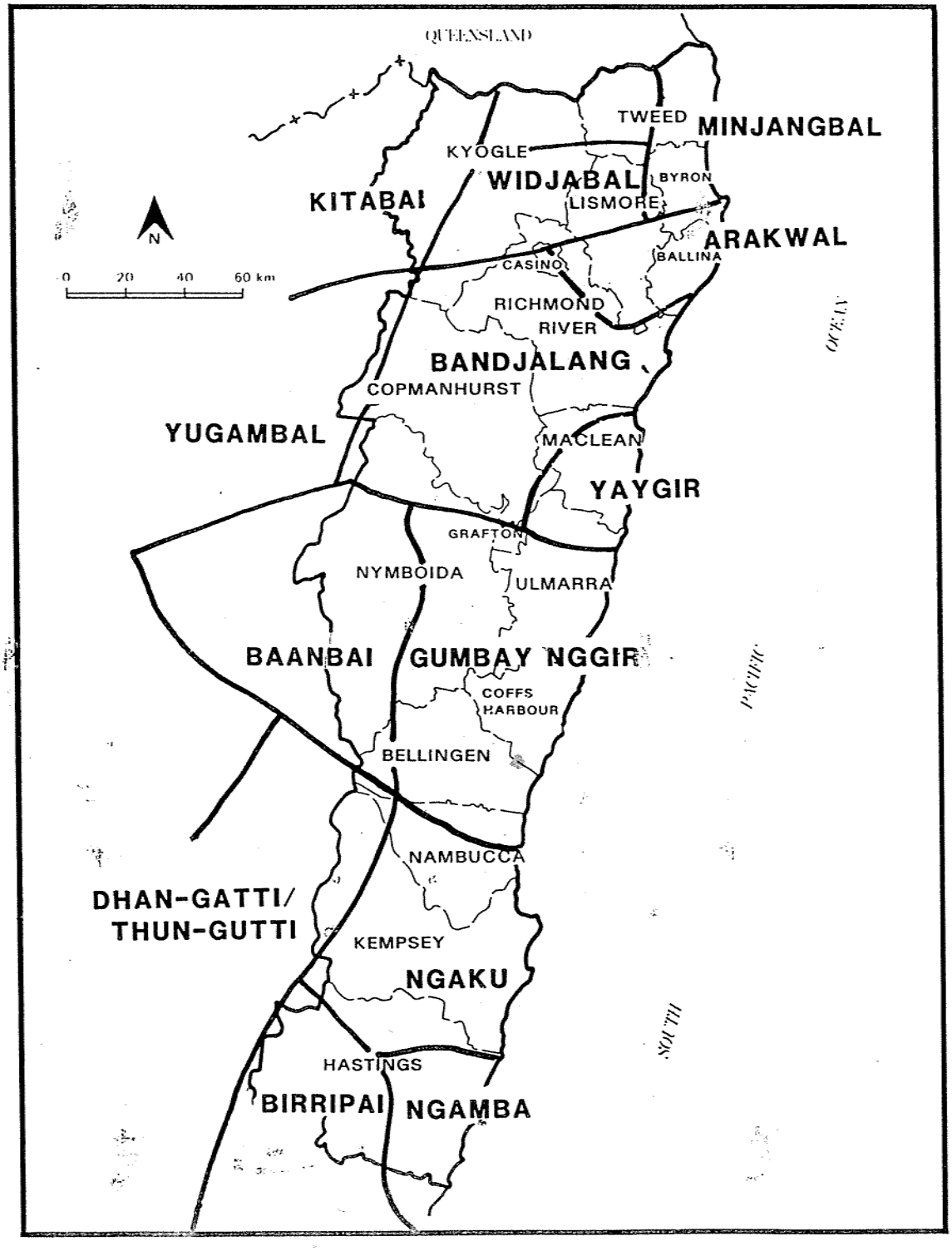
Larger game such as emu and kangaroo were hunted in the more open woodlands and grasslands while smaller game such as wallabies and possums were found in the forests. Early European settlers witnessed large hunting drives in which Aborigines used dogs and nets to catch very large numbers of small game in the scrub and rainforest margins. Other environments offered different hunting possibilities: the wetlands were teeming with wildfowl and their eggs and freshwater creeks were rich in fish and crustaceans. Flying fox camps were raided regularly.

In a diet of plant foods and meat, plant foods contributed at least 50 per cent. It has been estimated that at least 132 rainforest plant species were available as food (including fruit, leaves and roots) but only 30 are listed in the ethnohistorical records as having actually been eaten. The burrawang nut, bracken fern root and yams were important sources of starch.

3.3 Settlement Pattern

Human settlement is never random. People have definite reasons for being in certain places at certain times. These reasons give rise to a 'settlement pattern'. Aborigines congregated in large or small groups depending on the availability of food and social and religious factors etc.

MAP 3
TINDALE'S 1974 ABORIGINAL TRIBES OF AUSTRALIA - NORTH COAST EXTRACT
(USING MORE RECENTLY ACCEPTED SPELLINGS)



The Aboriginal inhabitants of the region were hunter-gatherers which implies they were mobile. While the distribution of sites in the region shows evidence of the activities of these people in every corner of the landscape, it is wrong to think that as mobile groups they were fully or even largely nomadic. While this was certainly the case in some of the harsher Australian environments, the north east of New South Wales was comparatively rich in food and water and people were able to live a more settled life.

People chose to make base-camps where great concentrations of food were available (eg on estuaries and inland along major rivers). These were the prime locations and many of the other sites scattered over the landscape, such as the art sites, ceremonial grounds, quarries and short-term campsites were used by people ranging out from, but still based at, these main settlements. At least on the coast, some settlements contained substantial structures which might better be called villages than camps.

Population densities are estimated at an average of one person per 0.4 - 2.6 square kilometres for the coast and one person per 5 square kilometres for the foothills. This is a high density for a hunter-gatherer population and it must relate to the rich food potential of the coastal zone. The key zones of concentration were the estuaries, the immediate coast and the river valleys.

Occupation sites are also found away from the coast and the main rivers. These are all relatively small and would have been used by hunting parties or groups engaged in activities such as obtaining raw material for stone tools or visiting ceremonial grounds or mythological sites.

There is a difference of opinion between archaeologists as to the original pattern of the movement between the coast and the more inland areas. One possibility is that groups moved on a seasonal basis, hunting in the foothills in winter and moving down to the coast in the spring to take advantage of the fish glut. On the other hand the coastal group of territories might have formed a block to movement by groups from the foothills.

It is likely that some form of inter-tribal agreement allowed access to coastal resources by foothills groups and vice versa. Such resource-sharing also involved trading items such as seafood, special stone types for stone tool manufacture, skins for cloaks and ochre for rock art and body painting.

