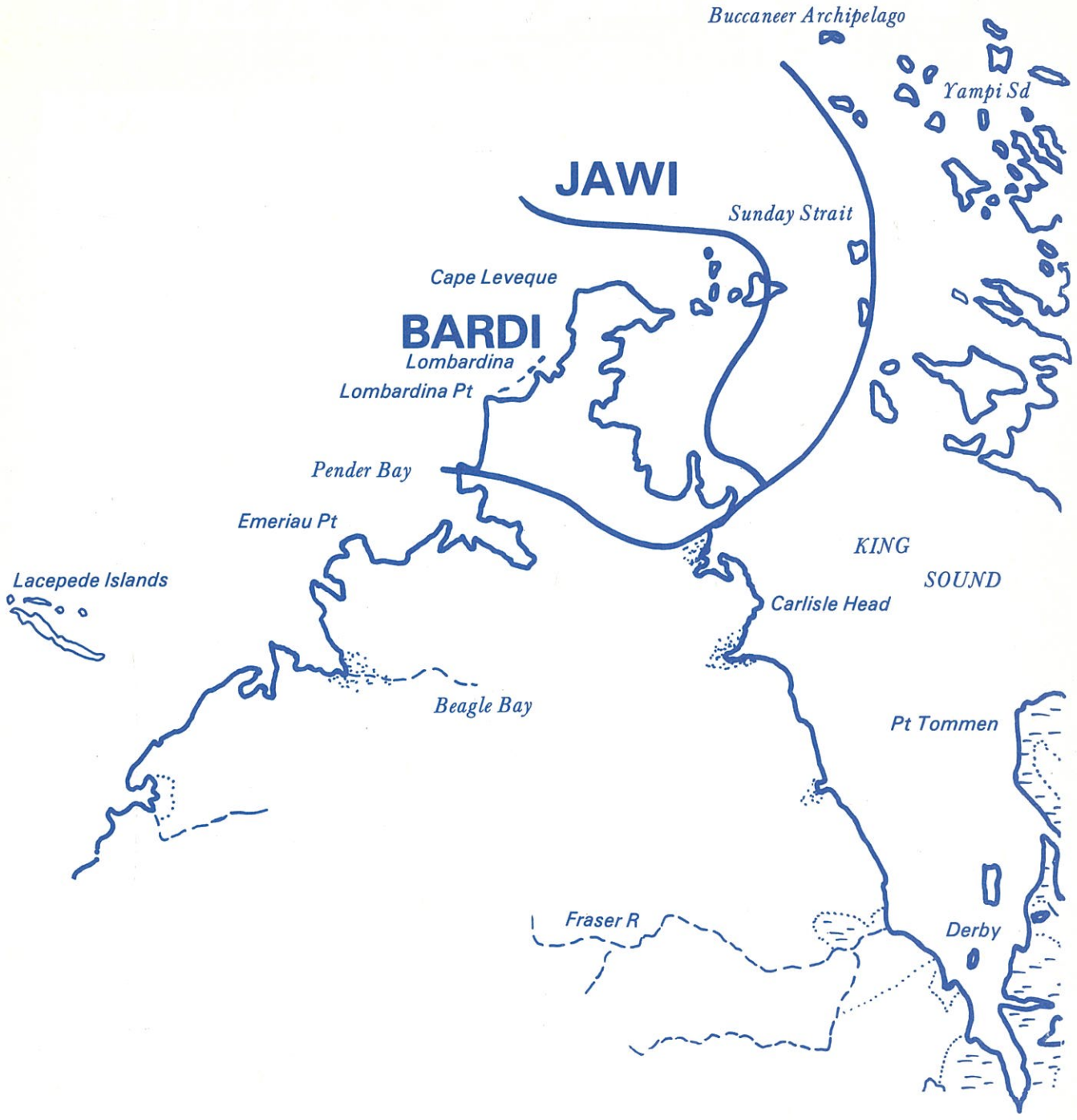
PEOPLE OF THE OCEAN

TIDE RIDERS OF THE DAMPIERLAND PENINSULA

THE BARDI AND JAWI — TIDE RIDERS OF THE DAMPIERLAND PENINSULA

The Bardi and Jawi live on the tip of the Dampierland Peninsula and the adjacent islands that form the Buccaneer Archipelago. More than any other Aboriginal group in Western Australia the Bardi and Jawi focus their lives on the sea that surrounds their tribal lands.



