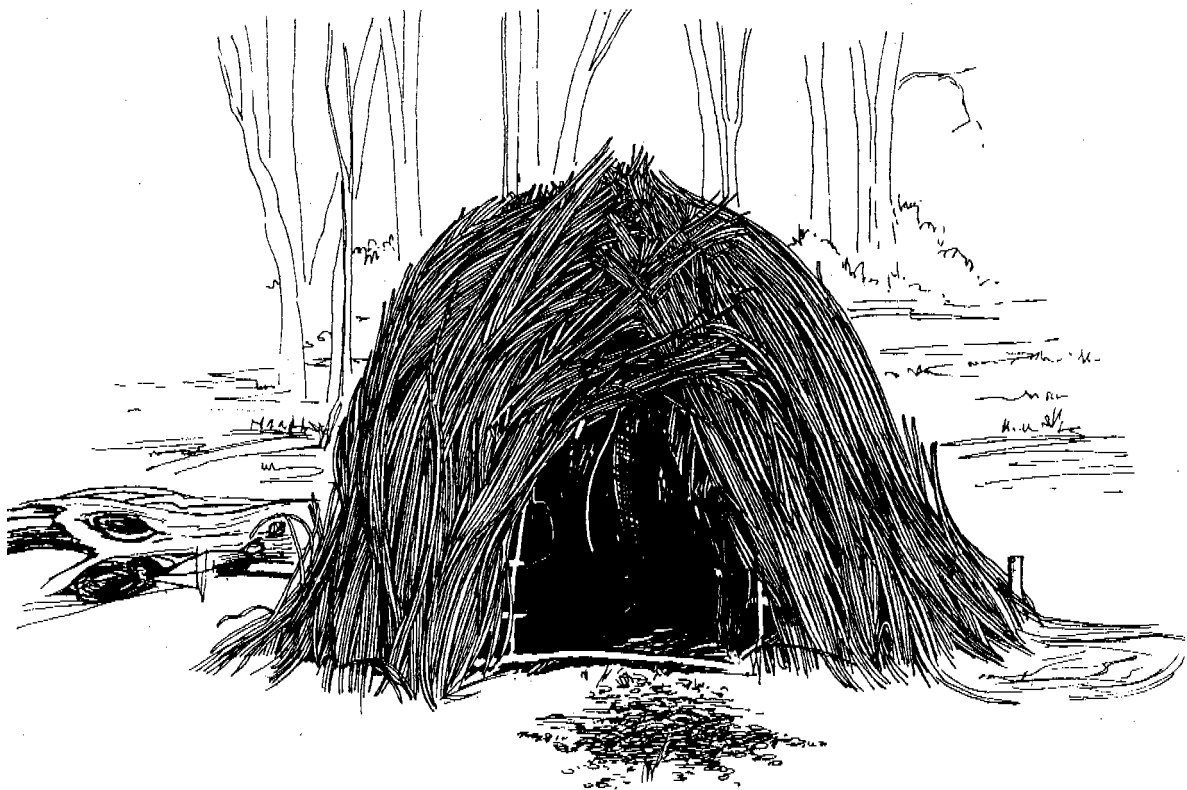


# Exploring Woodlands with Nyongars



*Teaching Activities  
for Primary and Secondary Schools*

Department of Conservation and Land Management

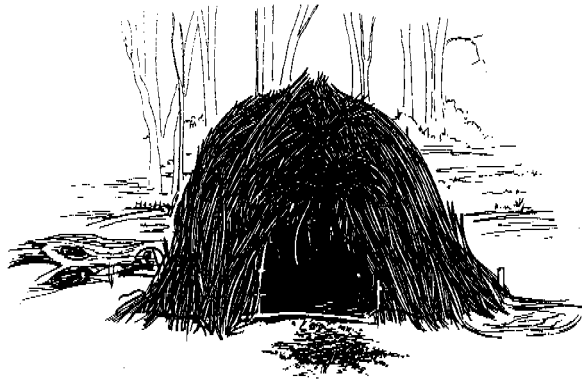
# **SPECIAL ACKNOWLEDGMENTS**

Many Nyoongar people contributed to this package. Their help has been vital. While the contribution of individuals is acknowledged in the appropriate place in the text, discussions with many others is not cited. Project team members therefore wish to express their appreciation to the following Nyoongars for the ideas and general information they contributed to this package:

Josey Hanson  
Geri Hayden  
Joan Hill  
Noel Nannup  
Trevor Penny  
Joe Wally  
Lang Williams  
Joyce Winsley

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# Exploring Woodlands with Nyongars



*Teaching Activities  
for Primary and Secondary Schools*

**Editors**

Ken Wallace and Janette Huston

**Project Team**

Kezia Cruttenden

Beth Gibb

Janette Huston

Jill Nottle

Ken Wallace

Department of Conservation and Land Management

**Design:**

Sandra van Brugge

**Illustrations:**

Kellee Merritt

**Printing:**

Daytone Printers

**Published by:**

Dr Syd Shea, Executive Director, Department of Conservation and Land Management, 50 Hayman Road, Como, Western Australia 6152.

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# PREFACE

*Exploring Woodlands with Nyoongars: Teaching Activities for Primary and Secondary Schools* is the final component of a three-part package that investigates the natural and cultural history of wheatbelt woodlands.

The first component, *Exploring Wheatbelt Woodlands: Teaching Activities for Upper Primary School*, includes a wide range of teaching activities that focus on the natural values of woodlands. That publication also examines some cultural aspects of woodlands. In the second component, *Exploring Wheatbelt Woodlands*, the natural history of our woodlands is described. It helps the student and interested visitor to appreciate the diversity of woodland plants and animals, and some of the processes that bind them together.

*Exploring Woodlands with Nyoongars: Teaching Activities for Primary and Secondary Schools* is the final part of the package. A set of teaching activities, it explores the relationship between Nyoongars, the traditional Aboriginal people of the south-west including the wheatbelt, and their environment.

There are two basic goals underlying the package.

Firstly, many different cultures interweave to make our Australian culture. In this complex fabric the impact of Aboriginal culture is evident from words used in the naming of towns, places and behaviour (for example, having a wongi). Aboriginal influence on bushcraft and art is also clear. However, the general understanding of Aboriginal culture within Australia is poor. If reconciliation between Nyoongar and Wadjela (non-Aboriginal people) is to occur, then this lack of understanding must be redressed. This package aims to help in this process and to encourage empathy with other cultures.

A second and equally important intent is to encourage people to explore Aboriginal culture and understand its relationship to the land. Our present land use practices cannot sustain, in the medium to long term, a high quality of life. The most dramatic wheatbelt example is the loss of land to salt due to clearing of native vegetation. While we cannot return to past ways, and would not want to if we could, past successes and failures are an important guide for present and future actions. In this sense, for our self-interest, we should examine and learn from traditional Aboriginal culture.

## Acknowledgments

The project team thank Barb Kennington and Neila Penny for typing text and amendments, and Trish Barton, Catherine Evans, Greg Martin, Mike Safe, and Elaine Sheldon for testing activities in the classroom. They also thank the following people for their help, advice and positive criticism along the way: Joy Bailey, Ray Bailey, Peter Bindon, Ray Garstone, Neville Green, Chris Kealley, Noel Nannup, Bob Prince, and Linda Ryder.

# OVERVIEW

## Goals

*Exploring Wheatbelt Woodlands with Nyoongars; Teaching Activities for Primary and Secondary Schools* includes a wide range of teaching activities and supporting information written by practising teachers. The package is based on the primary school curriculum and supports the aims of First Steps and Student Outcome Statements and Learning Area Statement.

Subject areas included in this package are:

- \* Society and Environment
- \* The Arts
- \* English
- \* Health.

Communication and interaction between cultures is gaining pace in a world compressed by technology. For our multi-ethnic nation, a mostly European people bordered by Asian cultures, the need to interact positively with others has never been greater. At the same time, our land use practices are not sustainable and it is important that we question the relationships between our culture and our land management methods. In response to these issues the goals of this package are to encourage students to understand, and empathise with, the values of other cultures, and to provide an opportunity for them to explore the way Aboriginal people lived with our local environment.

The package is specifically designed to:

- \* provide a foundation on which students can build an understanding of Nyoongar culture and its relationship to the land.
- \* improve students' understanding of the history of their environment.
- \* encourage students to value highly the natural lands remaining in the wheatbelt.
- » develop in students an understanding of, and empathy with, other cultures and their values.

The focus of learning activities in this package are that they:

- \* are action-based where possible.
- \* involve posing and solving problems, including real-life problems.
- \* encompass the school environs and local bushland.

Covering Aboriginal topics in the classroom requires sensitive handling of a range of issues. Appendix 1 includes some hints for the non-Aboriginal teacher.

A list of relevant videos (Appendix 2) is included for teacher reference.

## Themes

Despite the diversity of world cultures, humans are, as a species, genetically very similar. We all must fulfil the same needs to survive and prosper. Humans have met these basic needs in different ways depending on their environment and history. An understanding of how different cultures have either failed, or survived and prospered, is an invaluable springboard to building a better future.

While there is debate about the definition of basic human needs, several are commonly listed. These are the need for:

1. food, drink and shelter;
2. a set of shared beliefs about how the world works, and the place of humans in it - these beliefs are expressed through religion, spirituality, and philosophy;
3. friendship and love;
4. self-esteem and self-fulfilment.

The activities in this package examine the lifestyle of traditional Nyoongars by focussing on the first two of these needs. Three themes are developed:

*Food, Shelter and Tools:* Fundamental to human life are food and water. Similarly we need protection from the weather, either through clothing or shelter. Tools have also been a cornerstone of human lifestyle throughout the world. In this set of activities some Nyoongar ways of obtaining these necessities are discussed. For today's Australians, it is fascinating to learn that there are alternative ways of living in this continent.

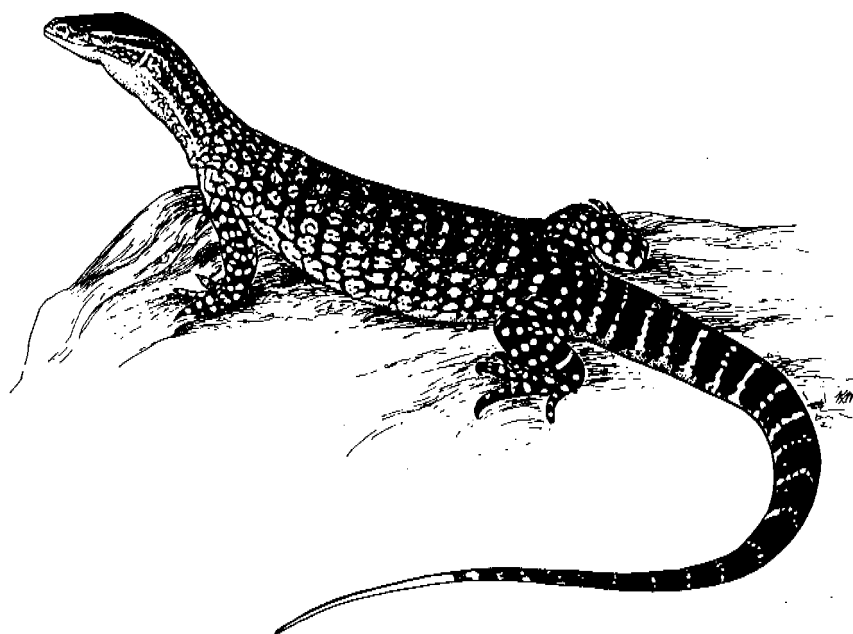
*Communication:* Humans are social animals. Effective communication is crucial to the many cooperative ventures of life, including friendship and love. In this package we have dealt specifically with two forms of communication by Nyoongars - language and art.

*Religion and Change:* All humans have a set of beliefs and ideas that account for the world around them, its origins, and the place of humans. These beliefs define the purposes of our lives. Belief systems also explain and guide humans through the great transitions of life including birth, coming of age as an adult, partnerships, parenthood, and death. These beliefs are expressed in religious systems. These systems generally provide firm, unchanging ground on which to build lives. For Aboriginal people, religion is based around the Dreaming. This is covered here and in other activities. Even religions change - and this change has been dramatic in the case of Nyoongars. While not dealing specifically with religious change, we have included in this theme one activity that deals with change at a day-to-day level.

In a larger package of activities a theme exploring family and kinship would be added. These matters are vital in all cultures, and are pivotal to the needs of friendship, love, self-esteem and self-fulfilment. These issues may be explored in future editions of this package.

**TABLE OF MAIN CURRICULUM AREAS COVERED BY EACH ACTIVITY**

Activities	Main Curriculum Areas				
	Science	1	5"	Society and Environment	1
Nyoongar Dreaming			*	●	
Life in the 40s and 50s			4	●	
Nomads of the Wheatbelt				*	* '
Back to the Bush				*	
Table Tucker		*	*		
Animal Tracks	4	*			
The Kangaroo Connection			*	*	4
101 Uses of a Grasstree	*				
Shelters and Structures	●		*		
Tribal Voice				*	
Let's Talk			*		
Not Art for Art's Sake		*	*		



*Race-horse goanna, kerda, kurda, karda*



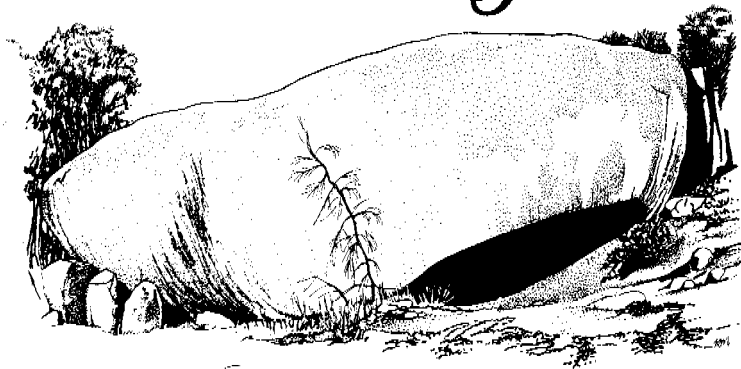
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*Woylie*

# Religion and Change



All humans have a set of beliefs and ideas that account for the world around them, its origins, and the place of humans. These beliefs define the purposes of our lives. Belief systems also explain and guide humans through the great transitions of life including birth, coming of age as an adult, partnerships, parenthood, and death. These beliefs are expressed in religious systems. These systems generally provide firm, unchanging ground on which to build lives. For Aboriginal people, religion is based around the Dreaming. This is covered here and in other activities. Even religions change - and this change has been dramatic in the case of Nyoongars. While not dealing specifically with religious change, we have included in this theme one activity that deals with change at a day-to-day level.

## *Activities in this section are:*

- Nyoongar Dreaming
- \* Life in the 40's and 50's

# NYOONGAR DREAMING

- \* English
- \* Society and Environment

Students study creation stories from around the world, and compare stories and legends of the Nyoongar people with those from other cultures.

## Concepts

- \* Natural phenomena are often explained through legends and stories.
- \* Religious beliefs are linked to legends and stories.

## Objectives

- \* To become familiar with a range of creation stories from different cultures.
- \* To learn the significance of the Song Lines as an element of Nyoongar culture.
- \* To understand that people have strict rules relating to almost every aspect of life.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
English	Language Modes -Context
Society and Environment	Place and Space - Culture

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
English	Reading	Contextual Understandings
Society and Environment	Place and Space Culture	Features of Places Cohesion and Diversity

## **Background Information**

For Aboriginal people, the Dream Time or Dreaming explained the creation of their environment and the relationships between its parts. The Dreaming describes their philosophy of life, and outlines their responsibilities and those of other parts of the environment. Humans and other animals, plants, sun, rain, wind, and so on, all had a part to play in maintaining a world in balance. The Dreaming is much more complex than this short explanation suggests. If you want to learn more, read articles such as that written by Deborah Rose (see References).

Song Lines express one part of the Dreaming. Song Lines are also known as Dreaming Trails. They follow a particular topographical route that relates to significant events that occurred to ancestral heroes during the time of Creation. For generation after generation, Aboriginal people have been taught through songs, stories, dances and their initiation that they were directly responsible for keeping these trails and their stories alive.

Those who walk the Song Line do so as part of their ceremonies and rituals. A Song Line is neutral territory and can, by arrangement, be traversed by those from any group who wish to participate in these ceremonies. Particular places along the trail have a specific story and ritual that must be performed there in order to keep the trail alive. Large groups did not proceed to the next point on the trail until the season was right. Elders were responsible for the way ceremonies were conducted.

Dreaming Trails are part of a much larger fabric of myths and stories. These are explained in the Introduction to *Aboriginal Myths* (Audio-Visual Education Branch. *Aboriginal Myths*. Education Department of Western Australia, extracts from pages 2 and 3) as follows:

"The whole of any 'tribal' or language group was (and still is) full of signs: not only particular areas of territory but all living creatures and things, physical features and elements. All had within them a special quality - a quality of life and living which was evidence of the continuing significance of the Dreaming. Particular mythological spirits had shaped the land, created human beings and other creatures. These mythic characters, through their inherent power, could change their shape from time to time. Some became birds and [other] animals and so on; some changed or 'turned themselves' or became particular physical features in the landscape - such as stones, hills, or trees and paintings etc., or left some other evidence of their presence on earth; and in doing that they left, as well, part of their spiritual essence, so that an Aboriginal person moving across his or her country not only saw those signs, but knew and believed what they meant. Those signs were the visual evidence of the truth of stories or myths which told about the adventures of the spirit characters. To an Aboriginal person with knowledge of his or her traditional background, it was like reading a book; and moving from one place to another was like turning the pages of a book of absorbing interest, tales of real events, associated with dramatic performances, songs and paintings. Even more than that: these were not just events of the past, but events that had real meaning to a person in ordinary social living."

The Berndts go on to explain that, while none of the stories they assembled in their particular collection are secret, they are sacred in an 'open' sense, and "they are guides to action, to bad actions as well as good; and they provide explanations of particular natural phenomena and of the behaviour of human beings."

### **Key Words**

Creation, phenomena, cultural, legends, serpent, ceremony, ritual, holy, sacred, Wagyl, Song Line.

### **References**

- \* Audio-Visual Education Branch. *Aboriginal Myths*. Education Department of Western Australia. (Contains some traditional Aboriginal stories of Western Australia arranged, assembled and spoken by R.M. Berndt and C.H. Berndt. This is part of an educational package of slides, cassettes, film strips and teachers' guides incorporating *People Caring*, *Rites of Passage*, and *Aboriginal Myths*.)
- \* Curriculum Branch. 1986. *Atlas for Young Western Australians*. Education Department, Western Australia.
- \* Education Department. 1990. *China Collection*. Education Department, Western Australia.
- \* *Holy Bible New International Version*. 1978. Hodder and Stroughton, London.
- \* Morrison, J., Penny, M., Storey, R., Ugle, S., and Colbung, B. (about 1993). *Gnarojin Park Nyoongah Revival*. Department of the Arts, Western Australia.
- \* Green, N. 1983. *Nyungar - Past and Present*. Focus Education Services, Cottesloe, Western Australia.
- \* Roughsey, Dick. 1988. *The Rainbow Serpent*. Gareth and Stevens Childrens Books, Australia.
- \* Rose, D.B. 1987. Consciousness and responsibility in an Australian Aboriginal Religion. Pp 257-269 in *Traditional Aboriginal Society a Reader*, ed. W. H. Edwards. MacMillan, South Melbourne.
- \* Video: 1995. "The Trail of the Rainbow Serpent", available from Susan Groom of AA & C Production (Tel: 09 250 1629). The video comes with ten booklets plus teachers' notes. At the time of writing, it is priced at \$150.
- \* Video: *The Rainbow Serpent*. BRN 600 513

## **Teacher Directions**

### ***Materials***

- \* Book - *The Rainbow Serpent* by Dick Roughsey
- \* Atlas
- \* Resource Information Sheets (1), (2) and (3)

### ***Lesson Outline***

1. Read to students the creation stories on Resource Information Sheets (1), (2) and (3). Instead of using Resource Information Sheet (3), you could read a story from *The Rainbow Serpent* by Dick Roughsey or show the video *The Rainbow Serpent*, The latter is available from the State Film Library. Note also the information supplied in Resource Information Sheet (4).
2. Students use Resource Sheet (1) to do a compare and contrast grid of the three creation stories. Discuss the results.
3. The Dreaming story in Resource Information Sheet (3) refers to several sites on Song Lines. The most obvious are Wave Rock and Mulkas Cave near Hyden. To develop the Song Line concept, follow this activity with the activity 'Not Art for Art's Sake'.

