

ABORIGINAL FISH TRAPS IN THE KIMBERLEY

The speaker for the meeting of 5 November 1997 was Dr Moya Smith, Acting Head of the Anthropology Department of the WA Museum. Moya calls herself an ethno-archaeologist and is concerned primarily with human behaviour, which gives life to her work. She began her study in the Kimberley in 1980, working at the Lombadina Community, counting the numbers of shells in middens on the coast. The women there were great and rescued her many times from her endless counting. Moya has also studied the ethno-botany of the Bardi people and wrote *An Annotated List of Plants & Their Use by the Bardi Aborigines of Dampierland*, published by the Museum. These people are called the Saltwater People and their life, including "Women and Fishing", is Moya's present study. Fish traps are her obsession. In commenting on her long term involvement with them, she said with a smile that she decided at one time they were only telling her small snippets so that she would keep coming back.

The earliest evidence of a coastal economy was obtained from two caves at Wigingarri (160 km NE of One Arm Point) and Koolan Island where the researchers found 28,000 shell artefacts, and marine food evidence dated at 8,000 years ago. The artefacts from Koolan Island included mud clam tools, baler shell dishes and pelican egg shells; turtle, dugong and fish bones were evidence of food use. High Cliffy Island in Montgomery Reef area was also a use site. Here they obtained shell scatters from 3500 years ago to the present, being good evidence of marine activity. Marine resources are, naturally, important to all coastal people, and these Aborigines relied on an extensive knowledge of the tides and seasons to enable them to make the best use of their environment for food. From October to November, for example, the people focused on turtles and their eggs and ate shark and whales, which they sang ashore and stranded. Dugong was, and still is, a major resource for the Bardi and other islanders. Stingrays, crocodiles, crabs, sea birds, shell fish and oysters also form part of their diet, and all have to be cut up according to rigid rules. The people use digging sticks to obtain bivalves such as pepis, but fish are still the most important part of their diet after plants.

They used fish traps and fish poisons in their capture. The plants used as fish poisons were three species of the pea *Tephrosia*, *T. crocea*, *T. aff. flammea* and *T. aff. rosea*. The nodules on the roots contain pyrofavones which are released when the roots are ground on a stone, mixed with wet sand and shoved under a stone or under sand in an enclosed pool. This poison is used between August and December. The bark of other plants such as *Planchonia careya* (cocky apple) and *Aegiceras corniculatum* are also used in a similar way. Soft corals and black sea cucumbers, *Holothuria atra*, containing the poison holothurin, are also used as a fish poison. The Worora lit fires to attract fish into their traps at night.

The traps offered a very popular means of capturing fish and comprised five different types:

1. A small stone wall covered with vegetation – these had to be watched continually so the fish did not escape.
2. A trap situated at the top of the tidal range – these allowed the people to swim out and drive in small fish such as garfish and longtoms
3. Pens with two arms or horns.
4. The natural rock pool built up as a trap.
5. Most common, 1 to 1.5 metre high rock walls built across a tidal creek – the fish are picked out by hand so there is no blood to attract sharks.

Moya has found 39 locations of these traps so far, either single or in clusters. Unfortunately, they can't be dated. The Aboriginal people still rebuild them, but mostly for tourists. Silting was a problem so they moved them around a bit. Cape Jaubert has many, as shown in an aerial photo, but not used any more. One Arm Point has many on the main reef area. Midlagon has one composed of a large curved wall, last used in 1972 and seen by many of our members. Many of them were rebuilt by the women. Moya herself tried building up a trap and caught 12 small fish! Temporary traps or weirs were once built up with mangrove wood but are now made using star pickets with a net strung across.

Spears 1½ metres long were the most common means of fishing and still are, made of *Acacia*. The modern ones have a steel tip fixed to a wooden shaft. Women carry them, also the digging sticks used for shellfish. Kylies or fishing boomerangs are not used much any more. These were made of tough mangrove wood. People later made metal kylies, but, because they sink, wood is better. They used paperbark trays to hold the food, also baler shells and torches or twists of paperbark for night fishing. Lines are now popular, with suicide hooks and lead sinkers the modern method.

Moya interspersed her talk with old slides which included the Bardi people riding turtles (taken in 1917); Robin Hunter, a learned old man in 1980; spearing fish; and a single fan raft made of seven pieces of mangrove wood, *Camptostemon schultzii*, light like balsa lashed together and with nails made from the very hard wood of *Acacia monticola*. These rafts were used from as far south as the Burrup Peninsula north to the Prince Regent River. They rode tides up to 12 metres on these, making sure they didn't go against them, and people were still making them in the 1970s. Dugout canoes can fill and sink, but not these light rafts which were used extensively for fishing. During question time, Moya explained that crabs were caught with the foot, or a tomahawk, or a specially fashioned wire. At the conclusion, Kevin thanked Moya for her well-presented, interesting talk and we responded in the usual manner with a round of applause.

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