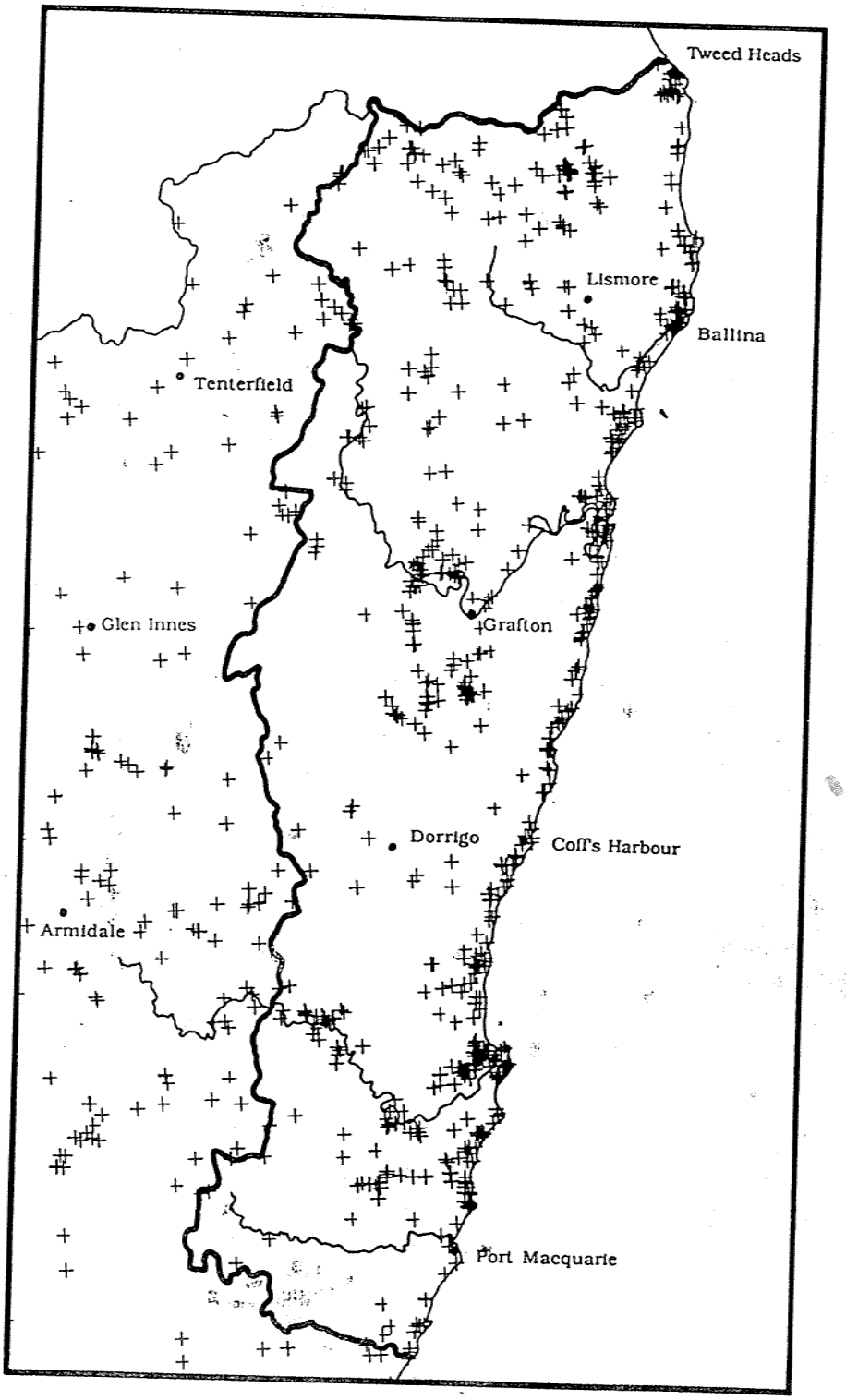
There are several references to 'villages' on the coast in the records of the earliest explorers. These contained solidly constructed huts capable of holding up to 15 people. In a number of cases these villages would have been close to fish traps and it has been suggested that the great output of such traps may have been sufficient to support these settlements.

Table 1 lists the number of sites recorded in the region as well as a percentage of the total.

TABLE 1: ABORIGINAL SITES IN THE REGION

	Total	%
Middens	306	28.9
Rockshelter middens	1	0.1
Open sites	133	12.6
Rockshelter deposits	57	5.4
Oven mounds	1	0.1
Quarries	16	1.5
Ochre quarries	2	0.2
Axe grinding grooves	21	2.0
Scarred trees	55	5.2
Fish traps	2	0.2
Waterholes	3	0.3
Rockshelter art	66	6.2
Rock engravings	22	2.1
Carved trees	22	2.1
Burials	85	8.0
Bora grounds	102	9.6
Stone arrangements	46	4.3
Mythological	109	10.3
Contact sites	9	0.9
TOTAL	1058	0.9

MAP 4
ABORIGINAL SITES OF THE NORTH COAST
RECORDED IN THE NPWS ABORIGINAL SITES REGISTER



4. ABORIGINAL SITES

4.1 Rock Shelters and Open Sites

Occupation sites are places where people have camped for any period of time.

Early explorers on the coast mention 'villages' containing solidly constructed huts. At the other extreme are sites where small groups may have stopped to butcher and cook game, moving on immediately afterwards. In between these extremes are the thousands of sites used as home bases for a few days or weeks and returned to regularly as groups moved around their territories to exploit the changing availability of food and water.

Occupation sites far outnumber any other site type (nearly 500 have been recorded in the region). They reflect the everyday existence of past populations. Taken individually they can tell us what people at a particular place and time were eating, where they were hunting and what they were using for tools. Taken collectively they form patterns revealing areas or environments which were most favoured and most densely settled.

Occupation sites can be separated into two main types: rock-shelters and open sites (which would include villages). While this division has more significance for archaeologists than for the people who live at the sites, the distinction has been important in the amount of attention each type has received in the past.

Rockshelters are attractive as camping places in that they provide ready-made shelter and relatively flat surfaces which are generally dry. The likelihood is that where shelters exist, and they fulfill certain requirements such as size, they were at some stage inhabited.

The attraction of rockshelters for the archaeologist is that, because of the limited interior space, the occupation remains are more likely to have built up into an archaeological deposit than is the case at most open

Aboriginal Bark Hut.
Photograph from Thomas Dick Collection, courtesy of the Australian Museum.

sites. This explains the larger number of archaeological excavations which have taken place at rockshelter sites compared to open sites.