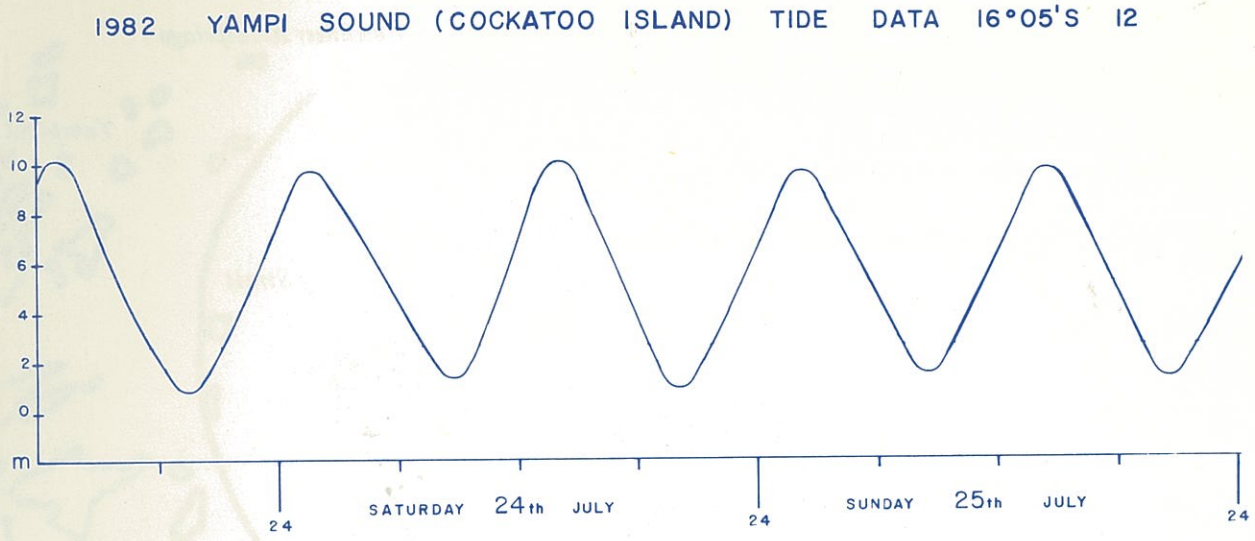
ACTIVITIES FOR YOU

1. Using the information on this map locate the tribal lands of the Bardi and Jawi on a map of Western Australia.

2. Find out what 'Pindan' scrub is. Describe it. How is it different to the vegetation in your area?

Swirling around the many islands and coral reefs that form the territory of the Bardi and Jawi, the sea rises and falls over 9 metres, one of the highest tides in the world. The currents created by this great tidal movement often move in excess of 10 knots (18 kilometres per hour).

Figure I ***TIDAL MOVEMENT***



The Bardi and Jawi skilfully exploit the tides in many ways. The currents created by the ebb and flow are used as highways on the sea along which people move to hunting grounds and their camps on the islands. The Bardi used to swim or float with the currents or they used a special raft called a Kalwa which they would get from the Jawi.

ACTIVITIES FOR YOU

1. Get a tide chart and draw a graph of the tide changes at the coastal area closest to your school.
2. Compare this with the tidal range at One Arm Point.

The Kalwa were made of a special mangrove that grows on the mainland. The neighbours of the Jawi, the Yaujibayi, (Yow/jee/bie) Umidayi, (Oo/me/day) and Worora (Wo/ror/rah) also used these rafts. The rafts were made in two sections. Pegging together six to eight trunks of the mangrove narrow ends, a fan-shaped section is constructed. Another slightly smaller section made with fewer logs serves as the bow section of the raft. The two narrow ends are overlapped and may be tied or pegged together or simply held in position by the weight of the person using it. Spikes of hardwood may be hammered into the stern end to make a pen to hold securely any goods that may be required or fish that are caught. The raft is propelled by a carefully made paddle of mangrove or cypress wood.

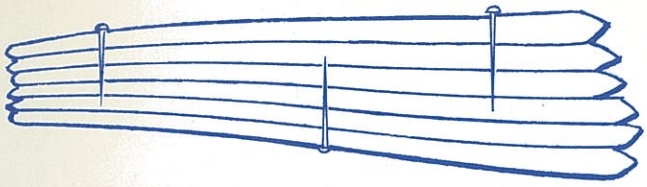
These rafts can be made to carry up to four or five people

KALWA

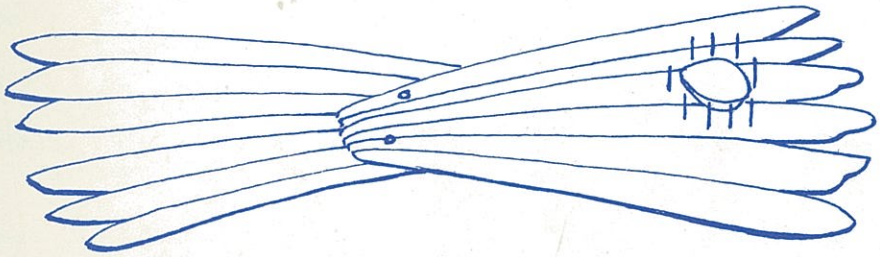
PROJECTS

A. Make a model raft (Kalwa).

1. Get 12 small soft wood sticks about 15 centimetres long.
2. Pin six of them together like this.



3. Do the same to the other six pieces.
4. Overlap the two narrow ends and pin them together.



5. Using small splinters make a pen at one end.
6. Place in this a small shell to carry water or food.
7. Make a turtle spear from a straight twig about 20 centimetres.
8. Carve a paddle from a pop stick.

Bardi children made toy rafts this way using mangrove seed pods.

When Europeans and Asians first started visiting the northwest coast the Bardi and Jawi did not have many of the tools and utensils usually associated with people who exploit the sea. They did not use harpoon fishing lines and hooks or fish nets. Instead they used fish poisons obtained from a variety of plants, stone wall fish traps made on suitable sections of the coastline, simple unbarbed hardwood spears and a special boomerang made of hardwood which was used to stun fish in shallow water. With these basic items and the tools needed to make or obtain them the Bardi and Jawi successfully exploited their marine environment.

Before the harpoon was introduced, turtle and dugong were hunted with heavy unbarbed spears made of a tough acacia (wattle) wood. With several of these spears and a large shell holding drinking water, a hunter would paddle out to a reef or grazing ground known to be a favourite feeding area for dugong or turtles.

The turtle or dugong swim into these areas with the rising tide to graze on sea grass. The hunter would carefully paddle towards an approaching animal and when close enough he would thrust a spear into its neck. If the animal was not mortally wounded other spears would be used to dispatch it. The dead beast would be pulled on to the raft and the hunter would return to his camp.