### ***Evaluation***

- \* Were students able to use a comparison grid to discuss similarities and differences in the creation stories?
- \* Did students recognise the linkages between myths, natural phenomena and religious beliefs?

### ***Complementary Activities***

- \* Using an atlas, students locate the "Holy Places" listed on Resource Sheet (2) and complete the last column.
- \* Read the Dreamtime story in Resource Information Sheet (3). Break the story into sections and have students draw a picture that represents each section. This can then be presented as a book.
- \* Read Resource Information Sheet (4) for a Dreamtime creation story. Discuss sites students have been to that may be sacred (including churches and cemeteries). Discuss the reasons why these sites may be sacred.

Show video *The Trail of the Rainbow Serpent*, This video is available from Susan Groom of AA & C Production (Tel: 09 250 1629). The video comes with ten booklets plus teachers' notes. At the time of writing, it is priced at \$150. After showing the video:

- . Discuss the values parents endeavour to pass on to their children. Discuss values the uncle was endeavouring to pass on to his nephews in the video.
- . Using an atlas, have students locate Boyagin Rock on a map of Western Australia. (You will need to check that your class atlases have this Rock marked.)
- . Study the map showing the trail of the serpent and a selection of sacred places along the trail on the video.

Discuss some landmarks that the students know and a possible mythical reason for their formation.

In groups, students are given a picture of one of the seven natural wonders of the world and invent a story to explain its creation.

## Genesis - The Beginning

*[Taken directly from the Holy Bible New International Version^/*

"In the beginning God created the heavens and the earth. Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters.

And God said, "Let there be light," and there was light. God saw that the light was good, and he separated the light from the darkness. God called the light "day" and the darkness he called "night." And there was evening, and there was morning - the first day.

And God said, "Let there be an expanse between the waters to separate water from water." So God made the expanse and separated the water under the expanse from the water above it. And it was so. God called the expanse "sky." And there was evening, and there was morning - the second day.

And God said, "Let the water under the sky be gathered to one place, and let dry ground appear." And it was so. God called the dry ground "land," and the gathered waters he called "seas." And God saw that it was good.

Then God said, "Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds." And it was so. The land produced vegetation: plants bearing seed according to their kinds and trees bearing fruit with seed in it according to their kinds. And God saw that it was good, and there was evening, and there was morning - the third day.

And God said, "Let there be lights in the expanse of the sky to separate the day from the night, and let them serve as signs to mark seasons and days and years, and let them be lights in the expanse of the sky to give light on the earth." And it was so. God made two great lights - the greater light to govern the day and lesser light to govern the night. He also made the stars. God set them in the expanse of the sky to give light on the earth, to govern the day and the night, and to separate light from darkness. And God saw that it was good. And there was evening, and there was morning - the fourth day.

And God said, "Let the water teem with living creatures, and let birds fly above the earth across the expanse of the sky." So God created the great creatures of the sea and every living and moving thing with which the water teems, according to their kinds, and every winged bird according to its kind. And God saw that it was good. God blessed them and said, "Be fruitful and increase in number and fill the water in the seas, and let the birds increase on the earth." And there was evening, and there was morning - the fifth day.

And God said, "Let the land produce living creatures according to their kinds: livestock, creatures that move along the ground, and wild animals, each according to its kind." And it was so. God made the wild animals according to their kinds, the livestock according to their kinds. And all the creatures that move along the ground according to their kinds. And God saw that it was good.



Then God said, "Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground."

So God created man in his own image, in the image of God he created him; male and female he created them.

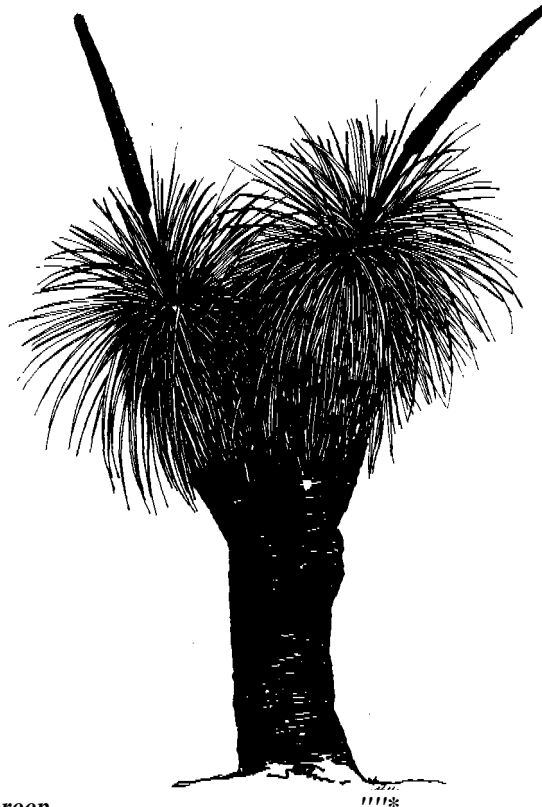
God blessed them and said to them, "Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground."

Then God said, "I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. And to all the beasts of the earth and all the birds of the air and all the creatures that move on the ground - everything that has the breath of life in it - I give every green plant for food." And it was so.

God saw all that he had made, and it was very good. And there was evening, and there was morning - the sixth day.

Thus the heavens and the earth were completed in all their vast array.

By the seventh day God had finished the work he had been doing; so on the seventh day he rested from all his work. And God blessed the seventh day and made it holy, because on it he rested from all the work of creating that he had done."



*Grasstree, balga, kooroop*

## The Dazzling Pearl

*[Adapted from: Education Department. 1990. China Collection. Education Department, Western Australia. This particular story is adapted from Folktales Of The West Lake. Hangzhou is the capital of Zhejiang Province in China. It is about 2000 years old and is considered to be one of the most scenic places in China. Hangzhou is situated on the West Lake, the city's 'shining pearl', and is surrounded by gardens, emerald hills, temples and historical sites. The Dazzling Pearl is a folktale explaining the formation of the West Lake.]*

Many years ago there was a white dragon, known as Jade Dragon who lived in a cave on the eastern bank of the Milky Way called the Celestial River. On the opposite side of the river in the forest, lived Golden Phoenix.

Each morning, before going their separate ways, they greeted each other. One swam in the Celestial River while the other flew in the sky. One day they met unexpectedly on a fairy island and there Golden Phoenix found a shining pebble.

"Look," she said to Jade Dragon, "isn't this the most beautiful pebble?"

"Yes it is" Jade Dragon said. "Why don't we carve it into a pearl?"

Using his claw, Jade Dragon began to carve the pebble and Golden Phoenix used her beak to grind it. Jade Dragon carried water from the Celestial River to Polish the pearl and Golden Phoenix flew to the magic mountains to gather dewdrops. Every day it was ground and after many years of hard work the ball became a beautiful dazzling pearl. By now, the two had grown attached to each other so they decided to live on the island forever, guarding the pearl that they both loved so dearly.

It was a magic pearl. Wherever it shone, things became better: trees grew greener, flowers bloomed longer and the land yielded bumper harvests.

The Mother Queen of the West saw its brilliant dazzling light in the sky one day and was so overwhelmed by its beauty that she wanted to have it for herself. While Golden Phoenix and Jade Dragon were fast asleep she sent one of her most trustworthy guards to steal the beautiful source of the dazzling light. The guard returned with the pearl and gave it to the Queen. She was stunned by its beauty and hid it in a secret room in her palace. It would be difficult for others to reach it as they had to pass nine locked doors to reach it. It was in this secret room that she enjoyed the pearl all by herself.

Jade Dragon and Golden Phoenix discovered that the pearl was gone when they awoke from their sleep. They were so upset and searched high and low for their precious pearl. Golden Phoenix combed every inch of land on the fairy mountains while Jade Dragon looked in every crevice at the bottom of the Celestial River, but in vain. However, they believed that because it was such a special pearl they would not give up hope and believed that some day they would find it.

Months went by and soon a big celebration was taking place in the west. The Mother Queen of the West was celebrating her birthday.

The gods and goddesses from all over the universe came to the palace to celebrate. "May your life be as everlasting as the South Mountain and your fortune be as rich as the East Sea," they chorused.

The Mother Queen was very pleased with these good wishes so she prepared a grand feast, serving her guests the fruit of immortality, nectar and celestial peaches. She drank the sweet wine of grapes but soon had drunk more than she realised and blurted out, "My immortal friends, I want to show you a truly precious possession of mine which cannot be found either in Heaven or on Earth." She left the room and taking the nine keys out of her pocket, unlocked the nine doors one after another, until she reached the secret room. She placed the beautiful pearl on a golden tray and carried it out of the dark secret room and carried it carefully to the table in the center of the banquet hall. The hall was immediately lit up by the radiant light of the pearl. The guests were stunned by its dazzling and beautiful light and lavished great praise on it.

Meanwhile, Golden Phoenix saw the bright light in the sky to the west and shouted, "Look, Jade Dragon, isn't that the light from our pearl?"

Jade Dragon looked up from the Celestial River and said, "Of course it is! Let's go and get it back."

They both flew toward the light which led them to the palace of the Mother Queen of the West. They flew into the window of the great hall where they were dazzled by the radiant light. No one noticed them as they entered, for all the guests and the Queen were still admiring the pearl.

They made their way towards the crowd and shouted "This is our pearl!"

The Mother Queen of the West emerged from the crowd and seeing them exclaimed "How dare you say this is yours! I'm the mother of the Heavenly Emperor and all treasures belong to me."

Golden Phoenix and Jade Dragon were infuriated by her remarks.

"Heaven did not give birth to this pearl, nor did the Earth nurture it. It is the result of our love and many years' hard work." Jade Dragon said lowering her voice.

Clutching the tray tightly, the Mother Queen of the West ordered her palace guards to remove Jade Dragon and Golden Phoenix. But they fought with the guards and escaped flying back into the hall through the window, determined to retrieve the pearl. All three struggled over the golden tray, pushing and pulling with all their might until the pearl fell off, dropping to the floor. When it touched the ground the pearl immediately turned into a clear lake. Unable to part from it, Golden Phoenix and Jade Dragon changed themselves into two mountains which, to this day, stand by West Lake in the western part of Hangzhou.

## A Dreaming Story

*[This story is taken directly from Morrison, J., Penny, M., Storey, R., Ugle, S., and Colbung, B. (about 1993), Gnarojin Park Nyoongah Revival, Pages 1-3. Department of the Arts, Western Australia.]*

"Long before the nyitting (cold times) there lived a giant charrnock (evil spirit) woman, who went from kallep (camp fire) to kallep stealing koolongurs (children). She had very long white hair and was taller than the karri and jarrah trees. She used her hair as a kind of net to store and keep the spirit children in, as this kept her hands free to gather more spirit children. She stole the spirit children to feed her "man" who dwelled in "Bates Cave" near Wave Rock.

The spirit people of the south-west of Western Australia were quite concerned about this phenomenon. Children were disappearing in large numbers. One night they set a trap to observe what was stealing the children. They tried to stop the evil woman, but they could not get close enough to kill her.

One day after a wongi (talk), the spirit people turned themselves into a totem of the magpie (Coolbardies). They knew that it was the only way to get close to her by flying at her in a flock. This way they had a better chance of freeing the koolongurs from her long white hair.

But on seeing them attack, the charrnock woman, whose hands were free, grabbed a big fire stick to beat the Coolbardies. A great fight followed all over the Bibbulmun nation, which can be described as follows. Draw a line from Geraldton, across to Southern Cross, then down to Esperance, along the coast to Albany, Bunbury, Perth, then back up to Geraldton. All the land in that area makes up the Bibbulmun nation. But it did not stop the Coolbardies from swooping on her to free the koolongurs from her long white hair. Some of the spirit children fell onto the ground as the battle continued, and on hitting the earth they turned into stone.

These stones are called bwia-ee-koolongur-nyinna (the stones where the little babies fell). The charrnock woman was beaten very badly. She made her way back to "Bates Cave" so that her "man" could give her assistance, but on seeing her arrive with the Coolbardies, he ran south. The charrnock woman then leapt into the sky, (with the help of Wave Rock which was soft and acted as a trampoline), out of reach in the sky where the magpies could not reach her. Also the rest of the children were imprisoned in her long white hair.

The Nyoongah legend states that her hair makes up the Milky Way and the stars are the children caught in the strands.

Also the five stars shaped like an upside down "v", which is situated between the "starpot" and the "seven sisters", represent her kallep (camp fire). The star on the bottom right side in the group is the fire, and it is always burning. Every now and then a star will fall to earth and make another stone where the spirit babies sit.

The magpie totems today still swoop on little children to let them know that the giant charnock woman is still up there around her fire.

Her giant "man" who had fled when this phenomenon was happening, had also fought pitched battles with the Coolbardies at Lake Grace and Dumblebung. By the time he had reached Katanning, he was bleeding very badly and hid himself in the bush to rest.

In the meantime, the spirit people all gathered for the final battle with the giant "man". Half were still in the magpie totem disguise, they led the attack from above with loud shouting. The spirit people on the ground ran with spears, axes and sticks and beat the terrible giant "man" to death.

While he was still warm, they dismembered him and threw all of his limbs and other body parts far apart. This prevented this charnock man from putting himself together again at Katanning.

When the gruesome task was completed, the spirit people were as one with their indigenous totems. That is why Aboriginals are related to certain living things, be they animal or plant.

A profound phenomenon then took place. Mother earth at Katanning produced the first people (of flesh) in the Bibbulmun nation which inherited the land and were told the laws laid down by the spirit ancestors of the Dreamtime.

As the communities of Katanning expanded, there became a need for the Nyoongar people to travel in their land. One group whose language ended in "up" went south from Katanning, then south-east and south-west. The other language group which ended its language in "ing" or "in" went north of Katanning then north-east."

## The Land of the South-West

*[This is taken, with minor changes, from: Green, N. 1983. Nyungar - Past and Present. Focus Education Services, Cottesloe, Western Australia.]*

### Key Words

Dreaming, asset, material wealth, environment, traditions, constellation.

### Objective

- \* The reader will understand how the Aboriginal past influences the present, and how Dreaming stories linked the Nyoongar to their environment; to the mountains and rivers, to the animals and birds of the earth and to the stars above.

### Introduction

The land over which Nyoongars travelled 200 and more years ago is now the most densely populated region of Western Australia.

Many of the things that made the south-west attractive to the Nyoongar continue to please Western Australians today. The reliable rains that assured the Nyoongar of permanent drinking water now enable farms to prosper. The mild winters are bearable and the summers that brought the Nyoongar to the coast to fish the shallow waters, now draw tens of thousands of holiday makers to the golden beaches. Although the Nyoongar shared the Europeans liking for the south west, they saw the environment through different eyes, and with different feelings.

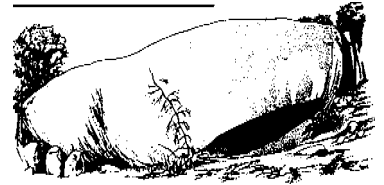
Europeans are inclined to look ahead to the future but the Nyoongar believed that the past and present were most important. Europeans value the land for the wealth that it will bring them in the future. The Nyoongar valued the land because it linked them to the Dreaming. The Nyoongar and the land were like two bodies sharing the one heart. Or as one old man said, "The land is my mother and my child."

The Nyoongar traditions were not written in books but on the land and in the skies. From a very early age Nyoongar children learnt to read these traditions.

The Stirling Range is a land mark in the south-west, and its peak, Bluff Knoll, is climbed by thousands of tourists every year. However, if you look closely at a photograph of the Stirling Ranges you can see the outline of the body of a woman. This is the Dreamtime story told by Greg Kelly of Narrogin, who heard it when he was a boy.

"In the Dreamtime, the giant kangaroo people lived in the vicinity of the town of Cranbrook. One day, two of these people, a husband and wife, had a fight over food. The wife was fatally speared by her husband. Her son was very upset and he found where his father was camped, and killed him. The bodies of the two kangaroo people now form the Stirling Ranges. The shapes of their bodies can be clearly seen from the eastern side of the Range. The Nyoongar believed these Dreaming people were not dead, but sleeping."

## Compare and Contrast Grid of Creation Stories



A Dreaming Story

The Beginning

The Dazzling Pearl

*Mulkas  
Cave*

Which major  
characters are good?  
List them.

Which major  
characters are bad?  
List them.

When do you think  
this story was written?  
(For example, what  
century.)

Which country do you  
think this story came  
from?

For each story, list the  
natural features that  
survive today.

## Location of Holy Places Throughout the World

Place	Co-ordinates	Significance	Country
River Ganges	23N 90E	Sacred river - Hindu Religion	
Bethlehem Jerusalem	32N 35E	Birthplace and crucifixion of Christ - Christianity. Wailing Wall - Judaic Religion	
Rome	42N 12E	Vatican City, Pope - Roman Catholic denomination	
Salt Lake City	41N 112W	Mormon Tabernacle	
Mecca	22N 40E	Resting place of Muhammad - Islamic religion	
Canterbury	51N 1E	Cathedral - home of religious leader of Anglican denomination	



*Mulkas Cave*



# LIFE IN THE 40'S AND 50'S

- \* English
- \* Society and Environment

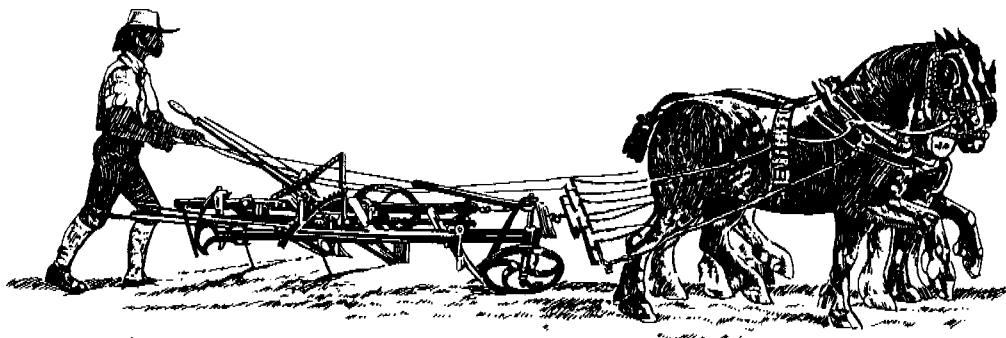
Students are to conduct an interview with either of their parents in order to compare and contrast the account given in this activity with that of their parents.

## Concepts

- \* Regardless of who we are or where we are, we must fulfil basic needs to maintain life.
- \* While lifestyles change from generation to generation, our basic needs remain the same - oxygen, food, water, shelter (clothing and built structures) and companionship.
- \* The experience of others is valuable in our own lives.

## Objectives

- \* To record and organise information according to main headings, sub-headings and supporting details.
- \* To understand that change occurs in the environment and that history helps us to understand what we see today.
- \* To construct questions that require a detailed answer rather than a yes/no answer.



*Horse team*

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
Society and Environment	Time, Continuity and Change - Culture
English	Language Modes - Listening - Speaking - Reading

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
Society and Environment	Time, Continuity and Change  Culture	Understanding the Past Interpretations and Perspectives  Cohesion and Diversity
English	Speaking and Listening  Reading	Processes and Strategies  Use of Texts

## Background Information

The basic needs of people using this region fifty years ago were oxygen, food, water, shelter and companionship. These needs were obtained from the surrounding land. While we still have the same needs today, they are usually purchased from other communities who have specialised in providing particular products.

## References

- \* Jaggard, E. and Baugh, R. 1979. *Welcome to Local History*. Education Department, Western Australia.
- Ministry of Education. 1992. *First Steps - Language Development Reading Comprehension Module*. Ministry of Education, Western Australia.

