NOTICE OF ORDINARY MEETING

The next meeting will be held in the Museum Education Building, North Terrace, Adelaide at 8.00 P.M. ON MONDAY, 30 APRIL, 1973

AGENDA

1. Apologies.
3. Election of members.
4. Tabling of Papers and Journals.
5. Rev. Gowan Armstrong (Maningrida Methodist Mission) will give an address entitled:
   "THE GUNAVIDJI PEOPLE OF NORTHERN ARNHEM LAND"
6. Date of next meeting: Tuesday 1 May, 1973 - (Special combined Meeting of the Anthropological Society and Royal Geographical Society of South Australia) - Dr. F. Gale.

Please Note: This is the night following the ordinary April meeting and will be held in the Public Library Lecture Theatre at 8.00 p.m.

The title of the address is:
"A COMPARISON BETWEEN URBAN ABORIGINES AND IMMIGRANT MINORITIES IN BRITAIN".

F.W. Ellis
Honorary Secretary,
C/- S.A. Museum,
North Terrace,
ADELAIDE. S.A. 5000
MIDDEN ARCHAEOLOGY IN NORTHERN N.S.W. FROM THE QUEENSLAND BORDER TO THE MACLEAY RIVER VALLEY

The shell midden is an extremely widely distributed site type, but in northern N.S.W. they are concentrated along the banks and estuarine streams, adjacent to tidal swamps and lagoons, or along the sandy beaches.

Middens represent only one aspect of archaeological sites in the region. To the west the scarp of the Eastern Highlands rises abruptly some 3,000 feet, and in this rugged area the easterly flowing streams of the north coast rise. In these headwaters, rock shelter sites bearing rock art, and rich occupation deposits abound. Ceremonial sites are not uncommon.

As the rivers flow seaward they dump huge quantities of alluvium, to build up extensive flood plains. Before the arrival of the European cedar cutter and farmer these areas supported dense, lush rainforest. Few sites are found in this area, but the forests provided an abundance of fruits, berries and roots and offered a habitat for oppossums and scrub kangaroo or "paddy mellons" that were very important to the Aborigine.

An early explorer of the region described the other major ecological zone in these words: There are

... extensive swamps of many thousands of acres in extent, whose verdant sea of high waving reeds and sedge, stretches away to the base of the distant forest ranges. (Hodgkinson, 1845:9)

It was these swamps, especially the mangrove swamps with tidal influences that provided the molluscs on which the Aborigine fed. In the Macleay River Valley such swamps had been abundant before drainage schemes of the thirties and sixties. Diligent searching has located many middens along the margins of these swamps. The lush vegetation they support shows their outline clearly, some running for a hundred yards, others for well over a mile. Middens tested were between three and six feet deep. In all, thirty three middens were located in this environment and in all of these the rock oyster (Crassostrea commercialis) predominated, although Hercules Club Whelk (Pyrazuz ebeninus) and cockle (Anadare Trapezia) were also common.
An interesting aspect of the most inland of the estuarine middens of the Macleay, hinges on the possibility of their being Pleistocene in age. A full discussion of this is contained in Mankind 8 (1972): 283-6.

Similarly large oyster middens are found at Ballina in the Richmond River Valley. The name "Ballina" is derived from an Aboriginal name meaning "oyster", and early accounts indicate the area was a feasting ground. Many other areas abound, but are smaller.

The dune systems along the sandy beaches are another midden area. These sites are smaller, often consisting of a thin band of shell a few inches thick running the length of the beach. The predominant shell in these middens is the sand pipi (Plebidonax deltoides). Being smaller these sites suggest that the shellfish is less important on the coast than a few miles inland, where fish would be less abundant.

Natural erosion, beach mining and 'development' are rapidly destroying foreshore sites. All too often only a surface scattering of shells and charcoal, a few hearth-stones and the occasional implement overlooked by local collectors, is all that attests to their former presence. In an attempt to salvage some information, the National Parks and Wildlife Service has conducted a field survey of midden sites in New South Wales.

Several middens from the coastal zone have been dated using radio-carbon and all have given dates within the last 2,000 years, and most have been more recent.

In contrast with the estuarine middens, those on the coast tend to be associated with other types of sites, indicating more diverse human activity along the coast. Burials are frequent in the sand dunes, and where the stone is suitable workshops occur on the terminal headlands.

A specialized site of particular interest are stone fish traps. Two such traps have been located, and another reported. The two surveyed are located in the southerly curve of wide, open bays. One at Point Plomer consists of a single square with badly collapsed sides each fifty feet in length. Within half a mile of this site are two workshop areas and a large midden (McCarthy Rec. Aust. Mus. XXI (8) (1947): 412-15). This and its associated workshop has been destroyed by mining activity.
A second site to the north, near Woolgoolga, is far larger and in a better state of preservation. At least two squares with sides sixty feet long exist. The alignment of stones is quite clear, and at places the walls exceed three feet in height. The first of the traps is drained about two hours after high tide, while the second is only becoming visible after four hours. This trap was used well into the nineteenth century, but an apparent absence of midden deposit makes documentation of its prehistory difficult.

Analysis

Because of their size and bulk middens produce many problems to the archaeologist and a great deal of work has been done on ways of sampling that are statistically valid. So far a combination of methods has been adopted in northern N.S.W. A hand auger has been used to determine depth of midden deposit and to show if it formed a capping on a natural bank. This method gives some idea of the nature of the midden and the type of shell present.

Such work is now being followed up by excavation on a larger scale in the Macleay River Valley.

Another method is to excavate a grid of squares, thus providing an insight into the composition of the site, its development, and allowing for the location of more, widely dispersed implements. (McBryde, Oceania XXXV (4), 1965:265-6). This approach has been followed up by taking 30 cms column samples and doing a complete analysis of content, density and variations of shell species and size. If dietary information is to be obtained control samples of living species are also necessary. Although very painstaking, this type of analysis can be very fruitful. In this case the size and percentage of oyster and other shell varies widely from level to level. The explanations for this range from minor environmental changes, such as siltation, to human explanations such as over exploitation of oyster beds or a diversification of gathering activities in the area.

A specialized site, the midden can provide considerable information about the diet and organization of native populations. Combined with data from other regional sites this helps to build a more adequate picture of the total life in the Aboriginal past.