Another characteristic of rockshelters is that they are easy to find, therefore a much higher proportion of existing shelters is likely to have been recorded than of existing open sites.

However, Aborigines in this region would have spent much more time occupying open sites than shelters, largely because rockshelters only occur in certain geological situations such as the belt of sandstone ridges flanking the Clarence River from Grafton westward to the foothills. In most areas of the region rockshelters simply do not exist.

Open sites typically consist of scatters of flaked stone tools and perhaps bone remains and charcoal. They are obviously more exposed to weathering than remains in rockshelters and often this means that no actual occupation deposit survives. Early illustrations and descriptions show open campsites to have consisted of shelters of branches and bark surrounding a central area where cooking and other domestic and social activities took place.

Most open sites and rockshelter deposits are identified in the field by the presence of stone artefacts at the surface. Most frequently stone tools were used for manufacturing the many wooden and bone artefacts which were part of the Aboriginal tool kit (eg, boomerangs, shields, bowls and awls for skin-working). Stone was also made into tools with flaked or ground cutting edges which served as projectile points hafted onto spear shafts and blades for butchering animals.

The 140 open sites and 76 rockshelters recorded in the region are likely to be only a small fraction of the number of occupation sites actually existing. In an equivalent area on the south coast of New South Wales more than twice as many sites have been recorded (343 open sites, 107 rockshelter deposits, 641 middens).

Rockshelter deposits are partly enclosed and hence partly protected but open sites are not only exposed to erosion (eg natural weathering) but to damage by field cultivation, road construction, housing developments and a myriad of other modern land use impacts. It is likely that as many as 60 per cent of open sites and 30 per cent of rockshelter deposits recorded in the region are in a disturbed condition. While sites may be identified because of this disturbance much of their scientific value is lost by it.

4.2 Middens

Middens are the accumulated remains of the exploitation of shellfish beds. With over 300 midden sites recorded in the region they are the most common type of occupation evidence. Their size depends on whether people returned to the same spot repeatedly over the years to feast on the shellfish or whether they are the remains of only a few meals. The largest middens are found on estuaries such as at Stuarts Point on the Macleay where linear mounds of shell over a metre high stretch for several hundred metres. Many of these sites have been destroyed through their use in the nineteenth century for lime and road making.

Smaller middens consisting of thin layers of pipi shell are commonly seen exposed in the foredunes of the long sandy beaches which are such a feature of the north coast. Perhaps as many as half the pipi middens of the region were destroyed during the sandmining of the 1960s and 1970s.

While shells make up the great bulk of the middens these sites can also contain fish bone, charcoal and, sometimes, the bones of land mammals, showing that the people camping at such sites were drawing food from a range of environments. Stone tools and human burial remains may also be found at middens.

The concentration of shells produces a high calcium carbonate level in the deposit and thus provides better preservation conditions for bone than would be found, for instance, in most rock shelter deposits.

Some 18,000 years ago the sea was 100 to 150 m lower than it is now. Since the sea reached its present level around 6000 years ago, after the end of the last glaciation, it follows that most of the middens on the present coastline will be younger than 6000 BP, and that many older middens may lie submerged. Middens on the Macleay are known to be older than 5000 years and these are the oldest coastal sites known in the region.

Middens consist mostly of food refuse and they have been overshadowed in the public eye by more spectacular sites such as paintings and bora grounds. They are, however, of great importance because of the amount and variety of information which they contain.

Gathering pipis on the North Coast.
Photograph from Thomas Dick Collection, courtesy of the Australian Museum.

4.3 Extraction Sites

Extraction sites are places where evidence of the way Aborigines used naturally occurring materials can be observed. Europeans have often been surprised at the detailed knowledge Aboriginal people had of the land and its resources. Without the aid of geological survey maps, Aborigines knew the whereabouts of dozens of different stone types, how they could be obtained and the best methods of flaking them.

Aborigines identified and named hundreds of different plants. They knew the growing cycle of plant resources and even how to render poisonous plants safe for consumption. The same applies to their knowledge of mammals, birds, fish and insects. This all amounts to a massive body of detailed knowledge acquired over hundreds of years of observation and experimentation, as well as the means of perpetuating that knowledge.

Another aspect of the Aborigines' exploitation of nature is the almost uncanny economy and the remarkable efficiency which characterises it. A good example is the care taken to choose pieces of bark or wood from trees which have the exact curvature for a canoe, bowl, boomerang or spear. This means a minimum of work in producing the finished object and also ensures the strength and resilience of the object.

With the destruction of the traditional lifestyle and the large scale movement of people to urban centres much of this knowledge has been lost. Nevertheless, many Aborigines living in the towns and villages of the region still regularly eat traditional food and fish at traditional fishing spots.