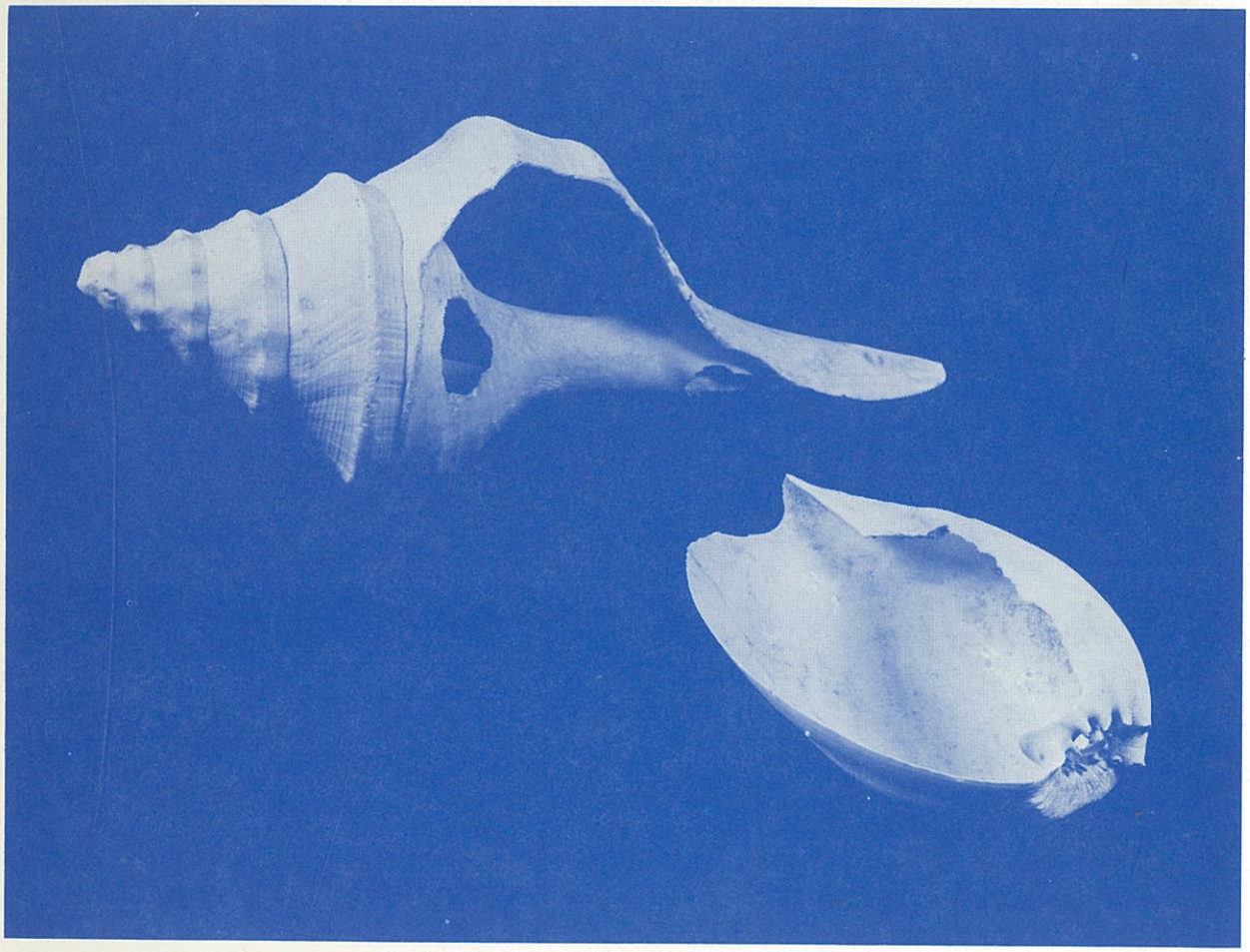
Careful and skilful use of the currents and the tide allows a hunter to go to hunting grounds, kill and secure game then return home with minimum effort.

With the knowledge of tidal patterns, currents, reefs and grazing ground locations and the habits of dugong, turtle and fish a hunter could easily provide for his family.

