Traditionally the Australian Aborigines enjoyed a close and harmonious relationship with their environment, its influence pervading every aspect of their lives. As hunter-gatherers they were totally dependent on the environment and their knowledge of it for their day to day existence. The Herbert/Burdekin district, situated between the Tully River and Mackay on the coast and inland to the Dividing Range, encompasses environmental variation from rainforest of over 2,039 millimetres per annum in the north east to open woodland of less than 610 millimetres in the south west (Department of National Development 1970). While nowhere in the Herbert/Burdekin could the environment be described as hostile, when compared for example with the Western Desert of the Pintubi (Long: 263), on the contrary, it seems that coastal north Queensland sustained a relatively dense population (Davidson: 656), nevertheless, during certain months of the year, particularly in the wet season, food was difficult to obtain and the Aborigines were forced to rely on food such as the fruit of the mangrove (Avicennia officinalis) which required much treatment before being suitable for eating (Thozet: 46). The Aborigines displayed considerable skill both in their exploitation of the resources of their environment and in the preparation they gave to foods, of which cooking was not always the most important factor.

The labour involved in procuring and preparing food was divided between the sexes. The men's part was generally restricted to hunting game, fishing with spear and line, and cooking of flesh foods (Roth: 7), though on the lower Tully River most of the cooking was done by the men. As a rule, the greater part of the food was provided by the women (Hiatt: 7), who gathered fruit, dug roots, chopped larvae out of tree stems, caught some small game, and where they were available also provided crustaceans and molluscs (Lawrence: 158). The painstaking preparation of vegetable foods was performed by the women, but on the Herbert River

'The husband’s contribution to the household is chiefly honey, but occasionally he provides eggs, game, lizards, and the like. He very often, however, keeps the animal food for himself, while the woman has to depend principally upon vegetables for herself and her child. The husband hunts more for sport than to support the family with necessaries, a matter that does not really concern him (Lumholtz: 160).

The range of equipment in the Aboriginal kitchen was as much a function of the environment as was the availability of various foodstuffs. The basic unit was the open fire; to the south west of the Herbert/Burdekin, in the drier areas ‘heated stones in extemporized ovens’ (Chatfield: 473) were an added feature, while in the hinterland of Rockingham Bay, north of Cardwell, where the Aborigines were able to lead a more settled existence, (Brayshaw) the ovens were larger, more permanent, and very efficient.

‘In the centre of the camp (on the Murray River) were four large ovens for cooking their food. These ovens were constructed by digging a hole in the ground, about three feet in diameter, and two feet deep. The
hole is then filled to within six inches of the top with smooth, hard loose stones on which a fire is kindled, and kept burning till the stones are well heated' (Carron: 16).

The meat was placed on these stones, covered by another layer of stones, and over them a fire was made (King: 203).

Special care was taken with the preparation of the oven when the dish to be cooked was sufficiently highly prized to warrant the exercise of full Aboriginal haute cuisine. On the Herbert River large snakes and fish were among the delicacies afforded such treatment, which Lumholtz (296) describes in some detail:

'First a hole is made in the ground about a foot deep, and in it a great fire is built. Over the fire a few stones about twice the size of a man's fist are placed. When the stones have become red-hot, they are laid aside and the rest of the fire is cleared away. Then a number of the stones are put down into the hole, and over them are laid fresh green leaves, especially of the so-called native ginger (Alpina caerulea). Upon these the meat is placed, and is covered with leaves and the rest of the hot stones; the dug-out earth is then spread over the whole, which has the appearance of an ant-hill. If an opening is discovered letting out steam, it is immediately covered so as to keep the heat within the hill.

Now the baking is permitted to go on undisturbed. The natives know precisely when the meat is done, and they never make a mistake. The hot stones have developed an intense heat, which gradually bakes or roasts the food thoroughly and preserves all its flavour.

On opening the mound the outer leaves are found to be scorched, while the inner ones are fresh and green, and give the dish a very inviting appearance.'

The simplest and most common method of cooking, however, was just to throw the food directly into the ashes. Boiling was done on the Bloomfield River and in the hinterland of Princess Charlotte Bay, using a large Melo shell or occasionally a bark trough, (Roth: 8) but it seems to have been unknown in the rest of Queensland and there is no mention of it in the literature relating to the Herbert/Burdekin. On the Tully River grilling was the general way of cooking eels, and this process may have been known further south on the coast, although there is no specific reference to it in the literature. The Tully appliances, according to Roth, were of two types:

'the one is formed of four upright forks supporting two main cross-pieces, on which several sticks are laid, the whole reaching to a height of from 18 to 24 inches from the ground; the other is lower, and built convex after the manner of a miniature hut.'