Stone Quarries

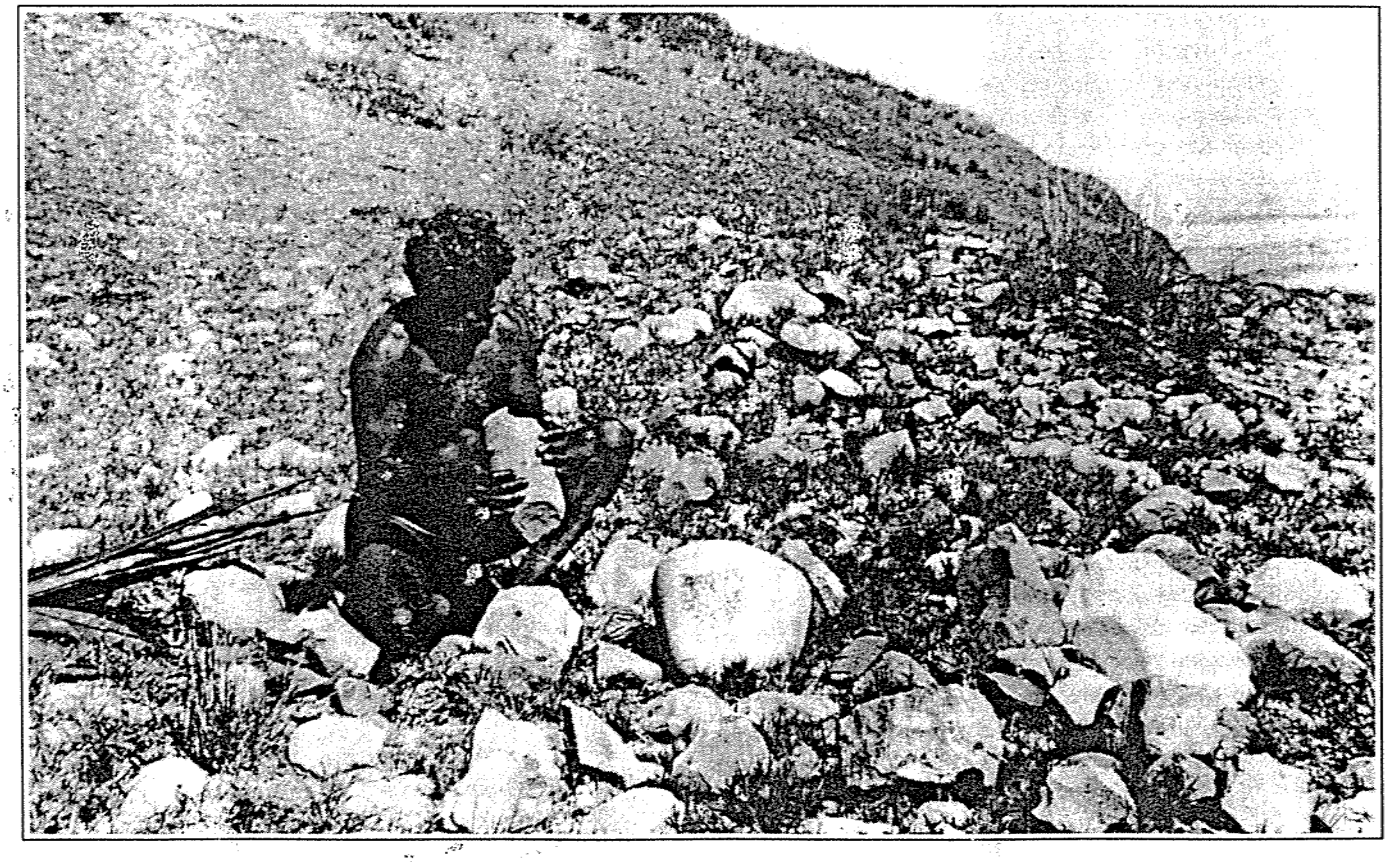
The term 'quarry' refers to places where stone has been obtained for manufacturing stone tools. Generally it refers to places where a relatively large quantity of stone has been obtained. Quarries are commonly located at points where the stone is exposed and accessible.

Though the term 'quarry' implies excavation, in most cases the stone was available on the surface in the form of an outcrop. The 'quarrying' activity consisted of selecting and breaking down the stone from its original form (boulders, rocks, pebbles) into pieces which could be worked into tools. Blanks were then further shaped or flakes were removed from prepared cores. These were then usually removed from the quarry for final working elsewhere.

Quarries are the first stage of a process which begins with the extraction of the stone, proceeds to the manufacture of the tools and their use and maintenance and ends with their discard from the toolkit.

Stone sources which have been quarried for the manufacture of ground edge axes have been located on the tablelands and western slopes. A detailed study of axe distribution in northern New South Wales identified the locations of 517 axes and classified them into 10 groups of stone types. The axes within some of these groups had a very wide distribution even though they probably originated from a single quarry. A number of source quarries were located by searching what seemed to be the central point of these group distributions for suitable outcrops of stone.

Raw material for pebble tools which are found in sites on the coast and tablelands came from pebble beds or from pebble beaches on the coast. There is a coastal quarry at Crescent Head where beach pebbles of shale, originating from the adjacent headland, were



Quarrying North Coast Stone.
Photograph from Thomas Dick Collection, courtesy of the Australian Museum.

obtained and worked. The pebbles were split and manufactured into pebble and flake tools.

A site at Schnapper Point was investigated in 1971 after storms had shifted part of a dune, exposing a surface scatter of pebble tools, waste flakes, cores and flaked and broken pebbles covering a large area. The scatter lay on a Pleistocene pebble beach and it seems the largest pebbles had been selected as raw material for a range of tool types. Since there was no evidence of this being a camp site (no middens or hearths), the people who exploited it were most likely camped nearby. Three nearby camp sites which have been dated were occupied during the 17th and 18th centuries AD and, since they contain similar stone tools to those found at the quarry, it is reasonable to link them together.

A total of 16 quarry sites have been recorded in the region so far. Finding the sources of stone used by the Aborigines can show how far stone has been transported from its point of origin. Even when the exact source cannot be found, it is possible to trace the locality from which it would have come. In this way clues about pre-European trade links and contact networks can be found.

Axe Grinding Grooves

Hundreds of years of grinding cutting edges onto stone axes and repeatedly resharpening them has left an impressive record in the form of grinding grooves worn into sandstone rock surfaces. The grooves are typically acentimetre or two in depth, a little more in width and vary in length from about 10 cm to about 30 cm. They are almost always found in groups of clusters, often quite close together in rows across the rock surface. These clusters range in size from two or three to 170 grooves.

The grinding process is aided by water and grinding grooves are often found close to, or even in rivers and streams. In addition to water they are also associated with occupation sites and quarries.

Most sites of grinding grooves are found in the vicinity of Grafton in the Clarence Valley, mainly because of the distribution of sandstone deposits in this area (all the 14 sites in the Grafton area coincide with the distribution of the Grafton sandstone formation). There are a further two sites on the coast north of Port Macquarie and a total of 21 sites in the region as a whole. Where suitable stone did not occur, Aborigines used imported slabs of sandstone as portable grinding stones.

Ochre Quarries

Ochre was used for body painting and decorating artefacts as well as for rock art. Many ochre quarries may have been linked with initiation rites.

In most cases the ochre was available on the surface in the form of rocks and nodules and was not excavated. As with other quarries the main locational factor is the accessibility of ochre sources. Ochre quarries might be expected to occur close to concentrations of rock art sites. This is the case with the Jackies Creek quarry which is midway between the rock art shelters at Copmanhurst and Chambigne. The Orara River quarry is also midway between the Bull Paddock and Blaxlands Flat art shelters, south of Grafton.

Scarred Trees

The practice of cutting sections of bark and wood from trees was widespread. The trees were carefully chosen so that the curvature of the trunk would provide the lines of the completed shield or canoe. A well-chosen piece of bark for a canoe would be ready for the water without any further finishing.

Evidence of the use of bark for containers, canoes and shields can still be seen on scarred trees in the region. Other trees, popularly known as 'possum trees' have had a series of climbing notches cut into them to enable hunters to catch possums living in the upper part of the trees.

A total of 55 scarred trees have been recorded in the region. Many of these are dead and in various states of decay. Several trees, however, are in good condition and are protected in state forests and national parks.

4.4 Fish Traps

Stone walled fish traps and brush fences were used to trap fish in the upper reaches of some rivers in the region. These have not survived in the archaeological record. There are also references to fish traps on the coast and historical accounts by Aboriginal people of their use. No sites are known which are of unequivocal Aboriginal origin. This is not surprising since European people are likely to have modified any such structures for their own uses. Structures which may have been used for trapping fish are recorded at Arrawarra and Point Plomer.