A SKILFUL HUNTER WITH HIS CATCH

IMPLEMENTS

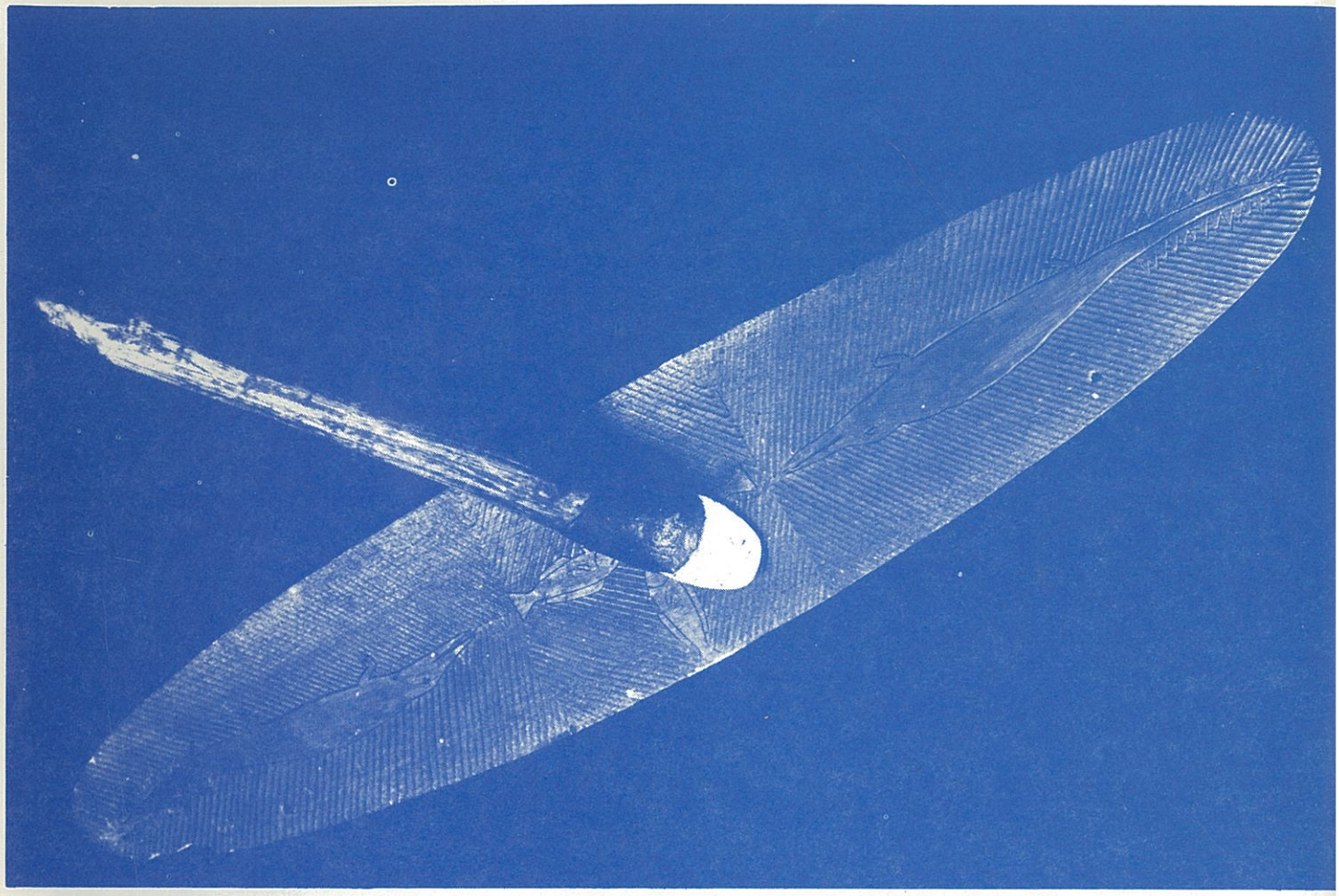
While a man would be hunting or fishing his wife and family would forage on the fringe reef or in the bush behind the coastal beach. Women used a small spear called a Jungur (Choongoor) to spear fish, crayfish and octopus in rock pools and lever or dig out shellfish. Some types of shellfish were caught for food and others for their shells alone. Large baler and trumpet shells, when cleaned, served as vessels for carrying food and water. Thick pieces of baler shell were trimmed and carefully rubbed sharp on grindstones to make a long, sharp chisel and knives. Large pearl shells were cleaned and engraved to make important ceremonial objects and ornaments. Broken pieces of pearl shell were also carefully shaped into ornaments. Many of these shell ornaments were traded from this area for many thousands of kilometres across Australia. Any fish or shellfish gathered would be put into a pleated bark dish called an ulada. Various types of plants were used as fish poisons. At the right season these were collected, crushed and placed in pools in tidal creeks or holes in the reefs. These poisons would, when concentrated, kill fish and when the tide came in were diluted enough to flow away and not cause any further harm. Stone fish traps, walls or dams of rocks across creeks or drainage channels in bays and reefs, would hold back fish that had swum into them as the tide rose, to be left stranded as it ebbed or fell. People would collect the fish at low tide. The traps,like the poisons, were used carefully to avoid waste - when people stopped living near a fish trap they would open up several holes in the wall so that fish could escape to the open sea with the outgoing tide.



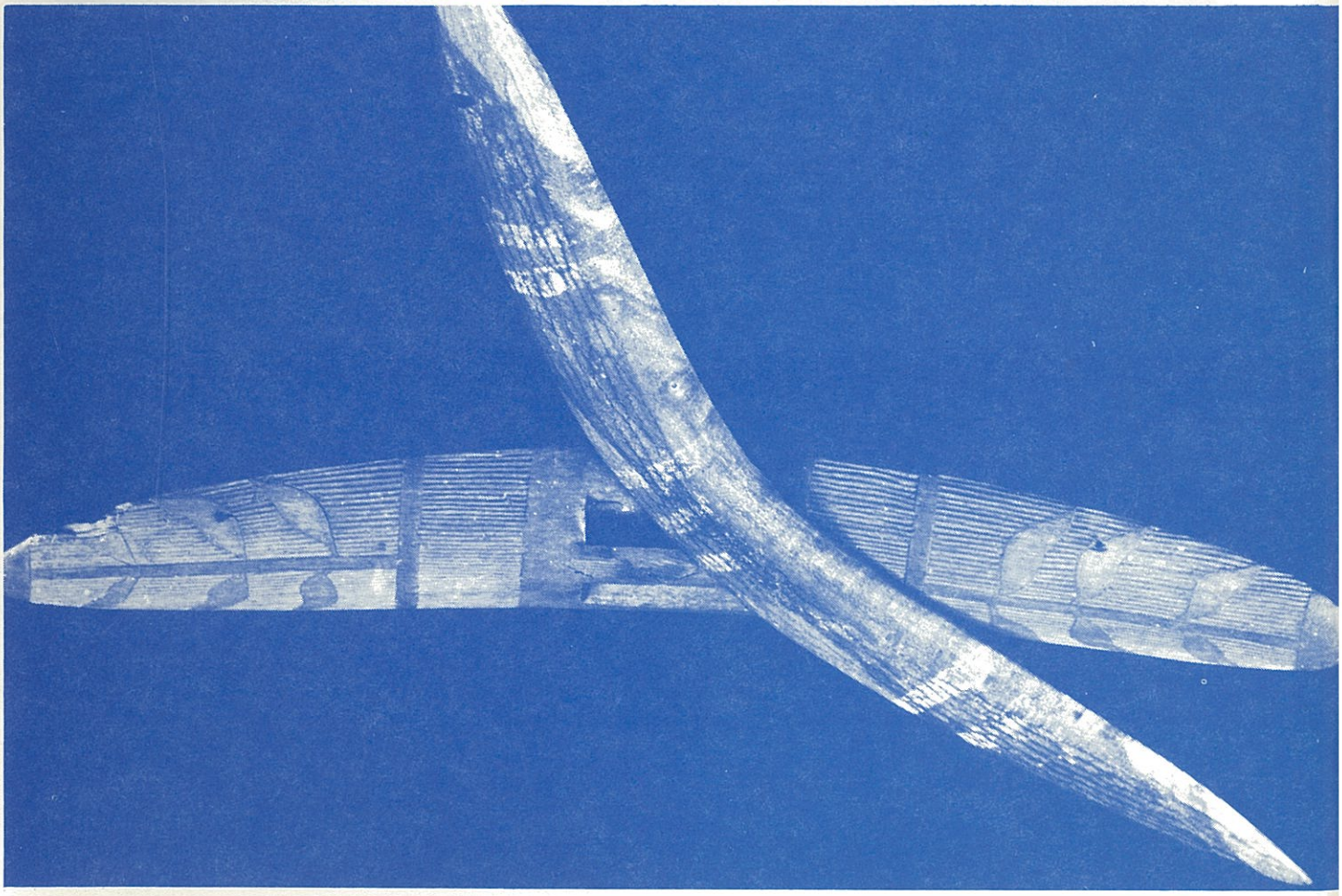
As well as harvesting the produce of the sea, the Bardi and Jawi collected many plant foods and obtained meat from the hunter. Each season was known for its particular vegetable produce. Women with digging sticks would collect fruit and yams and with stone hatchets chop out the hives of the stingless native bee. Stone hatchet heads were an important trade item from the eastern tribes as the stone from which they were made was not obtainable in Bardi and Jawi territory. From the bee hives the honey, pollen and the grubs of developing bees would be eaten and the wax would be cleaned and used in making tools and ornaments.