## Teacher Directions

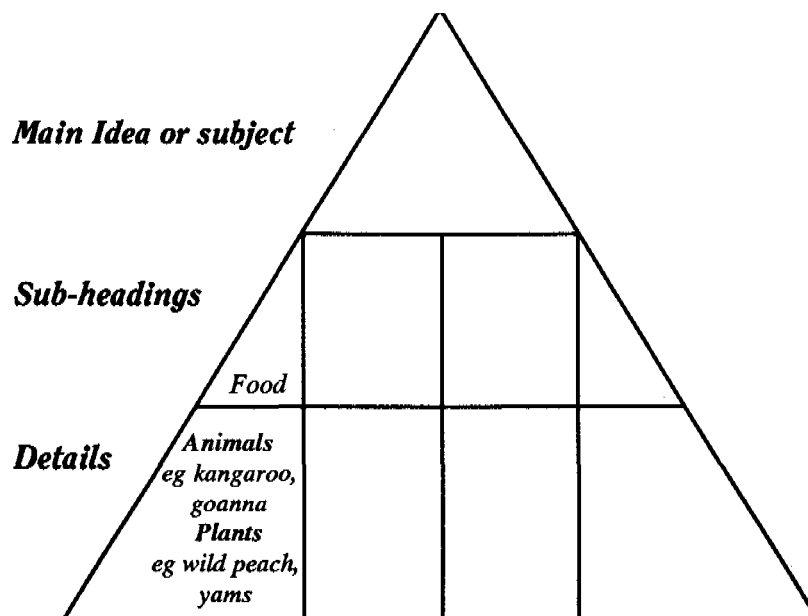
### Materials

- Resource Information Sheet (1)
- \* cards - A4 sheets of paper.

### Lesson Outline

#### Part 1 - Passage Pyramid

1. Read and discuss Resource Information Sheet (1).
2. Students read aloud specific facts from the Sheet such as "Nyoongars ate rabbits", or "Nyoongars sheltered in mias". The teacher writes each fact on a card.
3. Display the cards on the board.
4. As a class, students sort cards into groups. These groups form the base blocks of a pyramid (see diagram below).
5. Teacher asks for suitable headings for the baseline groups. These become the sub-headings for each section.
6. Fact cards are slotted in under the sub-headings in the 'details' section.
7. The main idea of the passage is derived by asking the question, "What is the author saying about the subject?" and writing this into the top block of the pyramid.



## Part 2- Interviews

1. Using Resource Information Sheet (1) as a guide, write out a list of possible questions to use when interviewing a parent or other adult - focusing on the past. The questions need to follow a logical sequence. Avoid questions which could be answered by "yes" or "no". For example, ask "What games did you play?" rather than "Did you play games?"
2. Begin with simple personal information and move gradually into the topic.
  - a) What is your full name?
  - b) When were you born?
  - c) Where were you born?
  - d) Where did you spend your primary school years?
  - e) Which primary schools did you attend?
  - f) How many people were there in your family?
  - g) Did any of your extended family (grandparents, uncles, aunts) live with your family?
3. Then bring in more generalised questions about the particular topic you have decided to focus on.
4. Students conduct the interview - answers can be written down or a tape used and the answers recorded later.
5. Draw up a pyramid similar to the first activity.
6. Students can use the two pyramids to practice drawing conclusions, making judgments and generalisations from the text.

### **Evaluation**

- \* Were students able to organise and record the information into main headings, sub-headings and supporting details?
- \* Were students able to construct questions for their interviews in such a way as to gain the most information?

### **Complementary Activities**

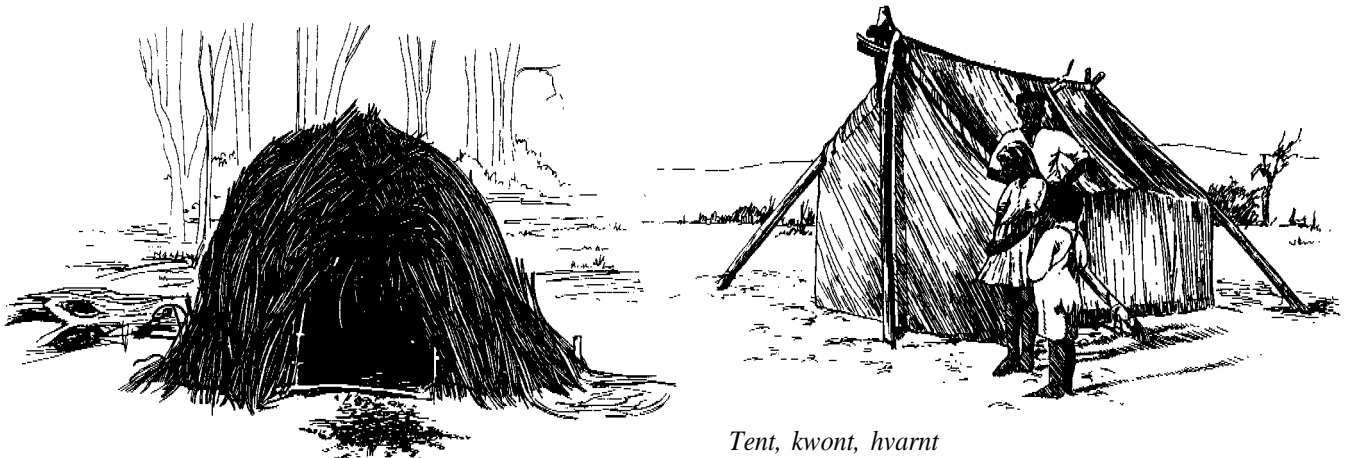
- \* Students could complete a similar interview sheet for themselves, making predictions as to what they think they will be doing in several years' time.
- \* View films such as *Playing Beattie Bow*, *A Fortunate Life* or titles from the *Touch The Sun* series in order to compare life styles of different generations in different times.
- \* Invite local identities to the school to discuss their childhood and early teen years. It is quite interesting to interview a family consisting of two generations, at one time.

## A Changing Life

[The following account is based on information received from Joy Bailey (Hopetoun), Chris Kealley (Narrogin), Trevor Penny (Narrogin) and Joyce Winsley (Narrogin).]

Nowadays, as we buy our food from the local supermarket, drive home in our cars and store the food in refrigerators and cupboards, it is hard to imagine a life where nearly all of our needs are provided by our local environment. Yet we only need to go back fifty years to find this was the case for many of the people of the wheatbelt. The Nyoongar people had developed a lifestyle that focused on their local surroundings for the necessities of life.

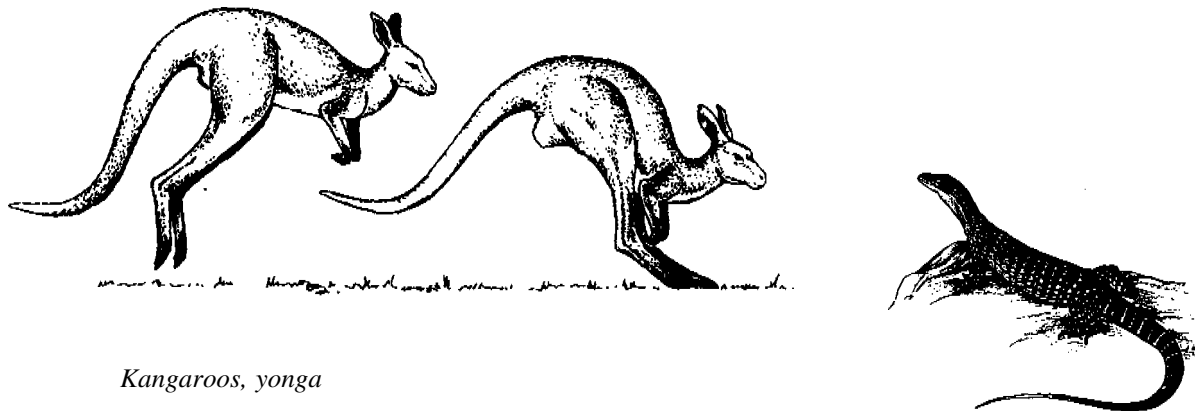
The 1940's and 1950's were a time of change. More and more of the wheatbelt was being opened up to farmers. Labour was needed to clear the land and Nyoongar people were affected by this change.



*Tent, kwont, hvarnt*

*Mia, mya*

The traditional shelter showed signs of this change. In winter a substantial shelter was necessary for protection from the cold winds and rain so a mia was constructed from sheoak or mallee suckers with a tea-tree or balga thatch. When a lighter shelter was required, a quornt was made. This had a similar framework to the mia but was covered with bags. Tents gradually became one of the shelters used by Nyoongars.



*Kangaroos, yonga*

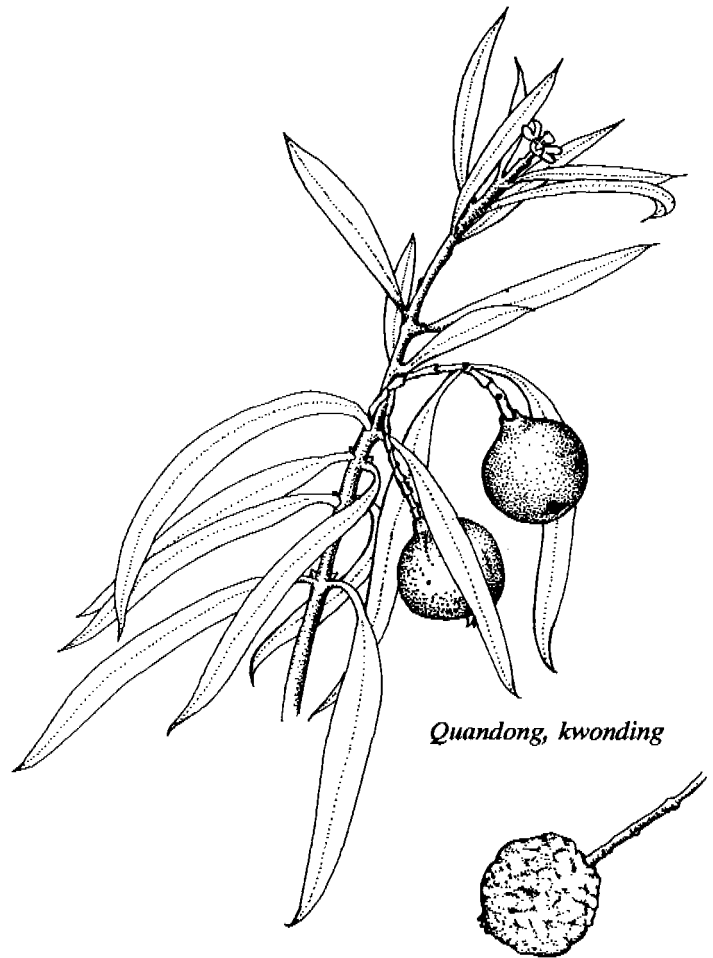
*Race-horse goanna,  
kerda, kurda, karda*

Nyoongars found most of their food in the bush. Rabbits, kangaroos, tammars, woylies, bobtail skinks and goannas were caught, cooked over an open fire and eaten. Some mammals provided skins that could also be used for warmth.

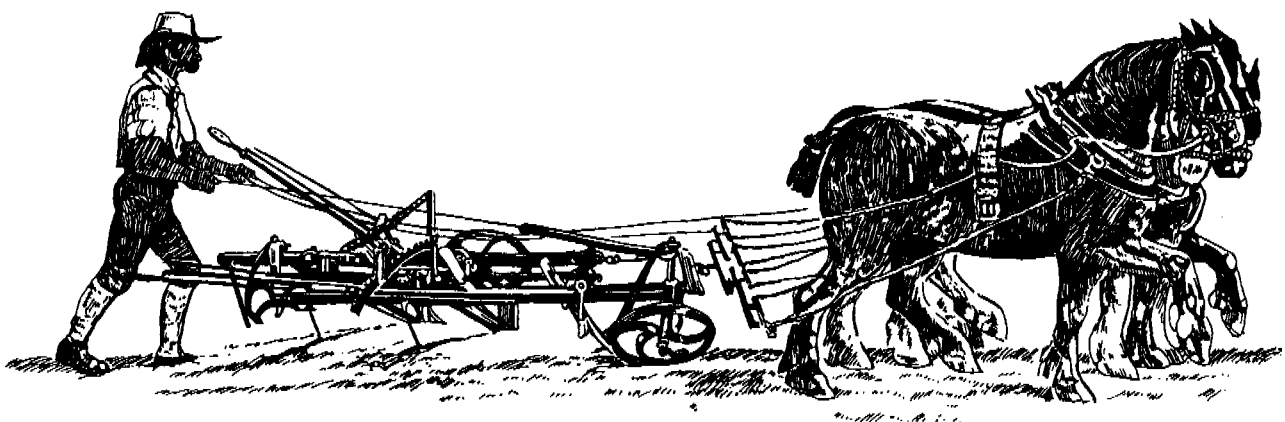
Plants were a rich source of food. Wild peaches (quandong) were a delicacy. The fruit could be eaten and the stones used for decoration. The inner kernel could also be eaten. Yams were dug up and other plants provided seeds and berries which could be eaten.

As more of the land was used for farming, further changes in the Nyoongar lifestyle occurred. Instead of spending time gathering food, Nyoongar people helped in the farming programme.

They drove horse teams and tractors, worked in the shearing sheds and cleared trees and mallee roots from the new paddocks.



*Quandong, kwonding*



*Horse teams*

Poisonous plants such as sandplain poison and box poison were picked so that the stock could graze safely. Rabbits were a problem as they ate the grass needed by sheep and cattle. Nyoongar people trapped rabbits and were able to sell them to dealers who used both the meat and the skin.

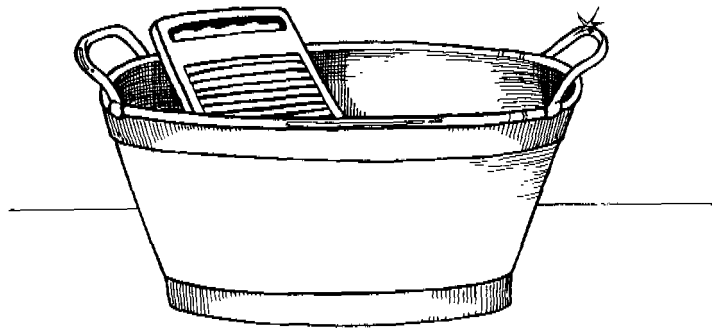
Outdoors work was usually performed by men while women were often employed in the home. Kitchen chores, cleaning, washing and helping care for the hens, cows and other livestock were some of the tasks done by Nyoongar girls and women. Work began often as young as thirteen years of age.

Tea, sugar, flour and mutton were often provided as part of the wages paid to workers. Gradually the traditional foods were replaced in part by these products.

The Nyoongar people changed their lifestyle to meet the needs of the time. Their foods, homes and work patterns were greatly altered as the wheatbelt areas were taken up for farming. The Nyoongar people adapted to this change by learning a new range of skills in order to meet this need.

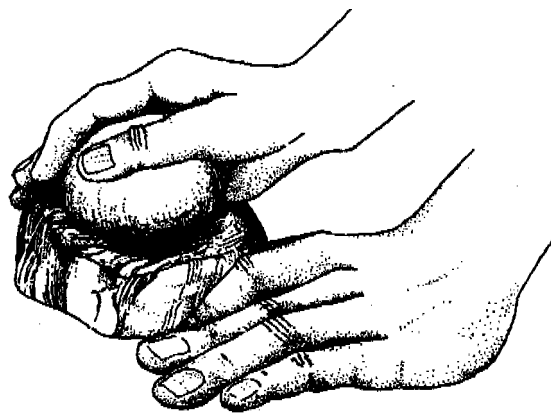


*Sandplain poison,  
mindalong*



*Wash board*

# Food, Shelter and Tools



Fundamental to human life are food and water. Similarly we need protection from the weather, either through clothing or shelter. Tools have also been a cornerstone of human lifestyle throughout the world. In this set of activities some Nyoongar ways of obtaining these necessities are discussed. For today's Australians, it is fascinating to learn that there are alternative ways of living in this continent.

***Activities in this section are:***

- \* Nomads of the Wheatbelt
- » Back To the Bush
- \* Table Tucker
- \* Animal Tracks
- \* The Kangaroo Connection
- \* 101 Uses for a Grasstree
- \* Shelters and Structures



# NOMADS OF THE WHEATBELT

- \* Health
- \* Society and Environment

This activity focuses on the six traditional Nyoongar seasons and the types of food available during each period.

## Concepts

- \* Nyoongars had a nomadic lifestyle and were hunters and gatherers.
- \* Traditional movements were based on seasons and related to sources of food.

## Objectives

- \* To familiarise students with the number of traditional Nyoongar seasons and the type of food available to them during each season.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
Society and Environment	Culture

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
Society and Environment	Culture	Beliefs and Culture

## Background Information

With minor additions and alterations, the following has been taken from publications by Peter Bindon and Trevor Walley (Bindon, P. and Walley, T. 1992. Hunters and gatherers. *Landscape*. 8 (1):28-35), and Neville Green (Green, N. 1984. *Broken Spears -Aboriginals and Europeans of the South West of Australia*. Focus Education Services, Perth.).

Throughout the world people generally divide the year into seasons based on the natural cycles of climate, plants and animals in their environment. Europeans divide the year into 12 months and four seasons based on their Northern Hemisphere climate - Summer, Autumn, Winter, Spring. The timing of these is shown in the table below.

Hemisphere	Spring	Summer	Autumn	Winter
Northern (European)	March, April, May	June, July, August	September, October, November	December, January, February
Southern (Australia)	September, October, November	December, January, February	March, April, May	June, July, August

When Europeans settled in Australia, they kept their old seasonal patterns despite the marked differences in climate and other natural cycles. Australia's climatic pattern is opposite to that of Europe because we are in the southern hemisphere (see table above). Early European settlers found it difficult to adapt to this new schedule for seasons.

Furthermore, climatic patterns vary throughout Australia, and these changes affect cycles in plants and animals. Aboriginal people divided the year into seasons that were closely attuned to the climate and related plant and animal activity.

Nyoongar people did not have names for the months, and did not measure time in seconds, minutes, hours, days, weeks, months or years. Their 'year' was divided into six seasons according to the cycle of weather. These were decided by the food available, not the time.

*Birak* was the dry time of December and January, with hot easterly winds during the day and cooler south-westerly (west coast) or south-easterly (south coast) sea breezes in the afternoon. *Bunuru* covered the late summer and early autumn months of February and March, with hot easterly and north winds. *Djeran* was the name for the period covering April and May. The weather at this time was cooler, with winds generally from the south-west. *Makuru* was early winter, spanning June and July. At this time the weather was cold and wet, with squally westerly gales. *Djilba* covered the late winter and early spring months of August and September when the weather began to get warmer. Finally, *Kambarang* was the season of decreasing rain, covering the months of October and November.

Each Nyoongar group had their 'kaleep' or favourite camping locality which held for them a special significance. Beyond this there was a more extensive area over which they hunted and foraged. They travelled in small family groups, and only met in large clan groups a few times a year for specific ceremonies. Family units travelled within their defined territories, setting up camps in 'mias' or bush shelters for as long as the seasonal foods lasted. When special harvest foods were abundant, other Nyoongar groups were invited to share them. Participation was always by invitation, for to trespass on another's range could evoke anger with the possibility of a spearing.

This nomadic lifestyle was misunderstood by the European settlers and seen as random 'walkabout' behaviour, because they did not understand the seasonal food patterns or the traditional hunting and food gathering lifestyle as the motivation for migration.

Nyoongars did not make permanent homes, but moved to follow the patterns of food available.

Although some root foods could be gathered and some small animals caught at any time of the year, most foods were seasonal, and only available at particular times of the year.

Apart from the weather, Nyoongars used a variety of other indicators which told them the best times to hunt particular animals. For example, when the sheoak (*Allocasuarina fraseriana* in the jarrah belt) turns a yellow-brown colour, kangaroos are fat, and Nyoongars never ate animals until they were fat. When swan feathers began appearing on the lakes and waterways, it became obvious that swans were beginning to moult and would be easier to catch.

Nyoongar people were quite aware of the products they could expect to harvest from various parts of their territories during each season. Their diet varied according to the weather within six seasons, and foraging groups travelled to the most suitable place within their territory to find food. Superimposed on travels made in response to the season were treks related to ceremonies. These large group meetings, arranged during previous gatherings, were scheduled to take place in specific locations.

Despite its close relationship to the seasons, the foraging system was sufficiently flexible to take advantage of unexpected events - like thunderstorms, whale strandings or natural wildfires - that might suddenly provide abundant resources.