Aboriginal People at a Carved Tree Site in 1977.
Photograph courtesy of H. Creamer, National Parks and Wildlife Service of NSW.

4.5 Art Sites

The tradition of rock art in the region was apparently abandoned by Aborigines at the time of contact. There is no record of Europeans ever witnessing art being executed. As a result it is difficult to know the meaning of the various figures and abstract designs depicted. Elsewhere in Australia however, it is known that many figures are representations of Dreaming Beings, often of the particular Beings associated with the area or a specific site.

The art of the region consists of dry pigment drawings in red ochre and charcoal, wet pigment paintings in red ochre, hand stencils (some of which were made with wet pigment), abraded engravings on sandstone surfaces, pecked engravings on granite, and pounded engravings on basalt. It is restricted to places where suitable rock occurs, mainly in the Clarence Valley.

A total of 66 painting and drawing sites have been recorded in the region, along with 22 engraving sites.

The drawings appear to have been produced by using pieces of dry pigment as crayons, leaving clear lines on the rock surface. Charcoal would have been readily available as a source of black pigment. The ochre quarries are possible sources of red and white ochre though there is no record of them having been used for this purpose. Those known to Aborigines in the region today are remembered as being sources of body paint for initiation rites rather than art. White clay at several points on the coast and red and yellow encrustations found on sandstone in the Blaxlands Flat area are also possible sources of red and white ochre.

Drawings and paintings are predominantly in outline form without three-dimensional perspective. In

some later cases figures were superimposed over earlier figures. There is little evidence of retouching or renewing any of the drawings or paintings as is common in some parts of Australia.

There are stylistic differences between sites in the Clarence Valley and those on the Tablelands. The former are a distinct stylistic group characterised by outline and stick figures in red and black. The common motifs are human and goanna figures. Each figure tends to be isolated - they do not relate to each other as is common elsewhere. Other motifs used in drawings and paintings are boomerangs, fish and animal tracks. Non-figurative motifs include grids, stars, circles, rayed figures, snake-like figures and hooked rods.

Stencilling is restricted to hands (elsewhere feet and implements such as axes are common). Dry powdered ochre would have been blown onto the rock from the mouth or off a piece of bark, the surface of the rock having first been wet. Sometimes the ochre may have been flicked onto the surface with a brush.

Hand stencils occur singly but are more common in groups. At Copmanhurst - Nobby's Creek, about 40 red hand prints are arranged in two rows covering most of the rear wall of the shelter. Engravings and drawings occur together at Copmanhurst. At Seelands, a rock-shelter near Grafton, a line of grooves rings the entire wall with one inverted 'U within U' figure and one very weathered crown-like sign on the right hand side of the entrance. West of the main shelter, 30 groups of engraved figures can be distinguished; 27 of these are groups of short abraded grooves and two are very weathered inverted 'U' figures.

In the Richmond Ranges a group of sites share some of the elements of the Clarence Valley drawing 'style'. One of these is very extensive, the drawings covering almost all the available rock surface. Towards the Tweed River are two sites where hand stencils are found but no drawings. North-west of Kyogle 40 pounded engravings are found on a free-standing basalt boulder, the motifs including circles, short straight lines and inverted 'U' figures.

Most of the engravings in the region are abraded, the method being to repeatedly draw a sharp stone over the surface of the sandstone until a groove is cut. They are linear in form, most being short straight lines which occur in groups and rows. Pounded engravings are found on hard rock surfaces such as basalt, the dark outer coating of the rock being pounded off with a heavy stone to reveal the lighter stone beneath. Pecked engravings are on granite and are formed by making relatively deep holes close together to form lines. North of Port Macquarie three pecked engraving sites have been recorded. Two of these, at Big Hill, consist of parallel lines on exposed granite rock.

It has not been possible to arrive at absolute dates for any of the art of the region. Four art sites have been excavated in the Clarence Valley but at none of them was it possible to relate the drawings or engravings to specific stratigraphic levels in the excavated deposit.

4.6 Carved Trees

Carved trees are associated with either graves or initiation grounds. The carvings are made either into the bark of the tree or into the wood following the removal of a panel of bark. Most carvings still surviving are cut into the wood. No doubt this simply reflects the better survival of this type of carving.

The designs with which carved trees were engraved were symbolic of totemic groups. In the case of a grave, the representation was the ritual and kinship affiliations of the deceased. They may also have served as a pathway for the return of the dead person's spirit to the spirit-world. At bora grounds they were used in initiation conveying the beliefs and practices associated with the totem.

The designs are in the form of linear and geometric patterns including zigzags, concentric diamond spirals and circles. Carved trees were often situated around one of the two rings normally found at a bora ground (see 4.9) and along the track connecting the rings. On the Richmond and Clarence they were used around the smaller circle, around the larger circle on the Manning and near either circle on the Bellinger. During the initiation ceremonies the meaning of the designs, the myths associated with them and their significance in tribal history were explained to the initiates.

Carved trees associated with graves apparently marked the remains of notable members of a tribe. Usually only one tree was carved but at times there were as many as four or five. The distribution of the 22 carved trees recorded in the region shows that those which remain are only remnants of an originally much greater number. Most are associated with bora grounds.

4.7 Burial Sites

Throughout Australia, Aboriginal mythology holds that, but for certain events in The Dreaming, men would have experienced an infinite succession of lives in the same endlessly renewed body and death would not have been part of the human condition. Although humans are known and expected to die the question remained as to why people die. The commonest cause was held to be sorcery. Damage to certain religious places was also regarded as a possible cause of death of people associated with those places even if the damage was unwitting. In recent times illness, old age or accident have also been recognised as causing death.

The result of death is the separation of the spirit from the body. To ensure that this separation occurs smoothly, a number of rites have to be observed. There is little information regarding the rites of death in this region compared to some other parts of Australia. The information that there is relates to material aspects such as the nature of the graves and the orientation of the bodies, rather than to behavioural aspects such as the nature of the rites.

At the time of early European settlement, bodies were buried in a tightly contracted crouching or sitting position, generally upright. They were often wrapped in bark and there are references to limbs being tied together. This is supported by information from Aborigines living in the region today.

The breaking and tying of limbs is a method of discouraging the dead person's spirit from wanting to return to its old body. In the case of three burials found at Tabulam in 1933, limb bones had been broken before burial. There is little evidence as to whether it was customary to have one or two-stage burials. In a two stage burial the flesh was removed from the bones by exposure or temporary burial and the bones were then often wrapped in a bundle and buried or deposited in caves. The fact that with most burials the bones of the skeletons were not separated from the flesh suggests a one-stage burial was practised.