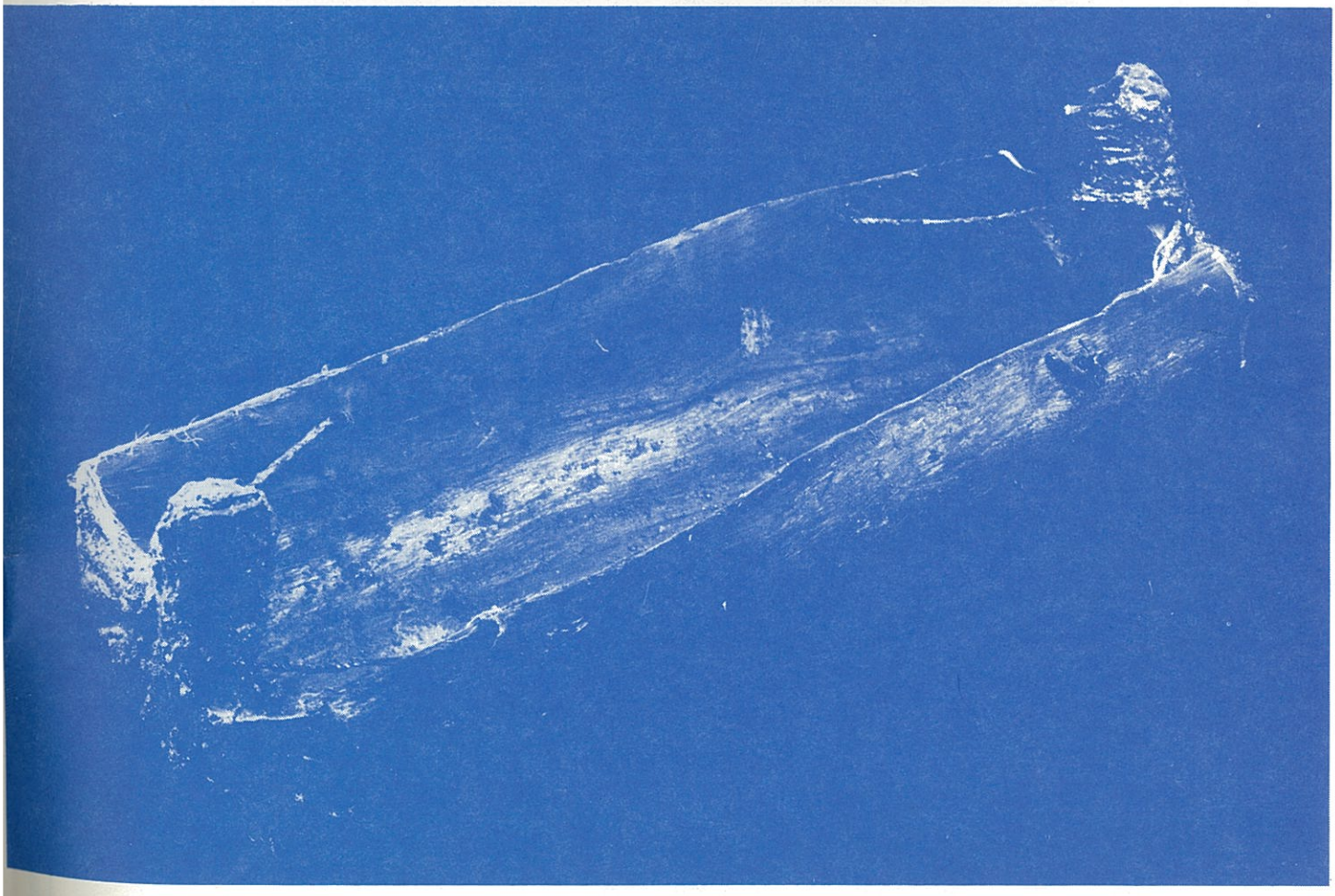
ACTIVITY FOR YOU

On this page and the next two pages you will find pictures of tools and implements used by the Bardi and Jawi. See if you can recognise these from the description in the text.