### ***Key Words***

Kaleep, nomadic, migration, seasonal, clan, harvest, trespass, mia.

## References

- \* Bindon, P. and Walley, T. 1992 Hunters and gatherers. *Landscape*. 8 (1):28-35.
- \* Green, N. (ed.) 1979. *Nyungar, the People: Aboriginal Customs in the South West of Australia*. Creative Research, South Perth.
- \* Green, N. 1983. *Nyungar- Past and Present*. Focus Education Services, Cottesloe, Western Australia.
- \* Green, N. 1984. *Broken Spears - Aboriginals and Europeans of the South West of Australia*. Focus Education Services, Perth.
- \* Staff and Students. 1995. *Cooking Noonghar & Watjela Way Cookbook*. C.Y. O'Connor College of Technical and Further Education, Narrogin.

## Teacher Directions

### Materials

- \* Resource Information Sheets (1), (2) and (3)
- \* Resource Sheet (1).

### Lesson Outline

#### Activity 1 • Poster of the Seasons

1. Study Resource Information Sheet (1), and discuss it with students using the details in the 'Background Information' section.
2. Cut up photocopies of the 'cards' in Resource Information Sheet (2), and give each student, or each group of 2-3 students, a card.
3. Either individually or as a group, students prepare a poster showing scenes that describe the season on their card. They could use drawings both of Nyoongar activities and their activities during the same period. Students should label the top of their

<b>BIRAK</b>	
December	January
Southern Hemisphere (Australia)	SUMMER
Northern Hemisphere (Europe)	WINTER
<i>Picture here</i>	

poster with the name of the Nyoongar season, the names of the months, and the name of the nearest, equivalent season in the European system (see the table in 'Background Information'). A possible layout for a poster is shown above.

### Activity 2 - Hunting and Food

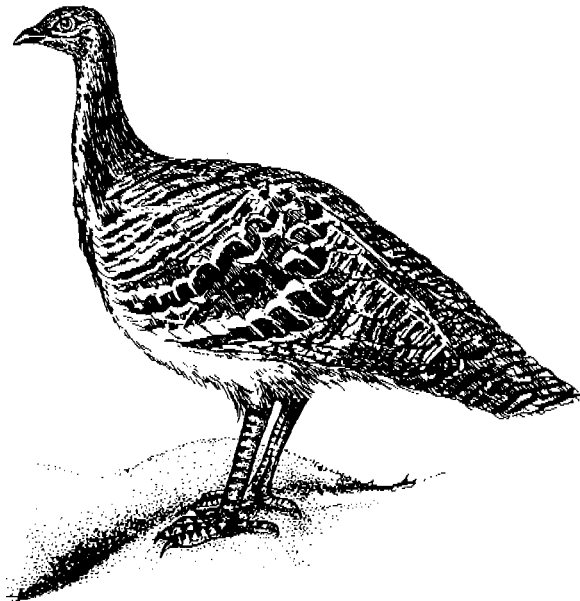
1. Provide students with a copy of Resource Information Sheet (3) and Resource Sheet (1).
2. Students read the Resource Information Sheet then list Nyoongar foods in the left column of the Resource Sheet. They then complete the right hand column with a list of the equivalent foods they might eat today.
3. Group students and give them Resource Sheet (2) and Resource Information Sheet (3). Using these sheets, have them write a procedure for:
  - \* hunting kangaroos
  - « weir fishing
  - » preparing zamia nuts.

### Evaluation

- \* Could students prepare a poster that accurately described a Nyoongar season?
- \* Were students able to extract information from text to write a procedure?

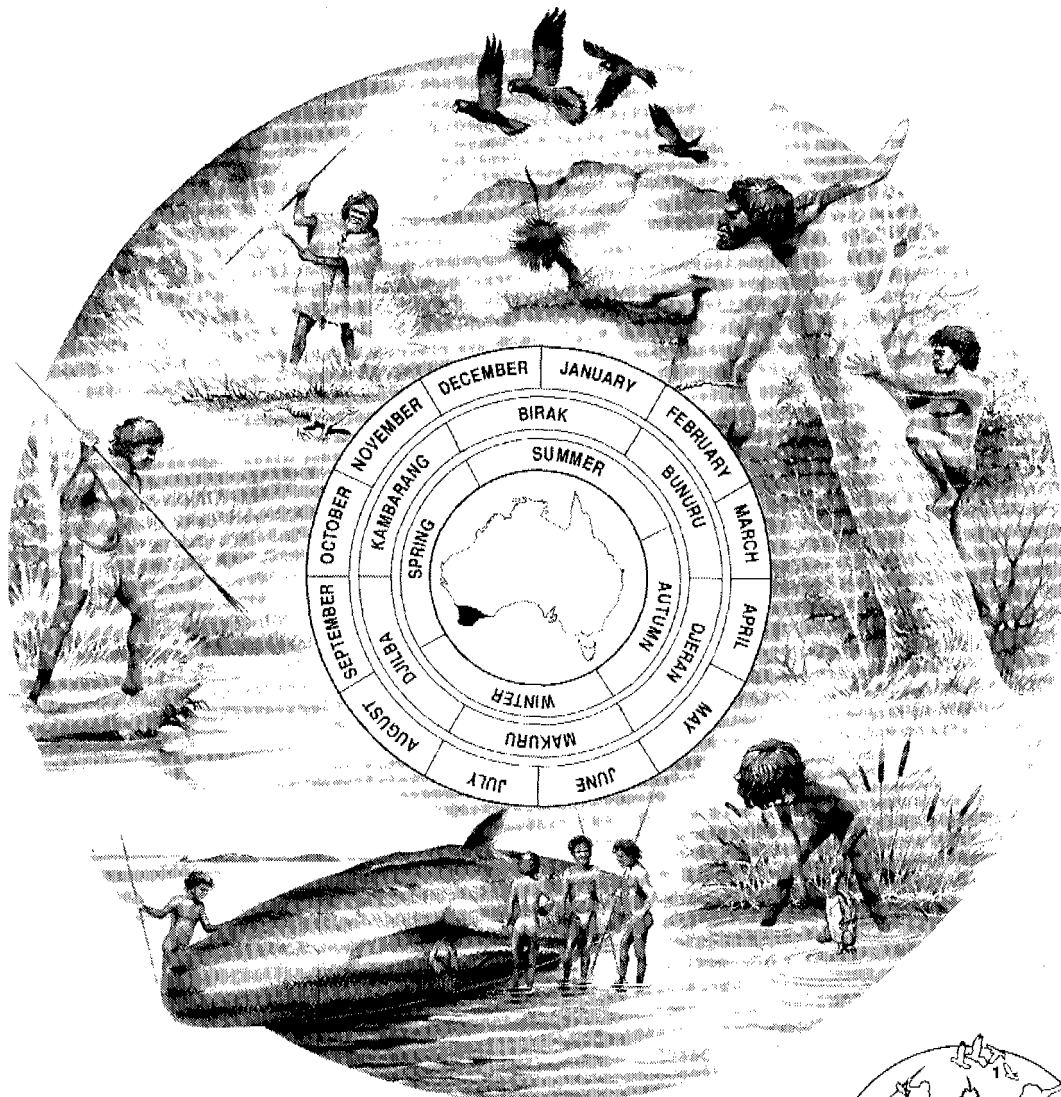
### Complementary Activities

- \* Take students outdoors. Create six areas bordered with sticks or hoops. In groups, students are given a card from pages 39-42. They then create a symbolic representation of the season using items found in the natural environment.
- \* Using Resource Information Sheet (4), try out some of the recipes which utilise traditional foods in modern dishes.
- \* Use the *Bush Tucker* videos to explore some traditional Australian bush foods.
- \* Using the posters made in *Activity 1*, have students write a diary of hunting and gathering activities for a traditional Nyoongar family. Use the Nyoongar seasons, not months.

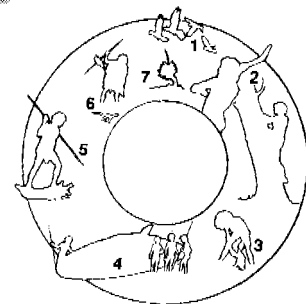


*Malleefowl, ngawoo*

# The Nyoongar Seasons



- Bunuru/ "Bunoora"** hot easterly and north winds from February to March
- Djeran/"Dj-eran":** becoming cooler with winds from southwest from April to May
- Makuru/ "Mag-goora":** cold and wet with westerly gales from June to July
- Djilba/"Jil-ba":** becoming warmer from August to September
- Kambarang/ "Kam-bar-an":** rain decreasing from October to November
- Birak/"Burock":** hot dry with easterly winds during the day and sea breezes in the late afternoon from December to January



### Key to Wheel

1. **KARRAK** red tailed black cockatoo
2. **KERL** boomerang
3. **BUYI** tortoise
4. **MAMANG** whale
5. **KITJ** spear
6. **KAADAR** racehorse goanna
7. **BALKA** blackboy

*This figure is the cycle of seasons figure from "Landscape" article by Bindon and Walley. Reproduced by courtesy of the Education Department of WA.*

## The Six Seasons

[With minor additions and alterations, the following has been taken from an article by Peter Bindon and Trevor Walley: Bindon, P. and Walley, T. 1992 *Hunters and gatherers. Landscape. 8(1):28-35.J* Anecdotal notes from Joe Watty have also been included.

### ***Bunuru***

Fishing and hunting coincided in Bunuru (February and March). At this time large sections of the country were deserted for lack of water. Near the coast and in estuaries, fish made up a large part of the diet of this season, and large assemblies gathered.

Although fish hooks were not used and most fish were speared, other clever methods were used to catch fish. Stone fish-traps and wooden weirs were built to take advantage of the shoals of fish which often visited shallow or tidal areas. When shallow pools were found to contain fish, piles of spiky brush were pushed ahead of a line of wading hunters who surrounded the fish and forced them into shallow water where they were easily speared or killed with clubs. Another technique was to build a 'mungur'. This was built with a central race, which was made shallow with bushes until there was as little as 20 cm of water for the fish to swim through. Next to the race was a platform on which people stood and scooped the fish from the water by hand, throwing them to people waiting on the bank.

Race-horse goanna (kurda) eggs were laid in termite mounds. The mounds acted as an incubator. When the young were born, they dug their way out and ate the termites.

Towards the end of Bunuru, in March, the fruits of the western zamia (*Macrozamia riedlei*) were collected. To remove toxins, these had to be buried for some time, then soaked in water and finally roasted before being eaten. Also at this time the underground parts of the bulrush (*Typha domingensis*) were pounded to remove the fibrous parts, moulded damper-like into a flattened shape and then roasted to produce tasty cakes. A sand-plain bulb, much used for food, was added to the bland foods to make a spicy meal.

### ***Djeran***

Djeran (April and May) was the period when mias were built or repaired, and also kangaroo skins and coats were prepared for winter. Hunting was focused on kangaroos and also fish from rivers.

When the first lot of rain came the bardi grubs climbed up the stems of the plants. It was easier gathering the Bardi grubs than rather than digging them out from the roots.

### *Makuru*

Makuru (June and July) was the time to dig pink tubers (*Tribonanthes* spp). Swans began moulting in June and, being unable to fly, made easy prey. Together the women and children would drive the swimming birds across open water of the lake or river to the men, who waited, concealed, for the birds to come within reach.

Isaac Scott Kind observed in 1831 that during winter when people were travelling, they scarcely went anywhere without a smouldering branch of bull banksia (*Banksiagrandis*) held beneath their 'booka' (kangaroo skin cloaks).

Fire was made using the slender flower stems from grasstrees (for example, *Xanthorrhoea preissii*). Fire was perhaps their most useful and precious resource, used in tool and artefact production, in food preparation and cooking, for hunting and driving game, for warmth, and for signalling. The camp fire provided comfort and company. Grasstrees were the home of the tasty bardi grub, up to a hundred of which could be found in a good tree. Skilled eyes could tell at a glance whether any particular plant held an abundance of grubs.

### *Djilba*

During Makuru and Djilba (August and September), the winter period, the people went to their inland hunting areas once water supplies in the dry areas of their territory were thought to be reliable. The tubers of native potato (*Platysace cirrosa*) were dug from beneath the wandoo at this time, kangaroos, emus and quenda (southern brown bandicoot, *Isoodon obesulus*) were hunted and possums were driven from their tree hollows with smoke.

When the Emu Berries were getting their buds, it was the time that emu eggs were being laid.



*Common brushtail possum, kumall, kumarl*



## ***Kambarang***

The sign to return to the coast as the warmer weather approached at the end of Djilba and on into Kambarang (October and November) was the flowering of the Western Australian Christmas tree (*Nuytsia floribunda*). After taking slabs of bark from the trees to make shields, families returned later to collect and eat the raw, sweet gum that oozed from the "wounded" trees, now in spectacular flower. In the coastal heathlands many different berries and fruits were collected, particularly those of the native cranberry (*Astroloma* spp), and wild pear (*Persoonia* spp).

Especially sought after at this time were supplies of gum from various wattle trees, and *Dioscorea hastifolia*, a yam which was dug up by women using a long 'wana' (digging stick). The shoots and tips of the yams were thrown back into the holes from which they had been dug to ensure that a new crop of yams would grow.

The season also brought a natural increase in game, some of which were trapped by being herded into trampled brush where they became tangled and were easy prey to armed hunters surrounding the scrub.

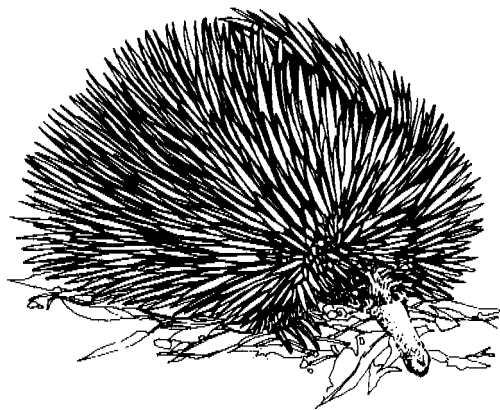
Also in Kambarang, the last red beak orchids (*Bumettia nigricans*) and native potatoes (*Platysace cirrosa*) were dug before the scattered groups moved back towards the coast. This time, when small family parties linked to form larger bands, was also known as man-ga (nesting season). During this time the people searched the forests and woodlands in pursuit of waterfowl, birds' eggs, and fledgling pigeons, parrots, cockatoos and hawks, which were all taken from nests.

Hunting also focused on the swamps and wetlands where freshwater crayfish and edible frogs were caught by hand in the shallows, and freshwater tortoises were easily caught in the dwindling pools. These delicacies, along with the starchy tubers of arrow grass (*Triglochinprocera*), were roasted together in the ashes of camp fires.

## ***Birak***

Birak was the hot time of December and January, which saw the lighting of controlled local fires in the scrublands. Such fires forced kangaroos and western brush wallabies out into the open so they could be speared more easily. Burning continued until Bunuru (autumn) to reduce undergrowth and bring on the lush growth of grasses and young plants in Djilba (late winter, early spring), which in turn attracted animals later in the cycle. Women and children also fired the bush for animals up to the size of bandicoots. As the fires swept through selected patches of bush, many reptile species, such as race-horse goannas, shingle-back lizards, and small marsupials fleeing the flames were killed with clubs and sticks. As soon as the ground fire passed, the group searched the ashes for burnt lizards and snakes, which were collected in great numbers. Birak was also the time of large gatherings to participate in drinking the nectar from the banksia flower spike steeped in water - the resulting honey-sweet drink was known as 'mungitch'.

The start of Bunuru brought the Nyoongar people to the beginning of another year.



*Echidna, nyingarn, nyngar*

## Nyoongars of the Swan

[The following is taken from Green, N, 1984. Broken Spears - Aboriginals and Europeans of the South West of Australia. Focus Education Services, Perth.]

Nyoongars of the Swan River Region divided the year into six seasons which roughly coincide with the calendar months as shown below:

- \* Birak - December and January
- \* Bunuru - February and March
- \* Djeran - April and May
- \* Makuru - June and July
- \* Djilba - August and September
- \* Kambarang - October and November.

During the winter months, when trails showed fresh on the damp ground and the fall of rain masked a man's approach, the kangaroo was tracked by solitary hunters. Later in the season, when the family groups began to congregate, they co-operated to drive kangaroos along paths into pit traps lined with pointed stakes, or into brush entanglements where they could be readily killed with clubs and spears. In spring possums were hunted, for then the tell-tale grains of sand from damp paws adhered to scratches on the trunks of trees to betray the animals' refuges. Throughout spring there was an abundance of roots, birds, eggs, young birds, edible grubs, lizards and other small reptiles. It was also the time of the year when the honeyed sweetness of the yellow banksia was sucked from the blossom.

Spring and summer fishing were popular in the sheltered bays of Mandurah, Fremantle and Albany, and groups of 20 or more women and children armed with branches drove schools of mullet into the shallows to be speared by the men. In autumn the estuaries and rivers were dammed at traditional places at Albany, Augusta and Mandurah, and thousands of fish were caught. In selected places along the Swan River and in the shallow waters of King George Sound, the Nyoongars lit bonfires on the bank and speared the fish attracted to the firelight.



*Tammar wallaby, damar*

In the summer months family groups gathered on their home territories to fire sections of the bush, and then kangaroos and wallabies, flushed from the underbrush by the fire, were speared at point-blank range or knocked over with sticks. It was customary for the owner to be present when his country was put to the torch, and if it was accidentally burnt during his absence, it could cause friction between families. During the spring another technique called the 'woit' was used to hunt animals. Like burning in the summer, it required the cooperation of groups of people. A wallaby or kangaroo was tracked to a dense thicket and all the perimeter bushes were broken to make a crude but effective entanglement. A few hunters accompanied by their dogs entered the thicket to flush out the game which became trapped in the bushes and easily clubbed.

Between March and May (autumn) the women gathered the by-yu nuts of the *Zamia* and left them to soak in convenient pools for several days before shifting them to grass-lined holes to cure for at least two weeks, after which the yellow casing of the nut, in addition to the kernel, was cooked or eaten raw. This lengthy process was necessary to neutralise the poisons in the nuts. At both Albany and the Swan River, the by-yu season coincided with the run of mullet, salmon and tailor which were readily caught by spearing and trapping, thus providing alternative foods during the time the by-yu was buried.

There were times during the Nyoongars' summer visit to the coast when seals and penguins were trapped among the rocks, and memorable moments when whales were beached.

The man who claimed the territory that received such an unexpected bounty would build a fire to attract any Nyoongar in the region. For days afterwards as people arrived they became engrossed in a cycle of cutting, cooking, dancing and sleeping.

Many edible roots were in season between May and October such as:

- \* MEEN, from the Kojonup district, was a root that possessed a bitterness which the Nyoongars neutralised by adding the ash of a particular bush during grinding.
- \* JEET-TA was a common root food found throughout the south-west around June.
- \* DJAKAT was a small root gathered in September.
- \* In October there were crops of DJUBAK, a larger tuber the size and shape of a new potato, which was a highly prized food.

Some foods, such as a BOHN, a small red root, were available throughout the year. Certain other foods such as oysters, although plentiful, were taboo by Nyoongar law. However, this avoidance began to break down soon after the arrival of the Europeans.

## Recipes for Bush Food

[The following recipes are taken, with minor alterations, from *Cooking Noonghar & Watjela Way Cookbook*, prepared by Students and Staff, Narrogin C.Y. O'Connor College of Technical and Further Education. The authors of each recipe are acknowledged with their recipe.]

### Quandong Jam by Joan Abraham

This tasty fruit jam is very easy to cook and doesn't cost a lot of money. All that is needed are some wild cherries (quandongs).

#### *Ingredients*

2 kilos of wild cherries (quandong *Santalum acuminatwri*)  
2 ^ tablespoons of sugar  
2 cups of water.

#### *Method*

Mix quandong peel, sugar and water together to make this jam.  
The taste is so great, you want to eat more!

Cook for about 15 minutes.