Cave burials were not practised at or after the time of contact. However, several such sites are found in the Richmond-Clarence area and it thus seems likely that there have been changes in customs relating to the disposal of the dead.

Sometimes the dead were buried in burial grounds which belonged to clans and were situated in areas frequented by clan members. Individual graves or small groups of graves are also found. There is some evidence that powerful 'clever men' may have been buried on their own because of the danger their spirits could pose to the spirits of other bodies. Graves themselves were often marked by stone or earth mounds and sometimes nearby trees were carved. Some traditional burials were conducted after contact and, in some cases, after the removal of Aborigines to missions and reserves.

More than 85 burial sites have been discovered and recorded in the region to date.

Aborigines in the region today are opposed to the disturbance of Aboriginal burial remains. Since the majority are unmarked graves however, they are sometimes disturbed accidentally by earthwork machinery (eg by bulldozers and backhoes). Skeletons are also sometimes exposed in sand dunes, especially following severe storms. In such cases the Aboriginal community usually requests the reburial of the remains either near the discovery spot or in a known Aboriginal burial ground.

4.8 Stone Arrangements

Little is known about the significance of stone arrangements. They played a role in higher level initiation ceremonies and would thus have been shrouded in secrecy. It does seem clear that stone arrangements marked the location of certain ceremonies, including initiations, and that the design of the arrangements was dictated by the nature of these ceremonies. At least some of them were in use until recent times.

In Australia generally, stone arrangements fall into several types. These include monoliths marking totem centres and ceremonial grounds; stone heaps and cairns marking totem centres, graves, tribal boundaries and increase sites, as well as stone circles placed around graves, initiation places, platforms for drying corpses and places used for communicating with ancestral spirits.

Stone arrangements are sometimes located at points of mythological significance. In cases where initiation rites were held at these places it may have been because of the mythological association.

In general, stone arrangements seem to have played a more important role in initiation rites in this region than has been recorded elsewhere. It seems that for the higher stages of initiation, one of the two circles of the bora ground took the form of a stone arrangement.

There are bora rings which consist of circular arrangements of stones - the functional explanation being

that they are normally situated on stony ground difficult to excavate into earth rings. Carved trees are sometimes found with stone arrangements, as well as with bora grounds.

The most common type of stone arrangement is that made up of groups of stone heaps or cairns, varying in size up to about half a metre in height and 10 metres in diameter. These cairns may be oval, square or rectangular as well as circular.

The overall form of the arrangements varies greatly. The cairns are often grouped in clusters and the arrangements are often situated on ridges and high ground. Other arrangement types include those made up of large blocks of upright or 'standing' stones. The best known of these are near the Serpentine River in the Ebor area. There are also sites where individual stones are arranged into lines and semi circles.

Stone arrangements are scattered in a way which does not suggest association with any particular environmental zone. Certain patterns do, however, emerge in the immediate environment of the sites. They tend to be on high ground, often on the tops of ridges and peaks commanding spectacular views of the surrounding country. They are often situated in relatively inaccessible places - possibly to maintain secrecy regarding the ceremonies which took place at them.

Most of the stone arrangements in the region are found in the Clarence Valley. While this might simply be a reflection of intensive survey work in this area, there is no mention in the historical literature of arrangements in the Richmond or Tweed areas.

South west of Kempsey, in the Ballengarra State Forest, is an arrangement of 16 circular cairns with holes in the middle, forming a scatter down the side of a

Bora Ground.
Photograph courtesy of H. Creamer, National Parks and Wildlife Service of NSW.

ridge. The cairns average 2.4 metres in diameter and 51 cm in height. A total of 46 stone arrangements are on record in the region. Many of these are poorly preserved, the loosely stacked cairns and circles being highly vulnerable to disturbance by stock.

4.9 Bora Grounds

Bora grounds are perhaps the least studied of all the Aboriginal sites. Despite this they are one of the most important types of site for Aborigines because of the role they played in ceremonial life. The bora ground functioned as a stage for various initiation rites. The place of the individual in the complex kinship system, the obligations of the living toward the Dreamtime ancestors and the intricate relationship between the ancestors, the land and the people were all part of ceremonies performed at bora grounds. The passing on of this body of information was critical for cultural survival. The location of bora grounds often coincided with the location of events in the Dreamtime.

Within this region there are a number of different types of bora ground. The most common by far is the earth ring bora composed of one or a pair of raised earth circles or rings. These range in size from 2 to 40 metres diameter. At time of contact, according to accounts by early settlers, the type of bora ground used had two rings, one larger than the other. They were connected by a pathway flanked by ground drawings of human and animal figures and by carved trees. Recent accounts by local Aborigines, some of whom have gone through initiation at grounds within the region, refer to two-ring grounds.

There are very few sites on record with evidence of connecting pathways except in the form of entrance gaps in the rings themselves. Since bora rings are highly vulnerable to destruction by ploughing, grazing and natural weathering, many of the single-ring sites are likely to be remnants of two-ring sites. There is, however, evidence of the use of single-ring enclosures for dancing and fighting. Wordlists for the Clarence area contain separate words for 'bora ground' and 'dancing ground'.

The banks of the actual rings appear to have been constructed by scraping back the earth from the centre towards the perimeter, this being done to renew the bora ground for each new ceremony.

Rings constructed from sand have been recorded in a few instances on the coast. Given their susceptibility to rapid weathering the few on record are probably a serious underrepresentation of their occurrence.

There is mention in early records of bora grounds with rings outlined by stones - perhaps due to the difficulty of excavating earth rings on stony ground. Another variation is reported for the Tweed River Valley where a central heap of stones was surrounded by a ring of stones which were often brightly colored. These are known only by historical reference. None are known to have survived into the present.

Initiation grounds are known as 'wundarral' in the Clarence and Richmond. The term 'bora' seems to derive from the 'bor' or 'boor', a fur-string belt worn by men of the Gamilaroi tribe.

Bora grounds are restricted to south-eastern Australia and are only found in large numbers in north-eastern New South Wales and south-eastern Queensland.