OTHER TOOLS AND IMPLEMENTS USED BY THE BARDI AND JAWI





Five seasons are recognised unlike the European four seasons of Spring, Summer, Autumn and Winter. Each of these seasons is heralded by a continuation of environmental features including climatic change, the position of celestial bodies and the behaviour of plants and animals. For each of the five recognised seasons the Bardi and Jawi modify their hunting and gathering patters to make full use of the particular resources available at each period. The five seasons are recognised by the Bardi and Jawi and the major activities associated with each period.

1. Erralpu (January — March). Wet season, tropical storms. People gather turtle eggs and hunt dugong and turtle at night. In the bush Junguna, Kulmi, Matura, Kuralka, Kuwal and Kurrar fruits may be gathered. The yams Ngurara and Kulagarin may be dug at all times throughout the year.

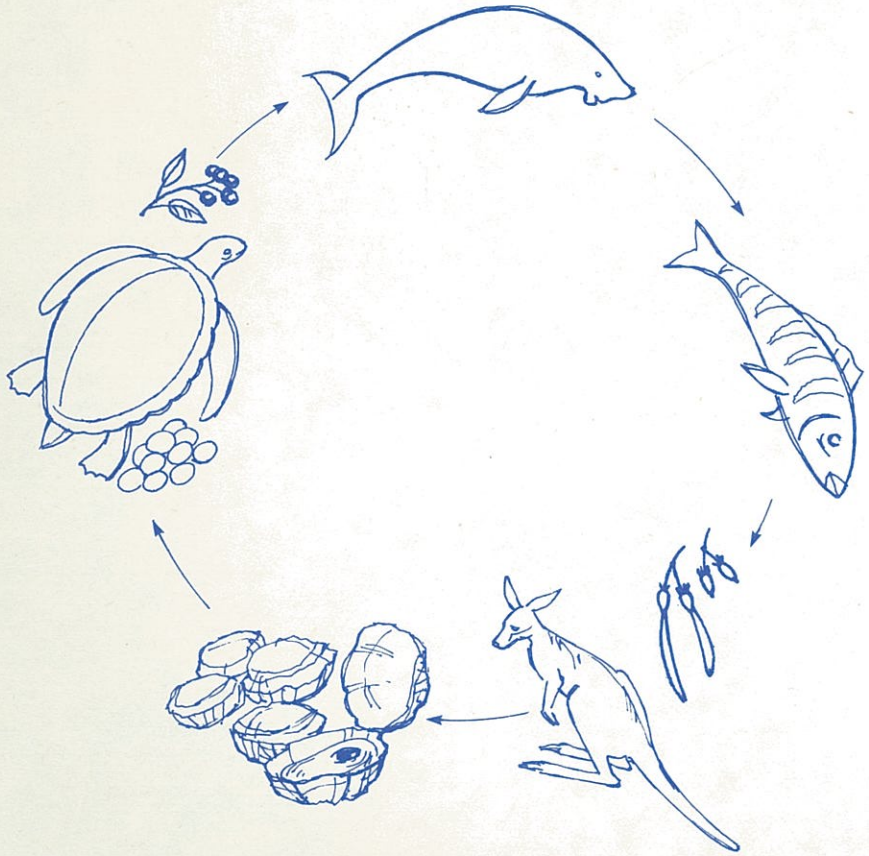
   In March 'King Tides' occur during which the sea rises and falls further than usual. Many reefs and banks not normally exposed, are accessible and shellfish are gathered. Ceremony Time.

2. Ngalataynya (April — May). Spearfishing of the Surgeon fish, Kampala, Parrot fish, Kilkillongka and Palayia. Mullet is hunted with Kulmi fishing boomerangs. The fruits, Arri, Ranji, Aanamu and Pirimpirri are gathered. On the flats beside creeks, bush onions, Niyalpung are dug out and collected.

3. Parrkana (June — July). The cold dry season. People hunt wallaby and possum in the bush and dugong in the sea.The big oysters, Jalaghun are in their prime. The main vegetable gathered are the pods of the mangrove, Ugurrngula. These are collected and buried in holes near the tide line on the beach for a week or so then roasted in ground ovens before eating. The eggs of Oyster Catchers and Terns are collected on the Twin Islands.

4. Jallablayi (August — September). Fishing with the poison, Ilngamu in pools and rockholes. The small oysters, Niwatta are now in their prime. Mating turtles are taken as they float on the surface. Kamalun, Illara and Kulayi fruits are gathered.

5. Lalin (October — December). Hot season. Mating turtles are taken and turtle eggs gathered. Night hunting of laying turtles. The same bush fruit that occur in Jallablayi are gathered.



THESE DRAWINGS REPRESENT MAJOR FOODS OF THE FIVE SEASONS

The first 'Europeans' that the Bardi and Jawi ever saw were probably William Dampier and his crew in 1688. Since the mid nineteenth century however there was increasing intrusion by Europeans gathering turtle shell, beche-de-mer and pearl shells. Many Bardi worked on these boats as their knowledge of the area was invaluable to the 'white men' who sought to harvest the produce of the sea and the reefs.

In 1899 Mr Sid Hadley set up a Mission on Sunday Island. A school was established and the Bardi were taught gardening and the handling of the mission lugger. The lugger was used to bring supplies to Sunday Island from Broome and Derby and to collect pearl shell and beche-de-mer.

Mr Frenchy D'antoine and Mr Harry Hunter who had bases adjacent to Sunday Island also had great impact on the Bardi. Both of these men married into the Bardi and with them set up boat building works and carried out shelling and trepanging in the area.

Hadley retired in 1923 and the Australian Aborigines Mission (later to become the United Aborigines Mission) assumed responsibility for the control of the settlement.

The mission continued until the government closed it down in 1962. The Bardi and Jawi were moved to Derby where they stayed on the reserve until 1971 when they decided to move back to One Arm Point. This move was made as the people were unhappy at living away from their country. Their leaders could see the destructive effects of a fringe dwelling town life on their people. They also felt that too many people were growing up not knowing their own country.