*Quandong, Icwondong*

## Kangaroo Casserole by Elaine Chitty

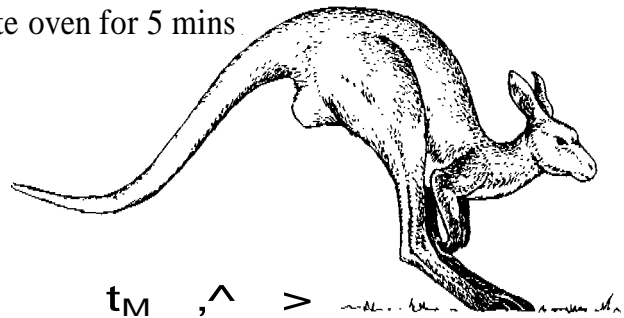
### Ingredients

500 gm diced kangaroo  
1 onion diced  
8 mushrooms  
salt  
gravy or continental hot pot (mushroom/beef stroganoff)

### Method

Put kangaroo meat in pot.  
Steam the meat and onion until half cooked.  
Add mushrooms cut in chunky pieces.  
Add salt.  
Add gravy mixture or hot pot when all steamed down.  
Cook for 10 mins or until thickened  
Put in casserole dish then place in moderate oven for 5 mins  
And serve with vegetables.

Serves  
four



Kangaroo, yonga

## Damper by Shirley Williams

### Ingredients

500 gm plain flour  
250 gm self raising flour  
3-4 cups of water

### Method

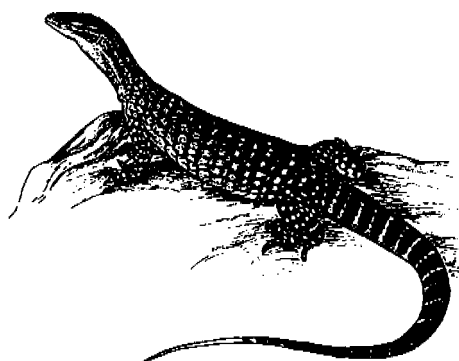
Put plain flour into bowl  
Add self raising flour  
Add water enough to make sticky dough  
Mix all together  
Roll on board until smooth, and then shape it out to fit tray  
Place in oven at 200 C for about 20 minutes, turn over.  
When brown pull out.

### Serves

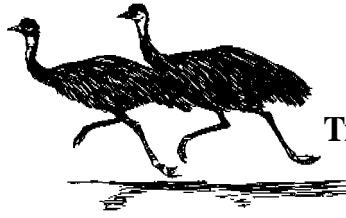
Up to 3-4 people, eat hot or cold with butter, vegemite, or jam.

## Bush Foods and Diets of Today

Season	Traditional Nyoongar Food	Foods of Today
Winter		
Spring Summer		
Autumn		



*Race-horse goanna,  
kerda, kurda, karda*



Title:

# A Hunting Procedure

Aim (What do you want to catch or process?)



Requirements (What do you need?)



Method (How will you do it?)

1.



2.

3.



4.

5.





# BACK TO THE BUSH

\* Society and Environment

This activity focuses on the basic needs of humans. A visit to the woodlands shows how modern basic needs and those of traditional Nyoongars are the same.

## Concepts

- \* All animals have basic needs - air, water, food, shelter and companionship.
- \* Living off the land is a difficult and challenging experience.
- \* Living off the land should cause minimum impact on the environment so that future food resources are conserved.

## Objectives

- \* To compare the basic needs of Nyoongars with those of Europeans.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
Society and Environment	Time, Continuity and Change Resources

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
Society and Environment	Time, Continuity and Change	Understanding the Past Interpretations and Perspectives
	Resources	Management and Enterprise

## Background Information

The basic needs of people using this region today are the same as those of the traditional Nyoongar people. These basic needs are oxygen, food, water, shelter (clothing and built structures) and companionship.

Today - other than oxygen and companionship - most of our needs are purchased from other humans who produce them. In tribal times, people were much closer to the resources of the land, with each community having to provide for nearly all their needs. A few non-perishable items, such as ochre, were traded with other tribal communities.

Fire is a very important part of traditional Aboriginal lifestyle. It was used for cooking, warmth, tool manufacture and as a tool for obtaining food. Heat from friction, made by rubbing two pieces of wood together, was used to make fire. Natural fire from lightning was also used.

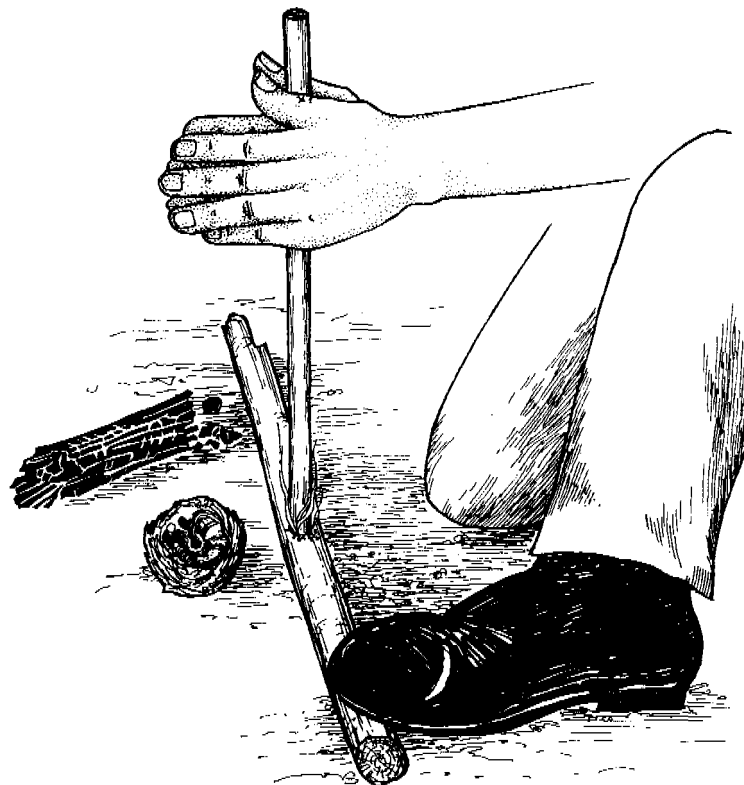
The sinew from kangaroos and possums had many uses, one of the most important being string. The resource information sheets for '101 Uses of a Grasstree' and 'The Kangaroo Connection' give more details concerning the use of bush materials to meet basic needs.

### Key Words

Nyoongar, traditional, basic needs, resources, non-perishable, corresponds, substitute.

### References

- Department of Conservation and Land Management. 1993. *Cultural Interpretation Activities Workshop*. Department of Conservation and Land Management, Perth.



## **Teacher Directions**

### ***Materials***

- \* Resource Sheets (1) and (2).

### ***Lesson Outline***

1. Discuss with students the basic needs of humans and whether they have changed over the centuries. Discuss how traditional cultures obtained their basic needs.
2. Hand out Resource Sheet (1) and discuss.
3. Students visit the bush and find something that could be substituted for the items in column one.
4. Hold a class debate on "Living off the land has an enormous impact on the environment". This activity could also occur in the classroom, but more discussion would need to take place.
5. Students do an exposition based on the debate and using Resource Sheet (2).

### ***Evaluation***

- \* Were students able to compare modern resources with those used by traditional Nyoongars?

### ***Complementary Activities***

- \* Refer to card 11 'South West Resources' and card 13 'Homes and Campsites' from *Nyungar - Past and Present*, a curriculum package by Neville Green.
- + Invite local Nyoongars to your school to talk about the traditional way of life, focusing on basic needs.
- \* Refer to 'A Bit Shaky - Seed Separation' in *Keeping the Spirit Alive*, a curriculum package by the Western Australian Museum.

## Back to the Bush

The basic needs of people using this region today are the same as those of the traditional Nyoongar people.

Imagine you are lost in the bush, hundreds of kilometres from the nearest town. You decide to camp near a large rock, so it can be used as a land mark.

In column two, list present day resources that would replace the traditional Nyoongar resources described in column one. Wander around the bush and see if you can find any resources listed in column one. Put a tick next to any that you find.

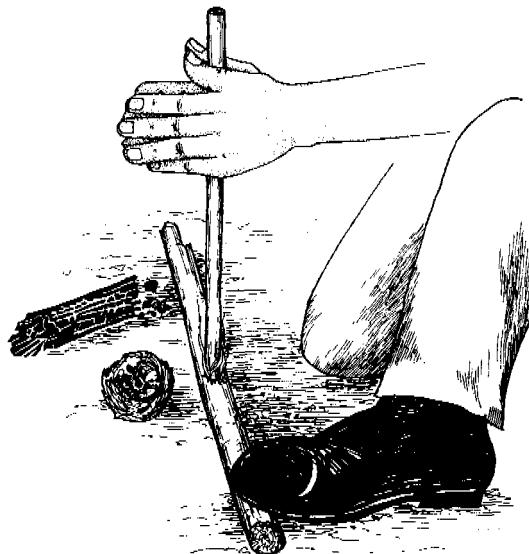
Column One	Did you Find it?	Column Two
balga leaves		vegetables
balga spear		matches
quandong		
water		
wild grasses		
animal fat		
mia or quornt		
kangaroo skin cloak		
kangaroo sinew		
sharp stone		
spear		
grass basket		
kangaroo meat		
ochre		



*Bandicoot, quenda*



Go into the school ground or nearby bush. Find a place where you would build a shelter and describe why you chose that spot. Also describe the materials you would use to make the shelter.

If you were a traditional Nyoongar, explain what you would do once you had used up the supply of food in a particular area?



## Exposition - Two Sides of a Story

**"Living off the land has an enormous impact on the environment."**

	<i>Arguments for</i> 1.	<i>Supporting Evidence</i>
	2.	
	3.	
	<i>Arguments against</i> 1.	<i>Supporting Evidence</i>
	2.	
	3.	
	<i>Conclusion or Summary</i>	

# TABLE TUCKER

The Arts  
English

A Diorama is created based on the habitat of an animal used as a food source by Nyoongars and found in the wheatbelt woodlands.

## Concepts

- \* Nyoongars were dependent on the environment for their food.

## Objectives

- To increase students' knowledge of the animals eaten by Nyoongars.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
The Arts	Arts Skills and Processes
Science	Understanding Concepts - Life and Living
English	Language Modes - Writing

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
The Arts	Using arts skills, techniques, technologies and processes	
Science	Life and Living	
English	Writing	

## **Background Information**

The traditional Nyoongars of the South-west were hunters and gatherers. They were dependent on the environment for their food supply, moving from place to place within defined areas as the availability of food and seasons dictated.

The most readily available sources of food were mammals, birds, eggs, most reptiles, some frogs, fish and some invertebrates (for example, beetle larvae such as bardi grubs). Seeds, fruit and roots of various sorts were gathered.

It is reasonable to presume that the men were hunters of larger animals, while the women were gatherers - collecting seeds, digging for roots and catching smaller animals.

Spears, axes, throwing sticks or clubs and boomerangs belonged to and were used by men, while the women's main implement was the digging stick. Both men and women usually went on their hunting and gathering activities independently, however, they both worked together in activities such as fishing or catching animals by setting fire to the bush.

A selection of animals is used in this activity. Other smaller mammals once common to the wheatbelt woodlands can also be researched. These include bandicoots (quenda), native cat (chuditch), wambenger (phascogale), dunnart, mundarda, potoroo and boodie.

The traditional Nyoongar food source is no longer the same due to the introduction of feral animals and also the loss of habitat due to European settlement.

### **Key Words**

diorama

### **References**

- \* Meagher, S.J. 1974. The food resources of the Aborigines of the South-west of Western Australia. *Records of the Western Australian Museum*, (1) Part 3.
- \* Strahan, R. (ed). 1983. *The Australian Museum Complete Book of Australian Mammals*. Angus and Robertson, Sydney.

## **Teacher Directions**

### **Materials**

- \* Resource Information Sheet (1)
- \* Resource Sheet (1)
- \* boxes
- \* paint
- \* cardboard
- \* collection of leaves, sticks, bark, nuts, sand, etc.
- \* textas
- » glue
- » scissors.



### ***Lesson Outline***

Each student is given a 'Native Animal Profile' from Resource Information Sheet (1).

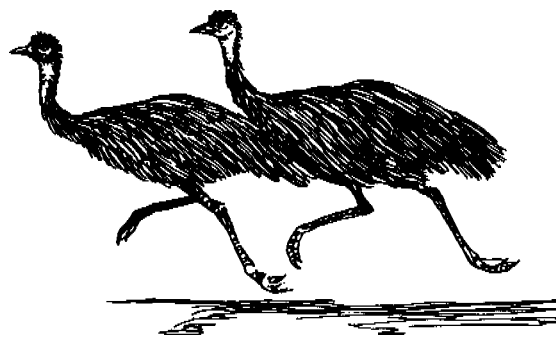
1. Using reference books, students research their animal and complete the 'Tacts Sheet' given in Resource Sheet (1).
2. Once students have researched their creature it may be best for them to collect the items that they need for a diorama. A visit to an area of bushland may be appropriate for this. Remember to obtain permission from the relevant land owner or manager, and to stress conservation at all times. For example, only take objects that have fallen or are dead. Look out for homes of insects, etc. and leave them behind.
3. Using a box opened on one side, create the habitat of the creature in the form of a diorama. Include a cardboard cut out of the creature to add to the habitat. Attach the 'Tact Sheet' and 'Native Animal Profile' to the box and each child will have a completed masterpiece!

### ***Evaluation***

- \* Were students able to research their topic successfully and complete a Tacts Sheet?
- \* Were students able to create a suitable habitat in their diorama for their given creature?

### ***Complementary Activities***

- \* Refer to card 10 'Wetlands of the South-West' and card 16 'Kangaroo Hunting' from *Nyungar - Past and Present*, a curriculum package by Neville Green.
- \* Refer to 'Hunt the Bouncing Target' from *Keeping the Spirit Alive*, a curriculum package by the Western Australian Museum.



*Emu, waitch*

## Native Animal Profiles

[This information is adapted from Meagher, SJ. 1974. *The food resources of the Aborigines of the South-west of Western Australia. Records of the Western Australian Museum, (1) Part 3.*]

### Common Brushtail Possum (*Trichosurus vulpecula*)

Kumall, Kumarl

A common animal, widely distributed throughout the area. They often shelter in the broken, hollow limbs of large trees.

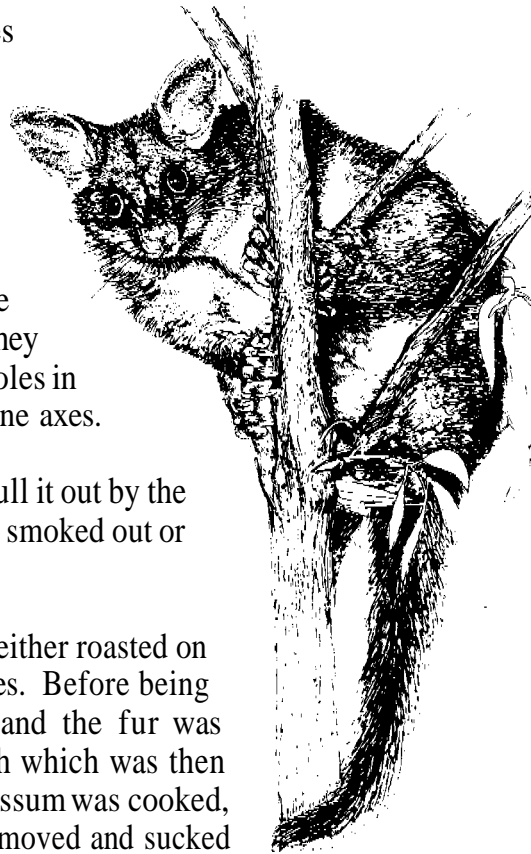
Nyoongars hunted them with their dingoes on moonlit nights as well as during the day time. The possums were speared as they fled or were driven into hollow trees from which they were taken.

Nyoongars were able to tell if a possum had gone up a tree and whether it had come down again by examining the bark. They climbed trees to catch them, cutting toe holes in the bark of the larger trees with their stone axes.

The easiest way to take a possum was to pull it out by the tail. If it could not be reached, it would be smoked out or poked out with a stick.

Possums were cooked whole. They were either roasted on the hot coals or were covered with hot ashes. Before being cooked, the intestines were taken out and the fur was plucked off and stuffed into the stomach which was then pinned together with a stick. When the possum was cooked, the fur which was stuffed inside it was removed and sucked to obtain the juices it had absorbed.

The main by-product from the possum was its fur, which was spun into long strands for use as belts and bands.



*Common brushtail possum,  
laimall, kumarl*

**Dingo** (*Canis familiaris*)

Twerh, Toorit

The dingo was eaten by Nyoongars. No information is available on how they were taken. The puppies were regarded as a delicacy, although they were sometimes reared by the Nyoongars and used for hunting.

The young people were not allowed to eat dingoes. If they caught one, they had to give it to the old people. Dingoes were cooked in a hole after being covered by ashes. Bracelets were made from the tails, and fur from the tail was worn as an ornament across the forehead.

**Dalgyte** (*Macrotis lagotis*)

This rare and endangered animal was once common in the dry country of the inland South-west. Now extinct in the South-west, it was one of the main burrowing animals.

Nyoongars dug them out of their burrows or took them while they were feeding.



*Dalgyte*

## Kangaroo Family

Spearing and trapping were the two main ways of taking kangaroos and wallaroos. In winter the Nyoongars took advantage of the wind and rain to hide their approach. To catch kangaroos, a large number of people would surround an area containing animals and close in on them, spearing them as they attempted to escape. In the summer they set fire to the bush and as the kangaroos, dalgytes and wallaroos fled, they were speared.

The most common type of traps used were deep pits with tapering sides. These were lightly covered with branches and earth. An animal falling into one of the pits was wedged in by the narrow sides and was unable to get out.

Two methods were used to cook these animals:

1. animals were placed in a hole, covered with ashes and a slow fire built over them, or
2. they were cut up and the pieces broiled on a fire.

The blood, entrails and marrow were considered delicacies, and the young men were not permitted to eat these.

Grev Kangaroo (*Macropus fuliginosus*)

Yonga

This is the largest mammal of the wheatbelt and occurs in small mobs. It was a common source of food for the Nyoongars.

Wallaroo (*Macropus robustus*)

A large kangaroo found on rocky outcrops in the wheatbelt, but only common at a few restricted localities.



*Kangaroos, yonga*

Woylie (*Bettongia penidllata*)

Woyle

This rat-kangaroo, now rare, was once a fairly common animal of the wandoo woodlands.

It makes its nest under bushes. Nyoongars speared them in their nests, or jumped on the nests, crushing the animals. If the animals escaped, they were chased until they took refuge, often in a hollow log where they were speared.



*Woylie*

***Tammar* (*Macropus eugenii*)** Tammar, damar

Now rare and endangered, this was the main wallaby of the inland South-west. They occurred in fairly large numbers in thickets.



*Tammar wallaby, damar*

***Brush Wallaby* (*Macropus irma*)** Quarra

This is the largest South-west wallaby. It is now mostly confined to the forested areas but also lives on the Swan Coastal Plain and in large areas of bushland remaining in the wheatbelt. Some populations have even survived in quite small patches of bushland, for example near Dumbleyung.

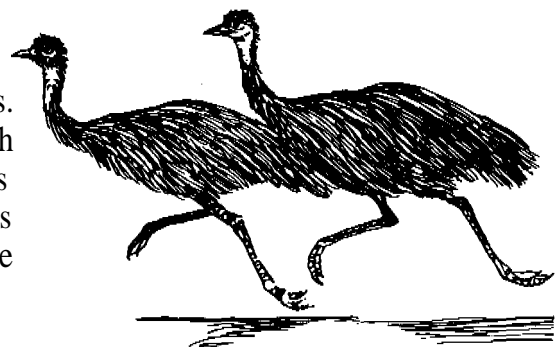
To catch a brush wallaby, woylie or a tammar Nyoongars surrounded an area where these animals lived and destroyed their runs by trampling or breaking down the bushes to trap escaping animals. In some areas, fences or snares were constructed at the ends of runs. Near the end of summer they set fire to the bush to drive the animals out of their retreat. At other times of the year they made loud noises, or drove them out with dogs.



*Western brush wallaby, quarra*

***Emu* (*Dromaius novaehollandiae*)** Waitch

The emu was stalked and speared by Nyoongars. They were mainly speared in winter. The flesh of the emu was highly prized and the feathers were used as decorations. There are no records on how the emu was cooked. Emu eggs were also eaten.