Fish were usually cooked whole, including dugong, which required a very large oven. Sometimes, however, dugong was cut into steaks with pieces of sharpedged quartz used as knives, and then roasted over the coals (Dalrymple: 21, 29). Wallabies, possums, flying foxes and other small game were all cooked whole, with the skin on to retain the flavour. The animal was thrown onto the fire to singe the hair off, then its belly was cut open and it was placed on the coals. As soon as it was half roasted it was torn

89
into several pieces and distributed, whereupon each person roasted his share. Lumholtz (152) observed that the Aborigines did not like to eat meat raw, but often, rather than wait until it was thoroughly done, it was the custom as soon as a crust was formed on the meat, to take it from the coals and chew off the roasted part, then put it back to roast the rest. Birds were cooked in a similar fashion, although in the case of large ones (Hives: 80), as indeed with large animals and fish, heated stones were often placed inside the carcass to speed the process. Eggs were also cooked before being eaten. Lumholtz describes the preparation given on the Herbert River to the eggs of the jungle hen (Megapodious tumulus). These eggs, about four times the size of ordinary hen eggs, were to be found in mounds constructed by the jungle hens for hatching purposes.

'The blacks, having first made a hole on one side of the egg, place it on the hot ashes, and after a minute or two the contents begin to boil. Two objects are gained by making a hole in the egg—in the first place it does not break easily, and in the second place it can be eaten while lying boiling in the ashes. They dip into the egg the end of a cane that has been chewed so as to form a brush, and use this as a spoon ... As a rule there are chickens in them, but far from being rejected these eggs are preferred to the fresh ones. If the chicken is about half developed and lies, so to speak, in its own sauce, the natives first eat with their "spoons" the white that remains of the yolk, and then the egg is crushed and the chicken taken out. The down having been removed, the chicken is laid on the coals, and then eaten—head, claws, and all.'

The vegetable foods consumed by the Aborigines included many fruits, berries and roots which could be eaten fresh, without any preparation at all; but there were also numerous species of plants of which various parts required sometimes quite elaborate treatment before they were considered suitable for eating. Amongst the foods requiring preparation was the fruit of Cyas media, which occurs frequently in the eastern half of the Herbert/Burdekin (Isbell and Murtha: 11). In the months October to December these fruits called 'nargado' by the Mount Elliott Aborigines (Morrill), constituted a basic element of diet. The kernels of the nut are poisonous, and to overcome this the Aborigines gave them a course of pretreatment in fire and water. After breaking the kernels and drying them, they were placed in a dillybag in water for several days, to extract the bitterness (Palmer: 318). The product was then ground with two stones to a pulp and baked in the ashes, the end result being rather like a damper (Chatfield: 473).

The seeds of Zamia (Macrozamia Miquelii), occurring south of the Cape River, were also given extensive treatment before consumption by the Aborigines of that area. The seeds were baked for about half an hour under ashes; the outside covers and the stones were then broken and the kernels, divided by a stroke of the pounding stone, were put into a dillybag, immersed in a creek or pond, and soaked for six or eight days (Roth: 14). After that period of time had elapsed, the kernels were removed and ground between two stones, wrapped in a covering of Tea-tree bark, and baked (MacGlashan: 20).
The nut of the Bean Tree or Moreton Bay Chestnut (Castanospermum australe), occurring in the tropical scrubs (Bailey: 448), was available throughout much of the year, but according to Roth (10) it was one of the worst foods to prepare, a long time being required to wash away the bitter flavour. Carron (28) was informed by the Aborigines of the upper Murray River that they steeped the nuts in water for five days, and then cut them into thin slices and dried them in the sun. They were then pounded between two large stones, and the meal, moistened with water, was then baked on a flat stone which was raised from the ground a few inches, with a small fire burning beneath. On the lower Tully River the treatment of the Castanospermum fruit was slightly different.

'After the beans have been gathered, the nuts are removed and placed in heaps in the ground ovens. After covering with leaves and sand, a fire is lit on top, with the result that the nuts are practically steamed, a process occupying from a few hours to a whole day. When removed, they are sliced up very fine with a snail-shell knife, and put in dilly-bags in a running stream for quite a couple of days, when they are ready. If not sliced up very fine, the bitter taste remains' (Roth: 10).

A food heavily relied upon during the wet season was the fruit of the White Mangrove (Avicennia officinalis), called 'egaie' by the Aborigines of Cleveland Bay (Morrill). Their method of preparing this fruit was as follows:

'The aboriginals dig a hole in the ground, where they light a good fire; when well ignited they throw stones over it, which, when sufficiently heated, they arrange horizontally at the bottom, and lay over the top the Egaie fruit, sprinkling a little water over it; they cover it with bark, and over the whole earth is placed, to prevent the steam from evaporating too freely. During the time required for baking (about two hours), they dig another hole in the sand; the softened Egaie is put into it; they pour water twice over it, and [it] is now fit for eating' (Thozet: 46).