In 1973 the Government gave the Bardi and Jawi at One Arm Point money to build a modern village with a school, a store, clinic and powerhouse. Various projects were started including turtle farming and fishing but today most men are employed working on the building of the village while others earn money by collecting trochus shell.

THE SETTLEMENT AT ONE ARM POINT

CLEANING AND SORTING TROCHUS SHELLS

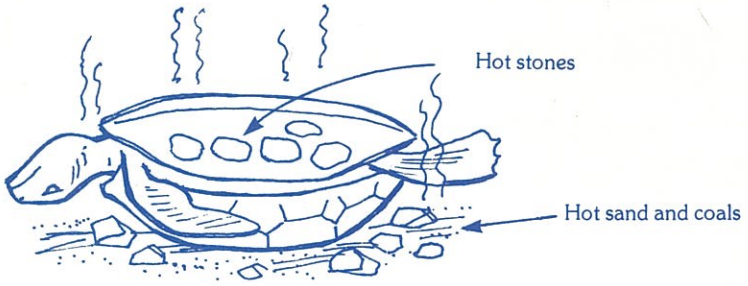
Even though modern fishing tackle is available, fish are still caught by small boys who use spears until they become proficient to harpoon larger turtle and dugong. At Lalanana an old stone fish trap is still being maintained and used. Although dinghies and outboard motors have replaced the traditional mangrove pole rafts as a means of transport, they are still being made. Museums and other institutions are aware of this unique raft and there is a ready market for all those that are made. The manufacture of the rafts, even though they will not be used, allows the young Bardi and Jawi to learn how their old people used to hunt and travel through their territory.

Similarly Bardi and Jawi boys and young men go through the important ceremonies by which they enter the adult life of their community. Like other Aboriginal groups, the Bardi and Jawi realise how important it is to retain their cultural identity particularly in the face of the many pressures that occur in modern society.

YOUNG BOY WITH HIS FIRST TURTLE

NOTES ON LALPU COOKING

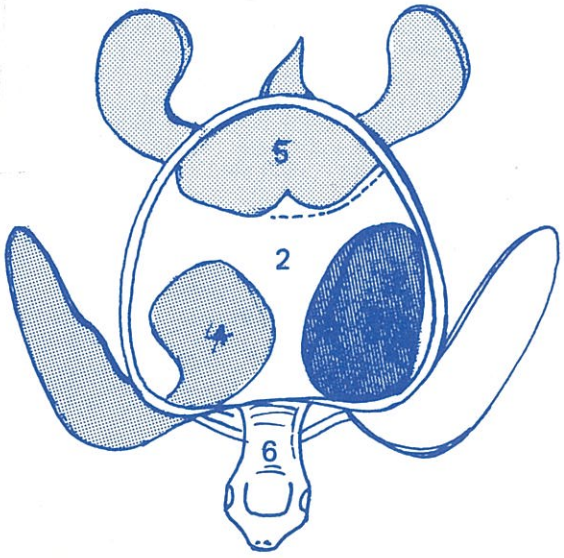
Turtles are cooked by carefully cleaning them through the neck and placing very hot stones inside their body. Then they are carefully placed on their back on a fire so that no blood is spilt. As they cook, a delicious soup forms inside the shell. When ready the bottom place is removed and everyone drinks the soup before sharing the meat. Cooking with stones this way is called Lalpu.

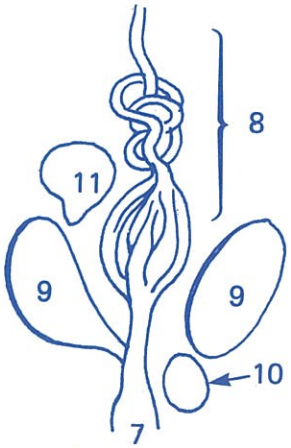


CUTTING UP A TURTLE

1. Remove Plastron (bottom or belly place)
2. Take out Lanjar (sheet of muscle covering intestines and thorax-chest)
3. Cut out Pectoral Muscles — Injar
4. After taking out internal organs, remove flippers and manpin, shoulder muscles
5. Rinyurr — Hind Quarter meat then removed
6. Nungkan — Head and neck removed
7. Purlku (Gullet)
8. Intestines and Stomach (Ngu Jin)
9. Lungs (Allan)
10. Heart (Lian)
11. Liver (Kowirr) all cleaned and eaten.

Top and bottom shells — carapace and plastron are placed on coals to cook any scraps of meat still attached and the gristly calipee and calipash — (Irramu) are enjoyed also.

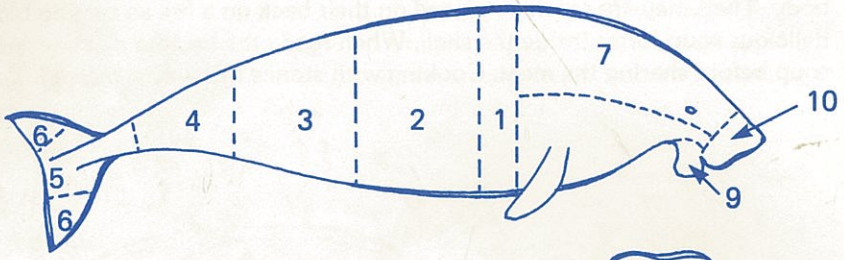


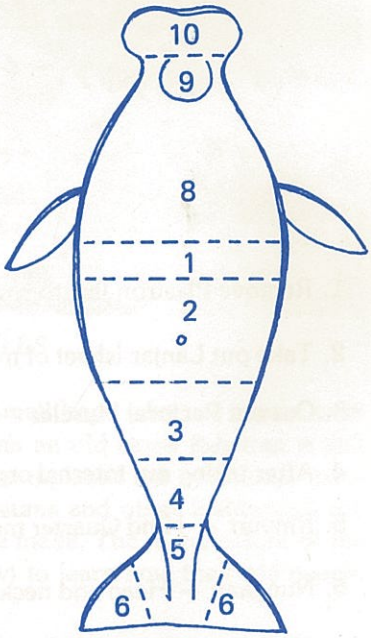


CUTTING UP A DUGONG

Name of Each Piece

1. Malpun
2. Nilaranj
3. Nungu
4. Nimungkul
5. Jampal
6. Kampala (cut off after cooking)
7. Nalma
8. Urlortan Imarol
9. Niyorta
10. Nimal