*Emus, waitch*

## Waterbirds

To cook them, waterbirds were covered with mud, then placed in a hole and covered with ashes where they were left for several hours. When the baked mud was cracked open, the feathers came away in the mud leaving the body clean. There are some references that say the birds were plucked before being cooked, others say the feathers were wet then burnt off.

## Snakes

Carpet Snake (*Python spilotus*)  
Dugite (*Dematisia affinis*)  
Tiger Snake (*Notechis scutatus*)

Wargal, Wakarl  
Dobitj, Kabart  
Norn

Snakes were caught behind the head, either by hand or with a forked stick, to prevent them biting themselves or their captors. Although some snakes (in particular the tiger snake) were feared by the Nyoongars, they were still eaten but only if they had been killed by a Nyoongar (as they believed that snakes that had bitten themselves became poisonous).

After a snake had been killed, its head was beaten. If its stomach contained undigested food, the Nyoongars would not eat the snake, as they believed it would make them ill.

Snakes were placed in a fire and roasted in the ashes.

## Lizards

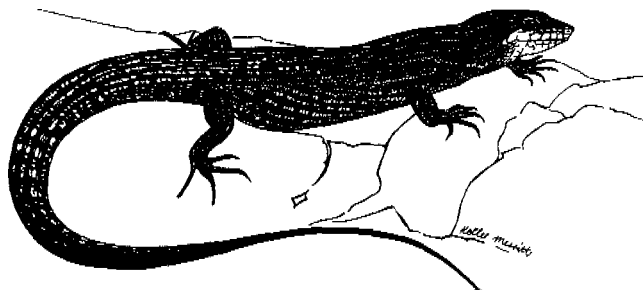
Common Goanna (*Varanus gouldii*)  
King Skink (*Egernia kingii*)  
Bobtail Lizard (*Tiliqua rugosa*)

Karda  
Yondi  
Yourin

There are no records of how lizards were caught. Their eggs were roasted in the ashes and eaten, but these were reserved for old men and women.

The animals were cooked in a fire or roasted in the ashes. A hole was made at the base of the throat and the gut hooked out with a forked stick.

Colds were cured by cooking and eating the liver of bobtails.



*King skink*

## Amphibians (Frogs)

Frogs are abundant in the woodlands, but a number of species are poisonous, or at least distasteful.

Various frogs known as goya, guya or wurgyl, were collected from swamps and shallow lakes throughout the year. But the greatest number were taken in summer when the water in these areas was low.

They were dug out of the ground with the aid of a digging stick.

In some cases, female frogs were preferred to males because their eggs were regarded as delicacies. Frogs were cooked in ashes.

## Insects

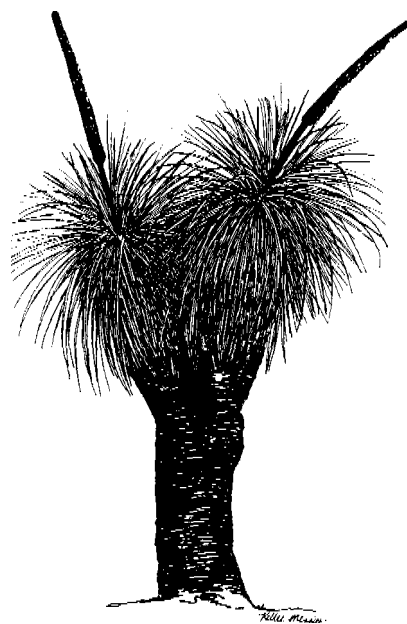
Bardi Grub (*Bardistus cibarius*)

Barrdi

Bardi grubs are the larvae of a beetle. They are found in decayed or rotting parts of grasstrees. They are small white grubs and as many as 100 may be found in the one grasstree.

To ensure an ongoing supply of these grubs, the Nyoongars knocked the tops off the grasstree. The grubs, regarded as the property of the man who knocked the grasstree top off to get to the tender rushes, were jealously guarded by the owner.

They were eaten either raw or roasted and were sometimes tied to a piece of bark before being roasted.



Grasstree, balga, kooroop

# Fact Sheet

What is it?

What does it look like?

Is there anything special about it?

Where does it live?

What does it eat?

How big is it?

What are its Latin and Nyoongar names?

How did the Nyoongars cook them?

In what books did you find this information?

Title \_\_\_\_\_

Author.

Title\_

Author





# ANIMAL TRACKS

- \* Science
- «. The Arts

Students study their own tracks and copy those of common woodland animals.

## Concepts

- \* Nyoongars were dependent on the bushland environment for their food.
- \* Careful observation and interpretation of animal tracks provides important information about the wildlife present in an area.

## Objectives

- » To develop powers of observation through an investigation of animal tracks.
- \* To learn how to clearly record instructions.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
Science	Working Scientifically - Investigating Scientifically Understanding Concepts - Life and Living
The Arts	Arts Skills and Processes

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
Science	Investigating Scientifically  Life and Living	Conducting
The Arts	Using arts skills, techniques technologies and processes	

## **Background Information**

The presence of bird and other animal life in an area may be deduced from tracks, droppings and traces of fur and feathers. Tracks can be seen in soft mud, as damp prints on hard surfaces, or in sand. Some animals, such as the goanna, drag their tails as they move. This will appear as a thin line along the ground. Claw marks may be seen as small indentations on the upper edge of the tracks. Remember claw marks may not always be seen as some animals retract their claws.

Animals found in wheatbelt woodlands include the brush wallaby, skink, bobtail skink, carpet snake, dugite, common goanna, common brushtail possum, emu, grey kangaroo, tammar, woylie and dingo.

## **References**

- \* Triggs, B. 1984. *Mammal Tracks and Signs*. Oxford University Press, Melbourne.
- \* Fler, M. 1989. *Tjina*. West. Ed. Media, Ministry of Education, Western Australia.
- \* *Emu Tracking Kit*, Aboriginal Series, Harcourt Brace Javonovich.
- \* Bruce, J. 1994. *Who Did That?* Kangaroo Press, New South Wales.

## **Teacher Directions**

### **Materials**

- \* Resource Sheet (1)
- \* clear area of sand.

### **Lesson Outline**

1. Prior to the lesson, rake over a large, damp sandy area and have some students and an adult (from another class if possible) walk barefooted, side by side, over the smoothed area.
2. With your students compare the tracks, and discuss answers to the following questions:
  - How do we know these tracks are human, for example, compared with a dog?
  - Which way are they going and how do you know (for example, could they be walking backwards)?
  - Which tracks, do you think, belong to the tallest and heaviest human?
  - How did the students arrive at this decision? (For example, length of print generally reflects size, and the depth reflects weight.)
3. Students explore the tracks made by different ways of moving across the raked area - skipping, running, walking, hopping, backwards, sideways, and so on. Compare the different tracks. Identify which part of the foot touches the ground first.
4. Using Resource Sheet (1), students make the tracks of the animals listed by following the directions given. You may find it better to put Resource Sheet (1) on an overhead and practice making the tracks with students in the classroom before taking them outside.

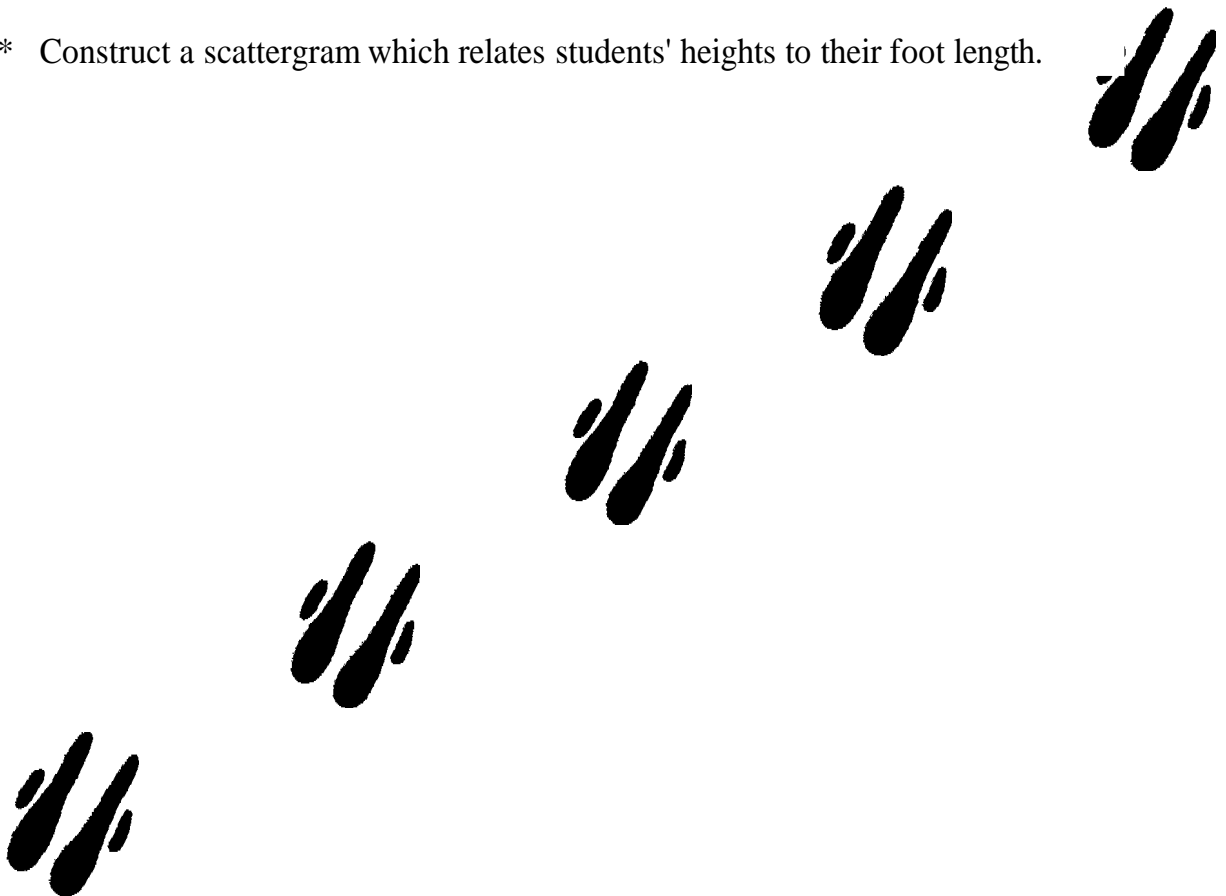
5. Once the given tracks have been made, students experiment to make tracks similar to the echidna and the possum track.
6. Students then record, in writing and drawings, instructions for making a print of one animal.
7. Check that the instructions are clear by having another student follow these instructions.

### ***Evaluation***

- \* Were students able to analyse and interpret tracks?
- \* Were students able to make tracks by following the instructions given?
- « Were students able to write clear instructions for making tracks?

### ***Complementary Activities***

- » Make plaster casts of the tracks.
- \* Set up a tracking station outdoors near a patch of thick undergrowth. Smooth the soil, making sure that it is not compacted. Place in the centre a small amount of food (for example, peanut butter, birdseed, fish oil, or carrots). Examine the area the next day for tracks. Try to identify animals from the tracks found.
- \* Use books such as *Who Did That* (see References), as an example of the report format.
- \* Construct a scattergram which relates students' heights to their foot length.



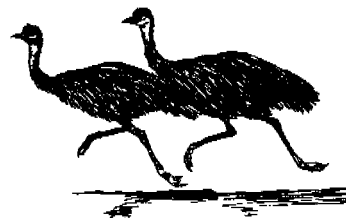
## Animal Tracks

### Instructions

### Track

### Animal

1. Extend thumb out and point index finger.



2. Press the finger and thumb of your right hand flat onto the ground.



*Emu, waitch*

3. Do the same with your left hand so that the index finger of your left hand lies within the print made by the index finger of your right hand.



4. To make the claw, press fingertip into the sand.

1. Fingers together, hold both hands straight out, about 10 cm apart.



2. Press the sides of both hands straight down into the sand.



*Kangaroo, yonga*

3. To make the side claw and tip press fingertip into the sand.



**Track**

**Animal**

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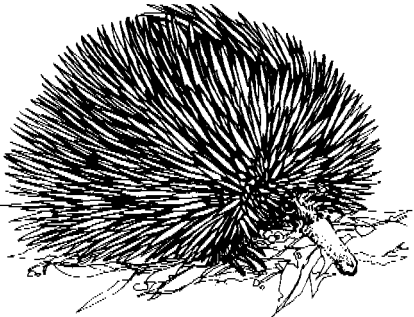
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*Echidna,  
nyingarn, nyngar*

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*Common brushtail possum,  
kumall, laimarl*

# THE KANGAROO CONNECTION

- \* English
- 4 Health
- \* Society and Environment

Students produce an explosion chart highlighting traditional Nyoongar people's dependence on kangaroos. Students then compare and contrast the development of Nyoongar children, today's Australian children, and kangaroos.

## Concepts

- \* Nyoongar people were dependant for survival on the animals in the Australian environment.
- + The process of birth and development is a complex issue and differs between species and cultures.

## Objectives

- \* To identify and understand the importance of kangaroos in the traditional Nyoongar lifestyle.
- \* To compare and contrast the birth and development processes between the kangaroo, today's Australian children and traditional Aboriginal children.

## Curriculum Links

### *Learning area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
English	Language Modes -Use of Texts
Science	Understanding Concepts - Life and Living
Society and Environment	Culture
Health and Physical Education	Interpersonal Skills

### *Student Outcome Statement*

LEARNING AREAS	STRAND	SUB-STRAND
English	Reading	Use of Texts
Science	Life and Living	
Society and Environment	Culture	Cohesion and Diversity
Health and Physical Education	Interpersonal Skills	

## **Background Information**

The relationships between Nyoongars and animals of the Australian bushland are important. The animals were not only used for the products that they provided, they were also used as totems and played a significant role in the Dreaming. The Nyoongars' respect for these animals was obvious in the stories that were told about them.

The following activities focus on the relationships between traditional Nyoongars, today's Australians and the kangaroo. It is interesting to note the similarities in the birth and development of all three.

### **Key Words**

Embryo, adhere, sinew, ochreous, dominance, initiation, pliable.

### **References**

- \* Atkinson, A. and Aveling, M. (Ed). 1987. *Australians: A Historical Library - Australians 1838*. Griffen Press, Australia.
- \* Green, N. 1984. *Broken Spears - Aboriginals and Europeans of the South West of Australia*, Focus Education Services, Perth.
- \* Green, N. 1979. *The People - Aboriginal Customs in the South West of Australia*. Creative Research, Mt Lawley College, Western Australia.
- \* Green, N. 1983. *Nyungar- Past and Present*. Focus Education Services, Cottesloe, Western Australia.
- \* VIDEO - *Kangaroos - Faces in the Mob*, ABC.
- \* Weldon, K. 1985. *The Kangaroo*. Weldons Pty Ltd, Australia.

## **Teacher Directions**

### **Materials**

- \* VIDEO - *Kangaroos - Faces in the Mob* (At District Education Office).
- » Resource Information Sheets (1), (2) and (3).
- \* Resource Sheets (1) and (2).

### **Lesson Outline**

This activity is broken into two parts. The first is a 'Compare and Contrast' activity in which the lifestyles of the kangaroo, traditional Nyoongar and today's Australians are compared and contrasted. The second is an explosion chart activity that focuses on the relationships between the traditional Nyoongar and the kangaroo.

### *Compare and Contrast*

As a lead up to the Compare and Contrast activity it is suggested that the *video Kangaroos - Faces in the Mob* is viewed by the students. This video is available from your District Office Resource Centre courtesy of the Department of Conservation and Land Management. At the 30.35 minute mark on the video is a mating scene which you may find too graphic for your students to watch. This continues until 34.00 minutes. The first half of the video provides ample information for this lesson. If you wish, the second half may be used in another session.

Students are given Resource Information Sheets (1) and (2). After reading both sheets they need to fill in the blank boxes on Resource Sheet (1) using their own knowledge or that given in the resource sheets. A worked example is provided at the top of the activity sheet. This can be discussed and students' responses compared.

### *Explosion Chart*

Students read the details on Resource Information Sheet (3) and summarise the information into point form on Resource Sheet (2).

### *Evaluation*

- Were students able to extract information from the text and reproduce it in point form?
- \* Were students able to write a concluding statement that contained evaluative comments and summarised the recount?

### *Complementary Activities*

- \* Game - 'Kangaroo Rat' from *Keeping the Spirit Alive*, a curriculum package by the Western Australian Museum.
- + Refer to Card 16 'Kangaroo Hunting' from *Nyungar - Past and Present*, a curriculum package by Neville Green.





## **The Western Grey Kangaroo Connection**

### **Birth**

The length of pregnancy in kangaroos is five to five and a half weeks.

Normally equal numbers of boy and girl kangaroos are born. As they get older, more boys tend to die than girls as a result of fighting and other stresses.

Females produce young each year. By the time a joey is out of the pouch, the next is beginning to develop. A mother can hold off giving birth in times of drought. When things improve, she will give birth. It is rare to have twins.

A mother has four teats, but only two are used. She can produce two kinds of milk - one from the teat that the new born selects, and one from the teat used by the older joey.

When the young is born, it is pink and weighs about one gram. It is about the same size as the tip of your finger. It can breathe air but is blind, has no fur and its hind legs are powerless. Once born it rests on its mother's tail and then climbs into the pouch. This process takes about ten minutes. Once inside the pouch it finds its mother's teat and fastens to it, whereupon the teat swells up in its mouth, thus holding the young joey firmly in place.

### **Joey**

A joey at eight to ten months of age becomes more curious and plucky. It has short fur and better control of its legs. It spends more time out of the pouch. As it explores, it frequently hops back to its mother so that it does not get lost. The mother keeps in touch with the joey by calling it softly and, when frightened, the joey calls its mother. At this stage the joey suckles while inside the pouch as well as while standing outside.

At ten months of age the joey weighs three to four kilos and is about knee high to an adult human. Four kilos is the same weight as two full, two litre plastic milk containers, and the joey is now too old to ride in the pouch.

By following its mother, the joey identifies the best tracks, good water supplies, safe resting places, shortcuts, and other things it needs to know to survive. Mothers go out of their way to visit local landmarks so that the joey will learn about the area where it will live.

The mother produces milk for this joey for another eight months. It is then on its own. To wean the joey, the mother tightens its pouch muscles and prevents the joey from entering.

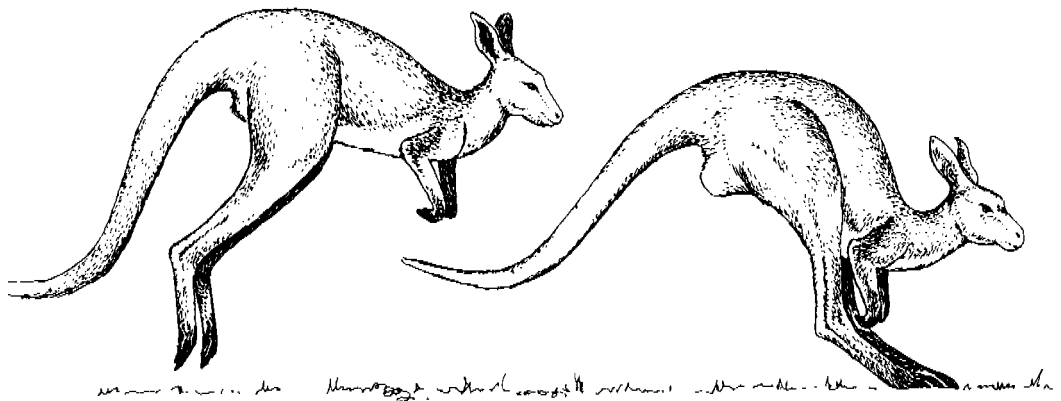
## **Young Kangaroo**

At two to three years of age the female kangaroo is ready to have a baby and her growth slows down - any extra food is used to produce young.

Young males keep on growing and begin to slow down at the age of eight to ten years. They prepare themselves for adult life by boxing and wrestling with their mother and their friends, and leaving their scent on the grass. As they get older, play becomes contests about dominance positions. The position of head kangaroo is continually tested. After a year or so with their mother's mob, they move to another area and settle with a new mob. This prevents breeding within the family.

Unlike humans, a kangaroo never stops growing. Nyoongars knew the age of male kangaroos by their height, whereas it is difficult to tell with females. A very large kangaroo is usually a male, or boomer.