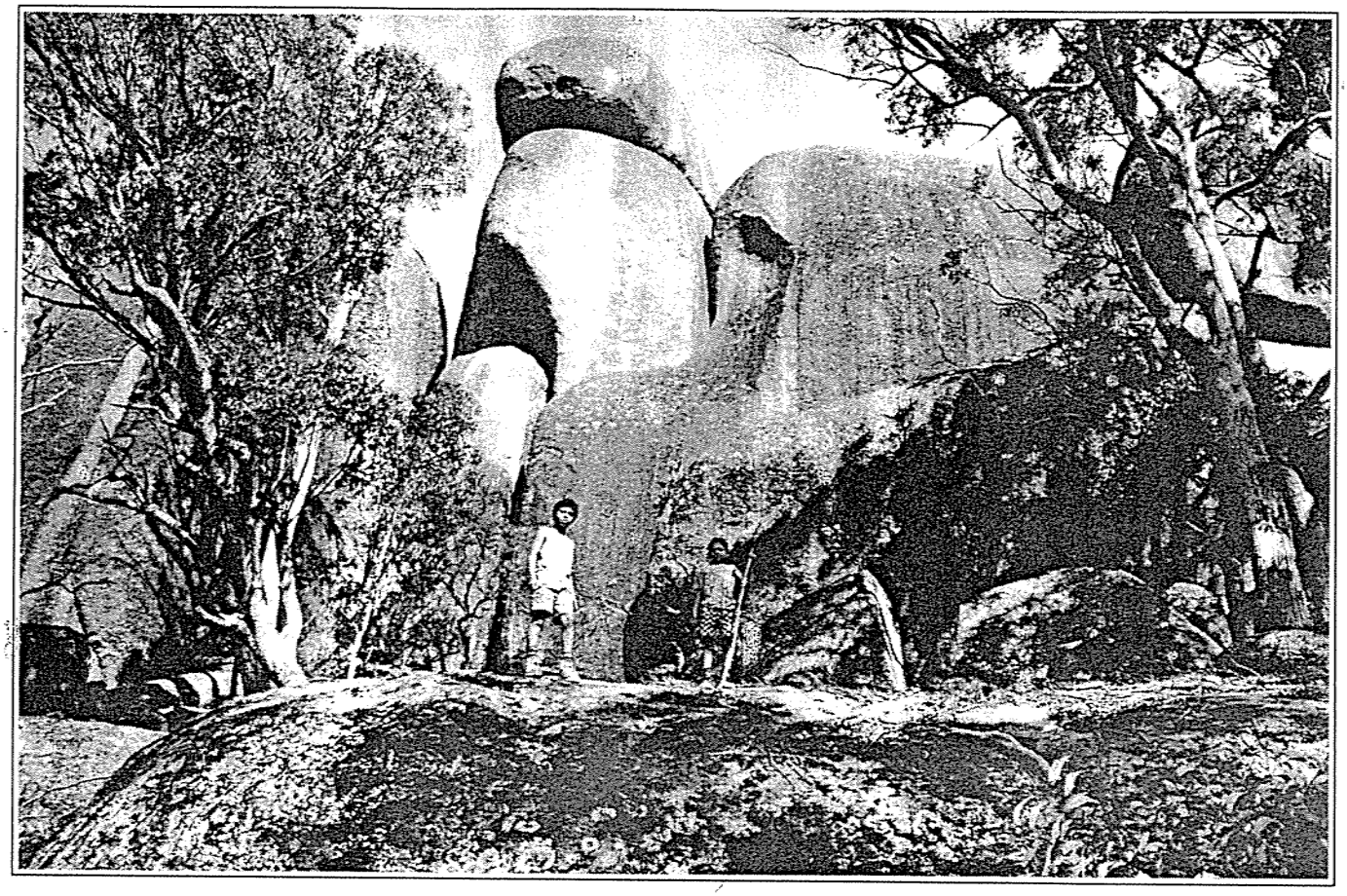
As people did not live at these sites there was no build up of rubbish. As a result there is nothing to be gained from archaeological excavation which has been a source of information on sites such as rock shelters, campsites and middens. Information on bora grounds comes from two sources: the accounts of early European settlers in the region and, more importantly, from local Aboriginal groups.

The historical records indicate that the initiation process followed by the Thungutti people of the Macleay Valley observed four stages of initiation, each marked by a particular set of ceremonies. Fewer individuals were admitted to each progressive stage or level. The initiation rites had an associated set of artefacts which were secret and hidden at particular locations by their custodians until they were needed. Each stage of initiation took place at a different location.

Among the Thungutti the lower stage rites took place at bora grounds and the higher stages were conducted at special bora grounds marked by stone arrangements. The last male initiation ceremonies in the region took place in the 1930s on the Macleay and the coast.

When the Thungutti were forced to move to the Bellbrook reserve, secret initiation objects were removed from stone arrangements south of Ebor and deposited at a bora ground in the Bellbrook area.

Traditionally all women also passed through initiation rites. The fact that almost nothing has been recorded about women's initiation reflects the fact that ethnographers, explorers etc., have, in the past, almost all been men. There are, however, women still alive in



An Aboriginal Natural Landscape Feature Site in Northern New South Wales.
Photograph courtesy of H. Creamer, National Parks and Wildlife Service of NSW.

the region who are known to have passed the 'rules'.

A total of 102 bora grounds have been recorded in the region. Many have been degraded by natural weathering and ploughing and are now very difficult to locate on the ground.

4.10 Mythological Sites

These sites differ from all other types of sites in that they are natural features of the landscape which have not been modified by Aboriginal people. Mythological sites include waterholes, rocks, caves, streams, mountains, trees and other natural features. They normally relate to events in The Dreamtime.

These mythological sites have been located with the help of Aboriginal elders. While the sites are focused on identifiable natural features which can be plotted on maps, their significance mainly relies on the knowledge of the elders. These elders have recorded their knowledge of the sites (including the stories associated with them) on tape so that, when they die, the knowledge will remain as part of the heritage of the younger generations.

Mythological sites are an integral part of Aboriginal culture. Rather than simply illustrating the myths or representing events and locations of the Dreaming they are a real and active part of the Aboriginal cosmos. When Aborigines speak of themselves as belonging to the land rather than the land belonging to them they are

expressing the place of humans in the overall ecology.

Each tribal territory has its own mythical beings which are friendly to the people of the tribe but dangerous to others. Particular people are vested with the guardianship of particular sites and with the store of myths which go with them.

There is wide variation amongst these sites as to their significance and power. Most of the 109 on record for this region are not known to be greatly powerful though this could be because much information on their significance has been lost.

There is also variation in the extent to which they relate to mythology. Some sites have detailed myths belonging to them which are still widely known today by people in the Aboriginal community and which involve known mythological characters. At the other end of the scale are those mythological sites for which the exact significance was not passed on and is now lost.

There are also sites which are of spiritual rather than mythological importance. An example is the spring at Cedar Getters' Creek to which young men were known to withdraw for a period of meditation following initiation.

The myths associated with sites sometimes explain the origin of aspects of the natural world - these are sometimes called 'creation sites'. The story associated with the Tooloom Falls site tells how a great flood occurred in the course of which the Clarence River was determined and gives details of how waterfalls along the river were formed.