CUTTING UP A DUGONG

CONTINUITY IN CHANGE

The archeological record shows that traditionally oriented people did make changes in their lifestyle and in the tools they made and used. Before the invasion of non-Aboriginal people into Australia these changes occurred slowly in response to climatic change, the introduction of new inventions from other areas in Australia and local inventions. After the coming of Europeans, change speeded up in response to explorers, miners, pastoralism and the development of towns. In some areas the change was greater than in others.

However Aboriginals throughout Australia retain a great pride in both their wider 'Aboriginal' identity and in their more local specific or 'tribal' identity.

Both urban and non urban Aboriginals know they have a right to talk about their own country even though specific country knowledge may have been lost through the processes of westernisation.

So do the Bardi and Jawi retain great pride in their Aboriginal identity as opposed to being 'European' and in being Bardi or Jawi rather than belonging to another tribal group. This continuity of cultural identity is reflected in the orientation of the Bardi and Jawi to island, reef and mainland areas that belong to them. The skills necessary to handle boats, hunting and fishing equipment, to understand tidal movements, seasonal changes and all that these changes imply are still informally taught to the young people. Western education teaches survival skills such as literacy that are necessary for modern life. At the same time the Bardi and Jawi, like many other Aboriginal groups, also learn about their environment and their unique and rich heritage.

CHANGE IN MATERIAL CULTURE

With the coming of Europeans the Bardi and Jawi were able to obtain new materials that they previously had never seen or used. One material of importance was metal.

Thick pieces of iron were beaten and ground into axe heads, smaller pieces into chisels and knives. Sheets of tin were carefully folded and crimped into metal replicas of the pleated bark containers. Iron rods and wire were used to make strong points on fish and hunting spears. With the introduction of heavy ropes, harpoons were made. Heavy sheets of metal were cut into boomerang shapes and used for fishing. The 'Tank' (so called because it was often cut from pieces of old water tank) replaced the 'Kulmi' as a fishing boomerang.

With money obtained from working on luggers many Bardi and Jawi bought dinghies which soon replaced the Kalwa.

Today metal tipped harpoons and spears are used for hunting and fishing. Plastic buckets, bowls and jerry cans fulfil functions once done by traditional receptacles. Wooden boomerangs are still made for using as musical instruments, for fighting and for sale to tourists. Shell ornaments are still made for ceremonial and personal use as well as for sale or for trade to other Aboriginal groups.

GLOSSARY OF TERMS

Aanamu	—	Ah/na/moo	—	small black plum
Arri	—	Are/ree	—	yellow plum like fruit
Bardi	—	Baa/dee	—	tribal/language name
Erralpu	—	Eh/rahl/poo	—	season name (January-March)
Illara	—	Ill/la/rah	—	white apple-like fruit with a big seed
Ilngamu	—	Ill/nga/moo	—	fish poison derived from a tuber
Jallablayi	—	Jal/lal/lay	—	season name (August—September)
Jawi	—	Jow/ee	—	tribal/language name
Jungur	—	Choong/oor	—	small spear used by women reefing
Junguna	—	Choong/oon/a	—	small round red fruit
Kalwa	—	Karl/wa	—	special double raft made only in this area
Kamalun	—	Come/a/loon	—	black grape-sized berry
Kampala	—	Come/pal/a	—	Surgeon fish
Kilkillongka	—	Kill/kill/long/ka	—	Parrot fish (small)
Kulayi	—	Cool/eye	—	green apple-like fruit
Kulmi	—	Cool/me	—	black raisin-like fruit
Kulmi	—	Cool/me	—	fishing boomerang
Kulngarin	—	Cool/ngah/rim	—	yam
Kuwal	—	Ku/wal	—	small white berry
Kurrar	—	Koor/raar	—	small red plum-like fruit
Lalin	—	Lah/lin	—	season name (October-December)
Matura	—	Mat/oo/rah	—	green plum-like fruit
Ngalataynya	—	Nga/la/tine/ya	—	sometimes said as Ngalatayin season name (April—May)
Ngurrngula	—	Ngoor/ngoo/la	—	edible mangrove seeds
Niwatta	—	Knee/what/ta	—	oyster (small)
Niyalpung	—	Knee/yal/poong	—	small bulb of a grass like sedge
Ngurara	—	Ngoo/rah/ra	—	a yam that needs to be carefully cooked before eating
Palayin	—	Pal/line	—	Parrot fish (big)
Parrkana	—	Par/car/na	—	season name (June-July)
Pirimpirri	—	pirim/pirri	—	small yellow/green fruit
Ranji	—	Ran/jee	—	black grape-sized fruit
Ulada	—	Oo/la/ta	—	pleated bark dish
Umidayi	—	Oo/me/day	—	tribal/language name
Worora	—	Wo/ror/rah	—	tribal/language name
Yaujibayi	—	Yow/jee/bye	—	tribal/language name

NOTE TO TEACHERS:

The initial consonant **ng** is pronounced as in si**ng**er/so**ng**.

Pupils can learn to pronounce it by repeating the word Singapore several times then dropping the first two letters — to say ngapore.

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