The average life for a kangaroo is 10 to 15 years. In unusual cases, they may live to be 20 to 25 years old. Less than half of the kangaroos born will reach five or six years of age, and very few live until ten or twelve years of age.



*Kangaroos, yonga*

## **The Traditional Nyoongar Connection**

### **Birth**

The length of women's pregnancy is about 39 weeks.

Traditional Nyoongar women moved away from the main camp to give birth either on their own or with a female friend. They gave birth in the squatting position and suffered little from child-bearing because they were fit and well exercised. As early as the next day they were able to hunt for food as usual.

As soon as the baby was born the mother took it immediately to her breast to suckle and there it remained most of the time.

In the case of twins, one of the children was killed - this was probably due to the mother not having enough milk for two. She could also not carry both of them as well as look for food. (If they were different sexes the boy was killed.)

### **Baby**

The baby was cradled in a bark dish when feeding or sleeping until it was about three weeks old. Afterwards it was carried on the left arm in a fold of the cloak, but it was later suspended on the shoulder.

Babies were never allowed to cry. As soon as a whimper was heard it was carried back to the mother's breast.

Until they could run alone, children were not clothed.

A toddler was almost inseparable from its mother until about three years old. Toddlers stayed close to their mother, or were carried. They suckled until the age of four or five years, but they were introduced to food as soon as they were able to help themselves. This was a long time before they were weaned.

If a female baby died, no one took any notice of the mother, yet if it was a male the mother was blamed and generally speared or beaten for it.

Aunts and sisters could be relied on to assist the mother in caring, carrying and showing affection to the child.

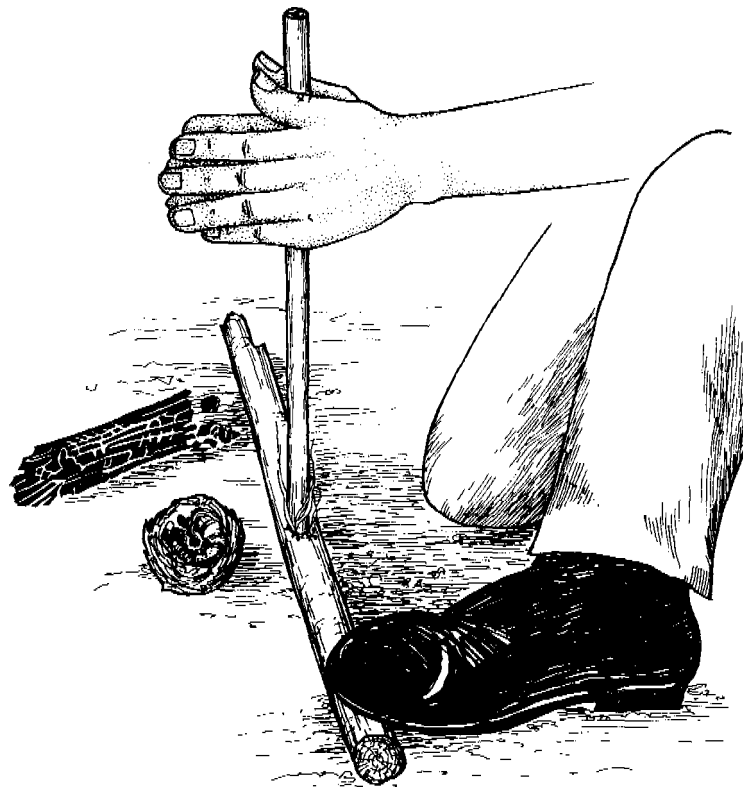
## Young Adult

Traditional Nyoongar children learned their accepted behaviours by watching and copying. They grew up in a practical world. They learned through play - mock fights, games, throwing, climbing, catching food and finding eggs, etc. Boys practised hunting with miniature weapons and youths competed together in fighting, wrestling and weapon contests. When boys were nearing their teens, they were separated from their family and friends so that they could concentrate on men's business. They were not allowed to return until they were ready to marry.

Girls concentrated upon camp skills and crafts. They collected food, for example, by searching and digging for roots. They also prepared food and cared for the young and elderly. Around the age of nine or ten, girls looked after small children who were able to walk. They also made mud and stick dolls and dressed them with things from the bush. As they got older they accompanied the women. A girl was ready to marry at puberty - often around the age of 13.

Children learned to call mammals and birds by mimicking their cries. Tracks were identified and copied. Each family was responsible for their children's education. For boys, the mother's brother was the main teacher. If they made a mistake or got into trouble, the response was a harsh warning or sometimes a protective slap.

They spent a lot of time with other children and adults and had a large amount of freedom as long as they obeyed instructions, such as staying clear of dangerous places.



## **The Nyoongar/Kangaroo Link**

### **'Roo parts**

As soon as a kangaroo was killed, the two front teeth were taken from the lower jaw. These were used to sharpen spear points.

The end of the tail was taken in the mouth and the tip bitten off. The sinews were pulled out, bound round a stick and dried for use in stitching cloaks (wokka, bwok, bwoka, booka, doorloop) or tying barbs onto spears.

### **Boys**

The new-born baby boy was bundled into possum skins (kwart). To give him strength bracelets of fur were tied around his wrists and ankles. He was then given his totemic name which he retained until about nine years old. When it was time to be initiated into manhood, a hole was made with a kangaroo bone through the nose and raised scars were made on his body.

### **Tools**

The mero (spear thrower) had a hook of kangaroo tooth or wood lashed to one end with sinew from a kangaroo's tail.

### **Dress**

The only article worn was a cloak (bwok, bwoka, booka, doorloop) made from kangaroo or possum skins (kwart). It was worn fastened at the right shoulder with a small stick, so that the right arm was left free.

Cloaks (bwok, bwoka, booka, doorloop) were prepared in the following way. Skins (kwart) were pegged out on the ground to dry and were then cut into the proper shape with a sharpened stone. With this stone, the inner surface of the skins (kwart) was scraped away until it became soft and pliable. It was then rubbed over with grease and a sort of red ochreous earth. The skins (kwart) were then stitched together with animal sinews.

### **Bags**

Around Albany, women made long narrow bags of kangaroo skin (kwart) sewn with the fur on the inside. It was called a gundir and the baby was placed inside and carried across the mother's back. Other bags (koot, kooda, kooda-kooda) were made to collect and carry food, gum, sinew, bones, stone, etc.

### **Food**

Kangaroos were one of the main sources of food for the Nyoongar people.

## Compare and Contrast

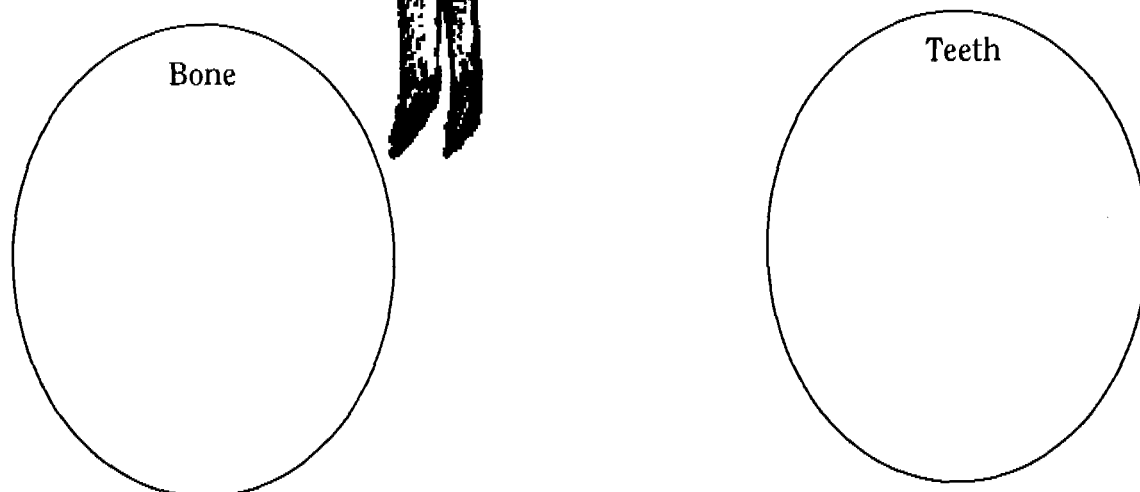
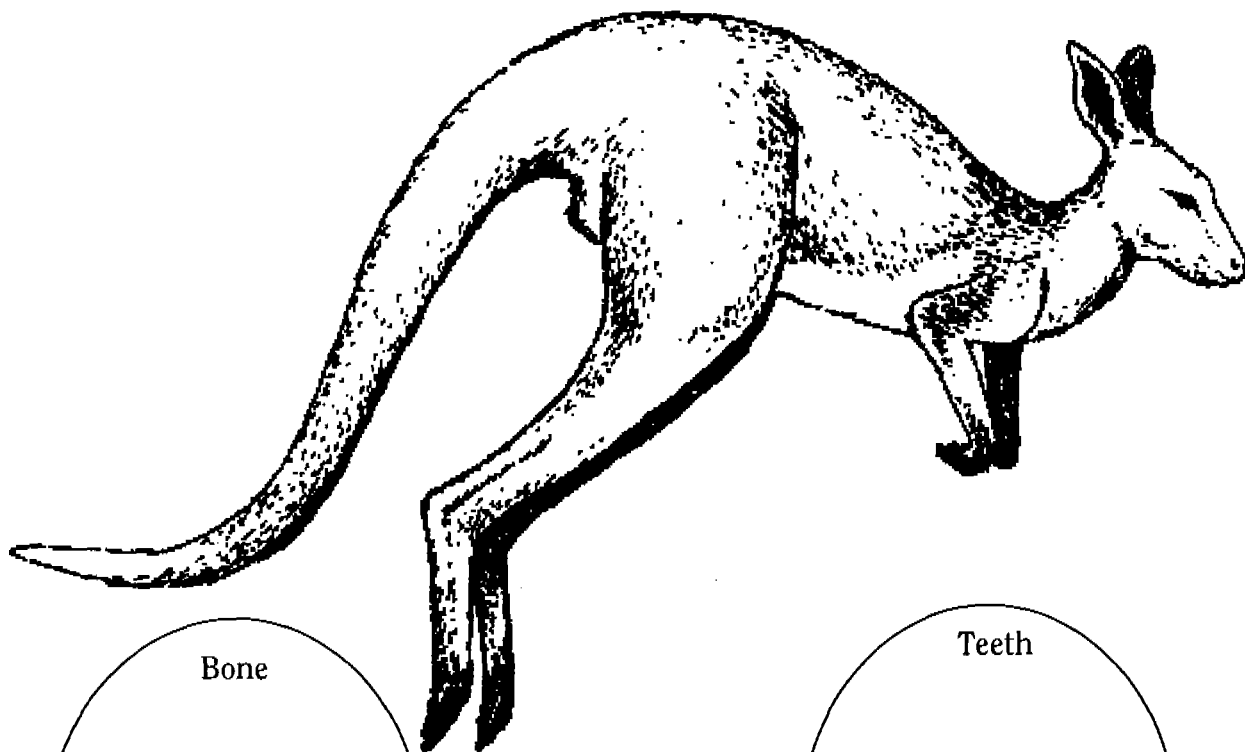
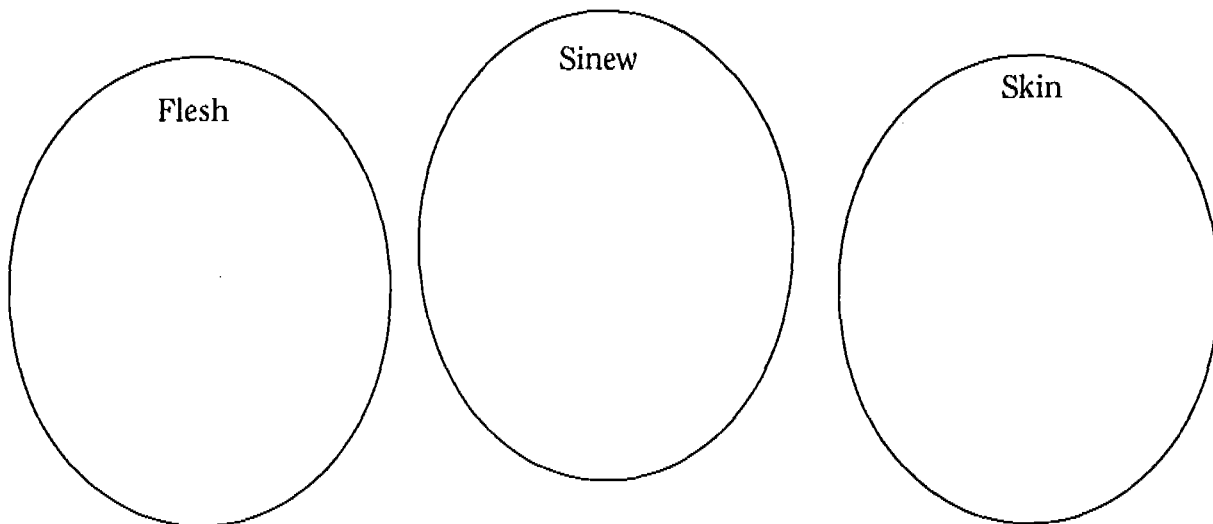
Read Resource Information Sheets (1) and (2) and fill in the empty boxes.  
You will have to use your own knowledge about today's Australians.

Kangaroo	Traditional Nyoongar	Today's Australian
suckled until about 18 months	suckled until the age of 4 or 5 years	suckle till around 4 - 6 months old
	gave birth in a squatting position	
the joey is cradled in the pouch		
		the gestation period is 39 weeks
females produce young each year		
	after giving birth may walk out and seek food as usual	
		teenagers go to school, play sport and go out with their friends
	a girl married around the age of 13	
it is rare to have twins		
		When young is born it can see, has hair on its head, and can move all body parts

## The Nyoongar/Kangaroo Connection

Draw an explosion chart using the facts from Resource Information Sheet (3).

### NYOONGARS USE OF THE KANGAROO



# 101 USES FOR A GRASSTREE

## \* Science

Discover the art of making glue and ink by using a local plant, the grasstree (sometimes called blackboys). Nyoongars called grasstrees "balga".

## Concepts

- \* Plants provide many products important to people.
- \* Grasstrees have been used as a source of valuable products by both Aboriginal people and Europeans.

## Objectives

- \* To provide students with an experience that enables them to empathise with the skills used by Nyoongars to manufacture products.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
Science	Working Scientifically - Investigating Scientifically Understanding Concepts - Natural and Processed Materials
The Arts	Arts Ideas - Arts Skills and Processes

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
Science	Investigating Scientifically  Natural and Processed Materials	Conducting
The Arts	Communicating arts ideas  Using arts skills, techniques, technologies and processes	



## Background Information

Refer to Resource Information Sheets (1) and (2).

### Key Words

Xanthorrhoea, balga, blackboy, kingia, grasstree, mia.

### References

- \* Powell, R. 1990. *Leaf and Branch*. Department of Conservation and Land Management, Perth.
- \* Cribb, A. B. and Cribb, J. W. 1974. *Wild Foods in Australia*. Fontana Books, Sydney.
- \* Low, T. 1990. *Bush Medicine*. Angus & Robertson, North Ryde.

## Teacher Directions

### Materials

- \* Kangaroo scats
- \* resin from a grasstree, wattle, or marri
- \* charcoal
- \* ash
- \* rust (perhaps taken from an old rusty car!)
- \* water.

### Lesson Outline

#### Activity 1: Making Paper Glue



1. Place wattle or marri resin in jar.
2. Add a few drops of water.
3. Leave overnight and glue is ready to use.

Note that the more water you use the runnier the glue becomes. Also, at least one teacher has used this mixture as a varnish to coat gum nuts.

### Activity 2: Making Hard Glue



3 parts grasstree resin



1 part kangaroo scats

1 part charcoal

1. Have a fire going.
2. On a piece of timber or stone, crush resin, scats and charcoal together until a fine powder.
3. Using a 30cm length of dowel (roughened with a knife or sand paper at one end) roll the tip in the powder then rotate it briskly over the heat of the fire - not the flames.
4. Repeat instruction 3 until there is about 2-3cm in length (1cm thick) of black glue on the stick,
5. Place a sharp stone such as quartz and mold the glue around it to secure it to the stick.
6. The glue will cool and harden so that it is rock solid.

### Activity 3; The European Way of Making Ink



Wattle or marri resin



Drops of water



Ash



Metal rust

1. Dissolve wattle or marri resin with water (see Activity 1).
2. Stir in ash and rust (a good source of rust is an old car!).
3. Your mixture is now ready to use as ink.

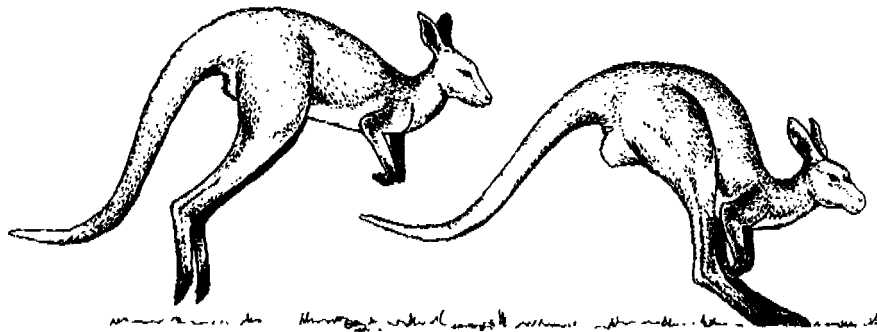
If you or your students find some large feathers, use these to make a quill.

### *Evaluation*

- \* Were students able to follow directions and make the glue and ink?
- \* Did students understand that local plants may provide materials that can be used in day-to-day life?

### *Complementary Activities*

- \* Go into the bush and estimate the age of grasstrees by measuring their height. Remember that they grow approximately one and a half centimetres each year.
- \* Invite a local Nyoongar to the school to talk about the uses of woodland plants.
- \* Use Resource Information Sheet (2) to complete Resource Sheet (1). In a trial, one teacher used Resource Information Sheet (2) as an overhead for students to refer to - the students worked in pairs.
- \* Using Resource Information Sheet (2) students follow the same format to research another plant in the Wheatbelt Woodlands.
- \* Refer to Card 13 'Homes and Campsites' from *Nyungars - Past and Present*, a curriculum package by Neville Green.



*Kangaroo, yonga  
and tracks*

## Grasstree - Balga - Xanthorrhoea

### Introduction

Grasstrees (species of the plant genus known as *Xanthorrhoea*) are more commonly known as blackboy or balga in Western Australia. Grasstrees occur only in Australia. There are 28 species altogether, nine of which occur in Western Australia. They grow in a wide range of soils.

The word 'xanthorrhoea' is derived from words in the Greek language. Xanthorrhoea means yellow flowing. This refers to the gum flowing from the flowering spear.

### Growth

It is commonly believed that grasstrees grow only 2.5 cm every 10 years. This is a gross underestimate, however, as they grow about 1.5 cm per year. Therefore a 2.5 metre tall grasstree would be about 150 years old.

### Features

The grasstree's trunk is built from layers of flat leaf-bases. 1.5 cm in growth represents about 580 new leaves.

Fire may stimulate the flowering of some grasstree species. However, every year some grasstrees flower regardless of whether they have been burnt. Fire rarely kills grasstrees because the tightly packed leaf-bases on their trunks protect the living tissues deeper inside.

The impressive spear can grow up to 4 metres long and 6 cm thick. Thousands of buds are tightly packed on the top two thirds of the spear and open into white flowers in mid to late spring. After flowering, the spear produces beak like capsules which release shiny black seeds in summer and autumn.

After flowering the spear dries but remains upright for one or two years before crashing to the ground. Only one spear is produced on each crown of foliage. If two are seen, it is a sign that the trunk is beginning to divide. More than two spears seldom survive and a grasstree that forks into three is unusual.

### Wildlife

Grasstrees teem with wildlife. Insects, such as jewel beetles, eat the leaves and other small insects, mammals and lizards shelter among the mass of leaves.

Honeyeaters and large numbers of insects are attracted to the flowering spear. When the spears begin to fruit, the larvae of weevils and other beetles burrow in and eat the forming seed. Twenty-eights (also known as Port Lincoln or ringneck parrots) pluck out the young green fruit in the older grasstrees and insect larvae burrow into the trunk. These insects include the bardi grub (the cream legless larva of a long-horned beetle) and the scarab beetle larva (which has legs and a black abdomen).