The well known blue water lily (Nymphaea gigantea), which flourishes in many lagoons, was another edible plant forming an important item of Aboriginal diet. The tubers, stems and seed vessels of the nymphaea were eaten, and Leichhardt (1847: 246) commented favourably after sampling some on the upper Burdekin, although Gilbert, who tried it on the same occasion, was a little less enthusiastic, praising the nutritive qualities but finding the taste unremarkable. The porous seed-stalk was peeled and eaten raw, or roasted (Palmer: 101), and the tuber was also roasted. The seeds, however, were baked in their pods in ovens of stones covered with strips of tea-tree bark over which ashes and sand were placed. When the pods became soft, the seeds, with their husks, were ready for eating (Roth: 14). Alternatively the husks could be separated by baking for a longer period, rinsing the seeds in water, pouring off the water and grinding the mass between two stones. The mass was then rinsed and ground again, and both processes repeated until the pasty mass became comparatively clear.

The yam constituted an important element of the Aboriginal vegetable diet throughout Australia, and the Herbert/Burdekin was no exception. Of the different varieties Dioscorea transversa was commonly eaten raw, though larger ones were also roasted. Dioscorea sativa, however, required extensive treatment to overcome its extremely bitter taste and render it palatable.
This preparation involved roasting and mashing in water, straining through fine bags into large bark troughs of water, and then washing and kneading for hours with constant changes of water. Round basins were then made in the sand, lined with clay and sand, and the washed pulp poured in. The water was drained off and the food was at last ready for use. It was this variety of yam which Leichhardt (1846: 188) tried at the head of the Lynd River.

'I tried several methods to render the potatoes, which we had found in the camps of the natives, eatable, but neither roasting nor boiling destroyed their sickening bitterness; at last I pounded and washed them, and procured the starch, which was entirely tasteless, but thickened rapidly in hot water like arrowroot, and was very agreeable to eat, wanting only the addition of sugar to make it delicious—at least, so we fancied.'

The fruit of the Pandanus tree was another food requiring treatment to rid it of its ‘deleterious qualities’ (Pelsart-Harris: 42). The fruit was soaked in water for a length of time, scraped of its soft jelly-like covering and then baked. Leichhardt’s verdict of the pandanus fruit was ‘it is very agreeable at the time, but afterwards extremely pungent, and a severe purgative’ (1846: 189). The water in which the fruit was soaked and scraped was retained and later used as a drink. If kept long enough it would ferment and form a slightly intoxicating beverage (Pelsart-Harris: 42), although Roth (31) says this was never done. Another drink greatly favoured by the Aborigines was a mixture of honey and water. Usually old honey was mixed with water, but occasionally fresh honey was also, the container being made of bark. The ingredients seem to have combined well - as Leichhardt’s party were favourably impressed and according to Gilbert they all enjoyed a long draught.

The traditional Aboriginal menu in the Herbert/Burdekin district included many more items than those discussed here. Nevertheless from this small selection it is possible to appreciate the culinary achievements of the Aborigines, especially considering the limitations of their equipment. Although the convenient display of foodstuffs and condiments available could not always be counted on, it would seem that with the current level of interest in natural foods there is scope for establishing an indigenous Australian cuisine.

HELEN BRAYSHAW

REFERENCES


CARRON W., 1849 Narrative of an Expedition Undertaken Under the Direction of the Late Mr Assistant Surveyor E.B. Kennedy, for the Exploration of the Country Lying between Rockingham Bay and Cape York... Sydney. (Australiana Facsimile Editions No. 9, Adelaide, 1965.)


GILBERT J., 1844-5 Diary of expedition with Ludwig Leichhardt, 1844-4. MS. (Mitchell Library).


In B.J. Dalton ed. Lectures in North Queensland History. History Department, James Cook University of North Queensland. Forthcoming.


LAWRENCE R.J., 1968 Aboriginal Habitat and Economy. A.N.U. Canberra. (Department of Geography Occasional Papers No. 6).


LUMHOLTZ C. 1890 Among Cannibals. London.

MACGLASHAN J., 1887 ‘Main range between the Belyando and Cape Rivers waters’. In E.M. Curr The Australian Race, v.3:18-25.


PELSART-HARRIS G., 1946 'The Pandanus Palm'. *Walkabout*, v.12, no. 3:42.

ROTH W.E., 1901 'Food: Its Search, Capture and Preparation'. *North Queensland Ethnology Bulletin No. 3.*


1970 *Burdekin-Townsville Region: Climate*. Queensland Resources Series. Geographic Section, Department of National Development, Canberra.