Some sites are concerned with Dreamtime heroes or deities who have been turned into stone. For instance, the 'clever men' who landed from a boat at Scott's Head incited the sea with taunts about its power. This caused the sea to drown them. They then turned themselves into stone and are now the headlands.

Increase sites relate to the rites of life. All important species of plant and animal are believed to have ritual centres. Rites are normally performed at these sites once a year, often at the time of breeding. The purpose is not so much to increase a species as to ensure its continued well being. The rites are usually performed by initiated men - there are several references to old Nguloongarra men (clever men) controlling increase sites in the Thungutti and Gumbangirra tribal areas but increase sites belonging to women are also known to occur.

Some increase sites also have mythological significance and evidence from Bundjalung tribal people indicates that owners of mythological sites feel a strong association with the sites and will sometimes visit them to renew their 'life-force' - in a sense they are increase sites as well.

Increase sites are totemic in the sense that each person within society inherited a particular site belonging to a totemic species which became their totem. In this region the inheritance of such sites was patrilineal ie, passing from father to son.

Two sites have been recorded which are exclusively for the use of women: Goat Island in the Richmond estuary which is believed to have been a sacred place for restoring the fertility of women of the Bundjalung tribe and St Mary's waterhole near Coffs Harbour, which was used by Gumbangirra women to avoid miscarriage during pregnancy.

In both oral and written evidence gathered about these sites there are many references to the danger emanating from them and injunctions against the misuse of them. No doubt this served to maintain the secrecy surrounding them but it may also have had a more practical aspect. For instance, the story associated with the Two Sisters Rocks north of Ballina relates how two girls, swept out to sea by a current, were drowned and turned to stone. Children were told this story to stop them swimming in a place which has dangerous currents.

4.11 Contact Sites

Although Cook had sailed up the coast in 1770 and named several natural features (eg Smoky Cape), the first European explorer to visit the region was Matthew Flinders who anchored in the Clarence estuary in August 1799.

Other explorers included John Oxley in 1818 and Alan Cunningham in 1827, who both explored on the tablelands. Captain Rous surveyed the Richmond in 1828 and Captain Perry investigated the Clarence in 1839.

The first Europeans on the coast were cedar getters. They arrived on the Macleay before 1835 and were cutting timber on the Richmond by 1842 and on the Tweed in 1844. Squatting licenses were taken out on the Clarence in 1839 and by 1845 most of the valley had been taken up.

While sometimes violent, contact between the cedar getters and Aborigines was limited. The arrival of

the squatters was more devastating. As the flocks of sheep competed with game for the grasslands, Aborigines attempted to preserve their livelihood by killing sheep and shepherds. The settlers responded by killing Aborigines, at first in retaliation, but soon in a systematic drive to completely wipe them out. Therefore, in the contact era in this region, there were periods of violent confrontation. Sporadic guerilla-style warfare continued for up to 30 years after contact, particularly on the eastern scarp of the tablelands.

The massacre and systematic extermination of Aborigines by settlers, aided by the Border Police and later the Native Police, had broken the back of Aboriginal resistance in this region by the 1860s.

The Robertson Land Act of 1861, allowing for selection before survey, and the breaking up of the squatters 'runs' into small farms brought intensive and permanent contact with whites and complete dispossession of Aboriginal land. Movement across the landscape, in the traditional sense, was to become impossible. This meant that surviving groups could no longer live off the land and became dependent on European food. It also meant sacred and ceremonial sites could no longer be visited. Initiations, critical to the maintenance of social control, were often difficult to perform and there seemed little point in continuing teaching duties and prohibitions to initiates who could never hope to be true to them under the new conditions.

Local Aboriginal elders at Stuarts Point, a former Aboriginal reserve, gazetted in 1885.
Photograph courtesy of H. Creamer, National Parks and Wildlife Service of NSW.

Of interest are those events of the contact period which have survived in the form of significant places. These come under three categories: massacre sites, contact campsites and reserves.

Massacre Sites

As well as the countless killings of Aborigines on an individual basis, there are several recorded instances where groups, often large, were murdered together. Sometimes they were rounded up by Europeans on horseback and shot or sabred or, in at least one case, driven over the edge of cliffs. Alternatively camps were surrounded at night and the occupants killed. The massacres took place with the assistance of the Border Police, established in 1839, and later with the Native Police who proved particularly effective in exterminating those Aborigines occupying the thick scrub and the ranges north of the Clarence.

Few massacres were officially documented because they were obviously illegal. Despite this, they were often carried out with the covert support of the Land Commissioners who were responsible to the government in Sydney.

Of those documented, the Myall Creek massacre of 1838 is famous as being the only occasion on which the killers were brought to trial and convicted.

Several massacre sites have been recorded so far in this region.

Contact Campsites

Contact campsites belong to the period after the 1840s when it was no longer possible to follow the traditional lifestyle. Unlike pre-contact campsites, they were not located according to the dictates of the Aboriginal traditional economy but to the dictates of the white economy. There was no access to most of the former hunting grounds and the game had been so reduced that new camps had to be directed towards the only alternative food source, the white stations and settlements. These were the first fringe camps.

Aborigines provided cheap labour for the white farms, as well as being exploited for their superior skills in bushcraft (such as cutting bark for fencing and housing or tracking stock in the bush). Their camps frequently had to be moved as white settlement intensified and they often had to leave land that they themselves had cleared.

There has been no archaeological work on contact campsites in the region. However, they can be expected to resemble pre-contact open campsites, the main difference being European derived artefacts eg flaked bottle glass.

The only contact campsites as distinct from official reserves or missions recorded in the North Coast region are those in the Kempsey area, those near Ballina and Yamba and one near Corindi.

Reserves

In 1882 the Aborigines Protection Board of New South Wales was established and the first reserves were set up in the region. Bellbrook reserve was gazetted in 1883, Burnt Bridge in 1898 and Nymboida in 1910. Aborigines in New South Wales were not forced by law to live on reserves but were compelled to do so by economic circumstances which made it impossible to live without government rations. Refuge from the racist and often belligerent attitude of the white community also contributed.

Although Aborigines lived on the reserves by coercion rather than choice and although the reserves were a symbol of oppression they, nevertheless, were enclaves of surviving Aboriginal culture. To supplement the meagre government rations people still hunted and gathered wild 'bush tucker' in the surrounding countryside. The generations who grew up on the reserves often maintain strong emotional ties with these places. A key factor in this is that fact that many of the reserves contain Aboriginal cemeteries wherein lie buried the parents and grandparents of many Aborigines in the region today.

Under the NSW Aboriginal Land Rights Act of 1983, most of the former reserves have been vested in the relevant Local Aboriginal Land Councils.