When the grasstree dies, fungi and native fly larvae enter the trunk and cause it to rot. Eventually the core disintegrates, leaving a cylinder of leaf-bases. This 'shell' makes an excellent home for snakes and lizards.

### ***Kingia and Grasstrees***

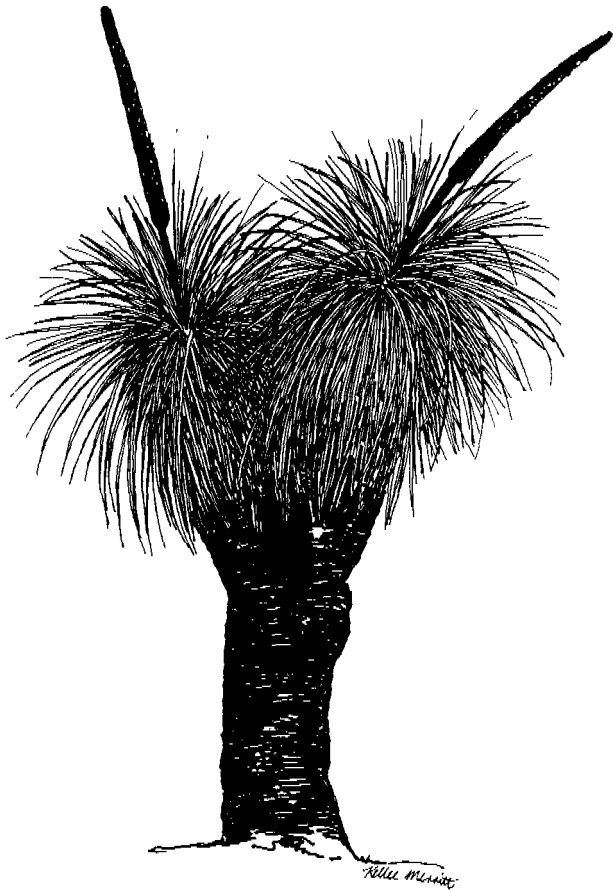
Grasstrees can be distinguished from their relatives, kingias, using the following characteristics:

#### **Grasstree**

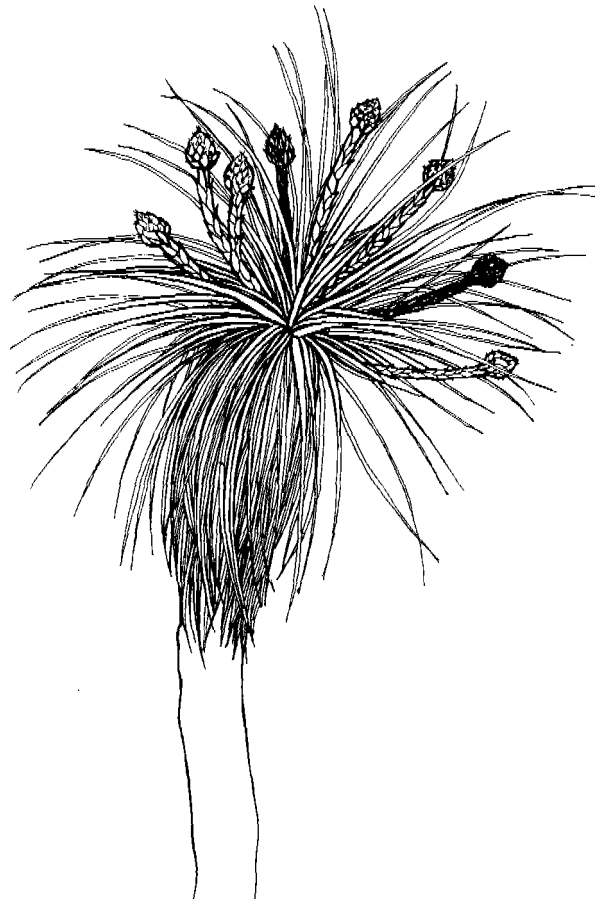
- trunk - usually crooked, often divided
- flowers - green then turn white on spears

#### **Kingia**

- trunk - straight, can be moved when pushed
- flowers - occur in egg-shaped heads on short, silky, stout stems



*Grasstree, balga, kooroop*



*Kingia*

## Use of the Grasstree by Nyoongars and Europeans

### Use of the Grasstree by Nyoongars

Nyoongars used the grasstree in many ways.

#### *Food*

With some effort, leaves can be pulled from the crown and a small amount of nourishment can be obtained by chewing the soft, white bases.

Each flower on the stem produces a large, glistening drop of nectar. If you can beat the birds to these, they can be licked from the spike. It has also been reported that Nyoongars soaked the flowers to make a sweet drink.

The bardi grubs which live in the grasstree were favoured tucker.

#### *Tool making*

Grasstree resin was taken from the trunk and used in tool making. The resin was used to make a thick glue to stick stones, wood, and other materials together. To make the glue, a combination of resin, charcoal and kangaroo scats were mixed together and heated.

#### *Housing and furniture*

A mia (shelter) was made from grasstrees. The spears were used as frame poles and the leaves bound tightly together to form a strong, waterproof thatch. The leaves were also used as bedding.

#### *Fire*

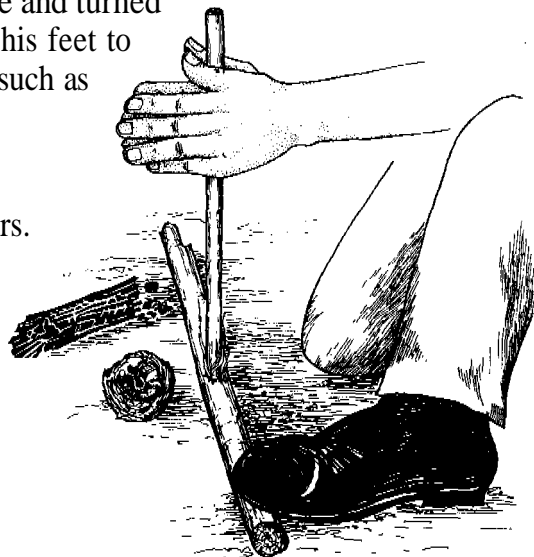
The dead trunks make excellent firewood which readily catch alight. To start a fire, one dried spear with a hole halfway through it was laid onto the ground.

The end of another piece was placed into this hole and turned rapidly between the hands. The fire starter used his feet to steady the piece on the ground. Furry material, such as that from the zamia, was placed into the hole to help start a fire.

The Nyoongars made torches from grasstree spears. These were used when hunting fish at night.

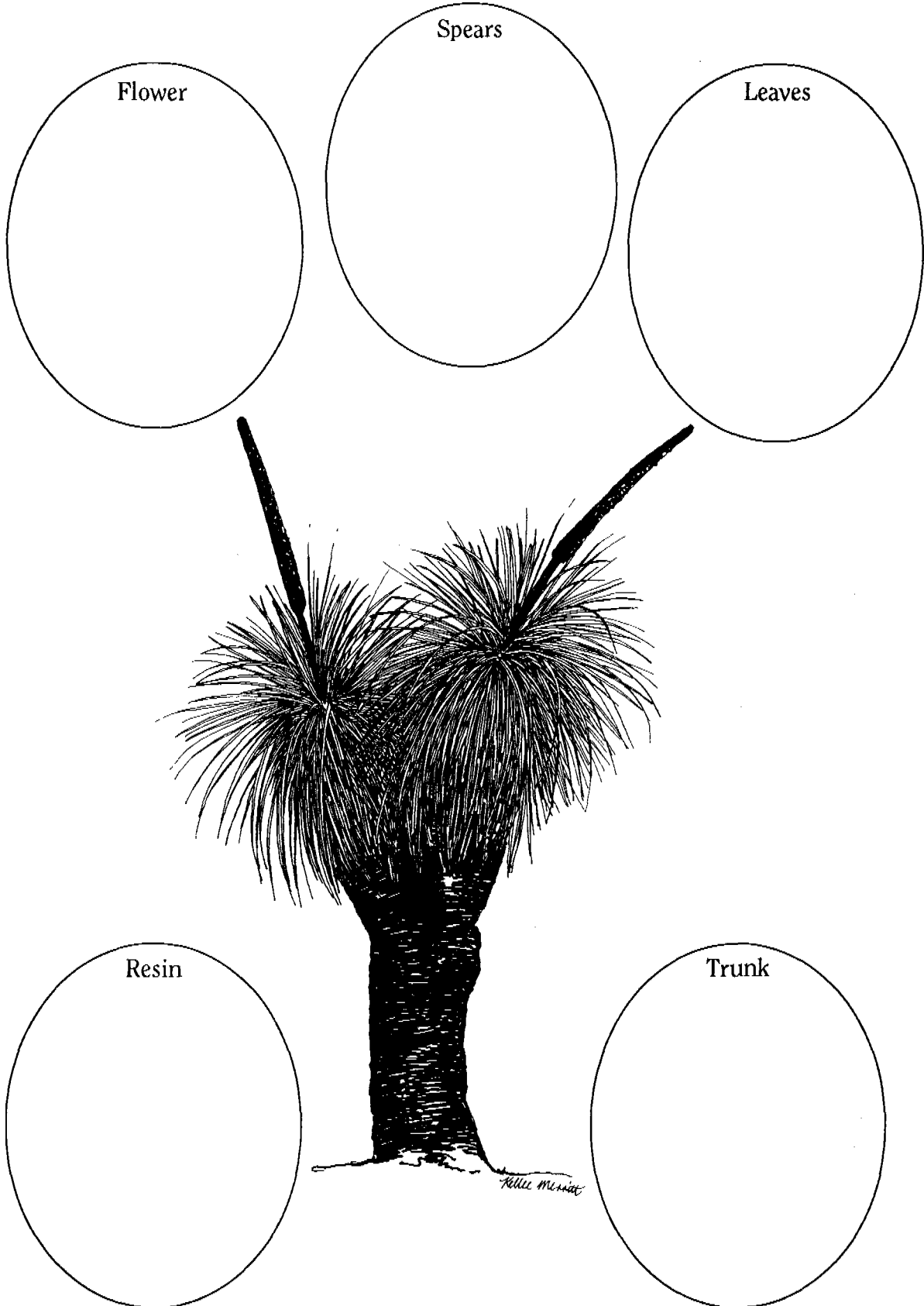
#### *Use of the Grasstree by Europeans*

When the Europeans settled in Australia, they too benefited from the grasstree. The resin was used to make varnish and the yellow balsam (resin) was used by the First Fleet doctors to treat dysentery. Dried leaf bases were commonly used in firelighting.



# 101 Uses of a Grasstree

Using the facts from Resource Information Sheet (2), record in the appropriate boxes the use made by Nyoongars of each part of the grasstree.



# SHELTERS AND STRUCTURES

- \* Science
- \* English

Students experiment with a variety of construction techniques to create a stable, strong shelter,

## Concepts

- \* Nyoongars used materials from the surrounding bush to create effective shelters.
- \* There are many ways of joining objects together to achieve a goal.

## Objectives

- \* To analyse and creatively solve a construction problem.
- \* To understand how Nyoongars supplied their need for shelter.
- \* To improve communication skills through an oral presentation of construction ideas in a dramatic form.

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
Science	Understanding Concepts - Natural and Processed Materials
English	Language Modes - Listening - Speaking

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
English	Speaking and Listening	Use of Texts
Science	Natural and Processed Materials	



## **Background Information**

Aborigines usually slept in the open when on the move. When they stopped at night a simple windbreak of branches was constructed for protection and to define the borders of the family group.

More solid shelters were constructed during cold, rainy seasons. These huts could be constructed quickly from the materials at hand. Throughout Australia these shelters took several forms including:

1. Sheets of bark bent in the middle to form a shape.
2. An oval or circular hut on a framework of saplings, interlocked at the top, criss-crossed with other branches and covered with bark, branches, grass or balga (grasstree).
3. A rectangular hut with four or more corner posts supporting a framework of saplings with a bark roof. (Arnhem Land and Cape York Peninsula.)

These huts were known by a variety of names including mia and quornt (Nyoongar), and wiltja, wurley, and gunyah in other parts of Australia.

### **Key Words**

Mia, quornt, balga.

### **References**

- \* O'Meagher, A.E. 1993. *Bushcraft*. Western Australian Police Force, Perth.
- \* Gibbs, R.M. 1974. *The Aborigines*. Longman, Hawthorn, Victoria.
- \* World Book, Inc. 1992. *The World Book Encyclopedia*. World Book Inc., Chicago.

## **Teacher Directions**

### **Materials**

- \* Newspaper
- \* glue
- \* parcel tape
- \* string
- \* pipecleaners
- \* cardboard cylinders
- \* plasticine.

### **Lesson Outline**

1. Organise the students into groups of 3-4 children and give each one a role. Suggested roles are: reporter, recorder, equipment gatherer and organiser.
2. Read information from Resource Information Sheet (1) to students.

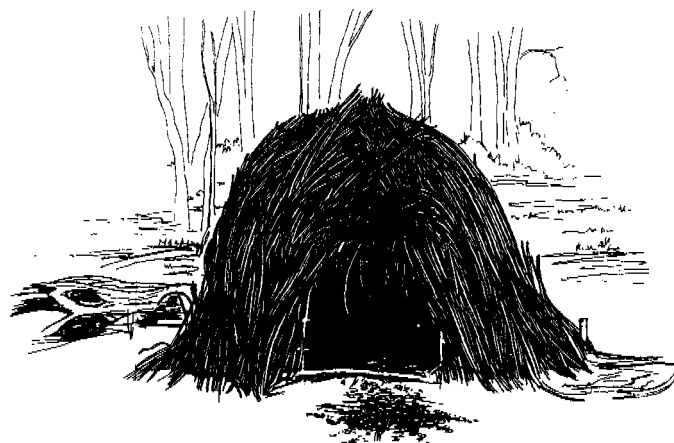
3. Students are to build a mia using newspaper and the other material provided. Allow about 30-45 minutes to build the shelter.
4. Emphasise the need to find a variety of ways to use the newspaper in order to achieve the desired result - a useable shelter. Try rolling, folding, fringing, taping, gluing, etc.
5. Shelters must provide protection from the sun, be firm enough to withstand the breeze from a fan placed two metres away on a number one setting, and be more than one metre in height.
6. Each group will present their findings to the class in the form of a role-play. The following roles could be set:
  - \* one member who plays the role of the Elder
  - \* one member who must put the Elder in a good mood
  - \* one member who must explain to the Elder the enormous efforts which the family has made to construct this shelter.

### ***Evaluation***

- \* Were students able to find a variety of ways to join paper?
- \* Were the students' explanations understood by other class members?
- \* Did each structure fulfil the requirements of point (5) in the lesson outline? (Remember, the emphasis is on doing and explaining, rather than the shelter that results.)

### ***Complementary Activities***

- \* Refer to *Bushcraft* (see References) available from the Police Department. This contains a section on shelters and describes how to construct your own shelter in the bush.
- \* Contact your local Girl Guide or Scout organisation for information on the various types of knots. Practice tying an assortment of knots using a variety of materials.

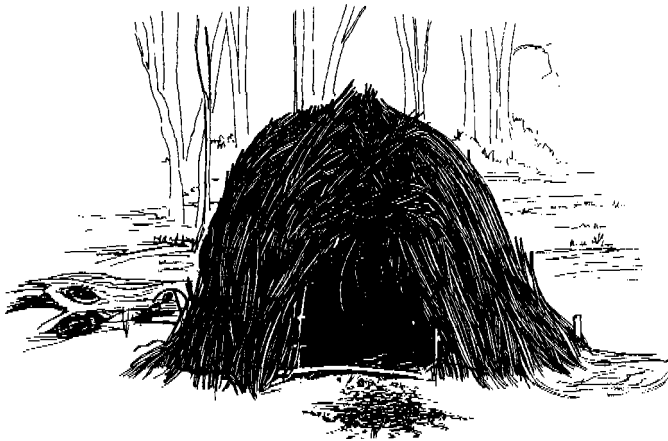


*Mia, mya*

## Shelters and Structures

### Introduction

The Nyoongar people used resources such as sheoak trees, balga (grasstree) leaves and bark to construct their shelters, known as mias. These were the more permanent structures for winter shelter. A windbreak was constructed around the mia. A less substantial structure, called a quornt, was made by using sheoaks or mallee suckers joined at the top and covered with tea-tree or, in later years, with bags.



*Mia, mya*



*Tent, kwont, kwarnt*

### To Be Read To the Class

A strange craft drifts onto the shore and a bedraggled family gaze at the eucalypt trees that fringe this land. A gentle, cooling breeze rustles gently through their leaves. Strange grey shelters are dotted over the landscape.

Slowly the family leave their vessel and stumble to shore. An excited crowd begin to appear from the grey shelters.

An elderly leader steps forward to welcome these unexpected guests. Food and water are brought and everyone joins in the feast.

After the meal the Elder explains that the family is required to build their own shelter as proof that they will not be a burden on the tribe. Each member of the family must help construct this dwelling.

### The Problem

The problem is to design and construct a shelter that will provide relief from the sun, withstand a gentle breeze, and be one metre tall.

### Materials

Newspaper, glue, parcel tape, string, pipecleaners, cardboard cylinder supports (toilet roll inserts), plasticine.

# *Communication*



Humans are social animals. Effective communication is crucial to the many cooperative ventures of life, including friendship and love. In this package we have dealt specifically with two forms of communication by Nyoongars - language and art.

***Activities in this section are:***

- \* Tribal Voice
- \* Let's Talk
- \* Not Art For Art's Sake

# TRIBAL VOICE

- \* Society and Environment

The names, distribution and language of Aboriginal clans in Western Australia are discovered through the use of maps.

## Concepts

- \* Nyoongar people had many different clan groups, territories and languages.

## Objectives

- \* To recognise the distribution of Aboriginal people in Western Australia and discover the names of the various clans and the languages spoken by them.

## Curriculum Links

### *Learning Area Statement*

#### LEARNING AREAS

Society and Environment

#### MAJOR LEARNING OUTCOMES

Time, Continuity and Change

Place and Space

Culture

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
Society and Environment	Time, Continuity and Change	Interpretations and Perspectives
	Place and Space	People and Places
	Culture	Personal Group and Cultural Identity

## Background Information

Nyoongars originally occupied the south-west of Western Australia. This area lies roughly south-west of a line drawn between Kalbarri to just east of Esperance.

The Nyoongar languages were not always related but had within them a common thread which enabled interaction between the groups. Usually neighbouring groups had common words. Nyoongars named places according to their use, particular spiritual significance, or an historical event associated with that place. Many place names end with 'up', 'in' and 'ing'. Translation of this is 'place of'. Wagin, for example, means 'Place of the Emu', Wilgagin means 'Place of the Red Ochre', and Katanning means 'Place of the Head', 'Meeting' or 'Talking'.

## **Key Words**

Co-ordinates, boundaries, territories, tribes, clans, traditional.

## **References**

- \* Bindon, P. and Chadwick, R. (compilers and editors). 1992. *ANyoongar Wordlist from the South-West of Western Australia*. Western Australian Museum, Perth.
- \* Curriculum Branch, Education Department of Western Australia. 1986. *Atlas for Young Western Australians*. Education Department of Western Australia.
- \* Green, N. 1983. *Nyungar - Past and Present*. Focus Education Services, Cottesloe, Western Australia.
- \* Whitehurst, R. (compiler). 1992. *Noongar Dictionary*. Noongar Language and Cultural Centre, Bunbury.

## **Teacher Directions**

### *Materials*

- \* Resource Information Sheets
- \* Resource Sheet (1)
- \* marking sheet for map co-ordinates (prepared by teacher)
- \* overhead transparency.

### *Lesson Outline*

Using an atlas and Resource Information Sheets (1) and (2), students fill in the following details for each town on Resource Sheet (1):

- \* the map co-ordinates from their atlas
- \* the name of the traditional tribal area for that location from Resource Information Sheet (1)
- \* the language spoken by the tribes in that area from Resource Information Sheet (2).

### *Evaluation*

- \* Were students able to determine the co-ordinates, locate the tribal area and find the language for each town?

### *Complementary Activities*

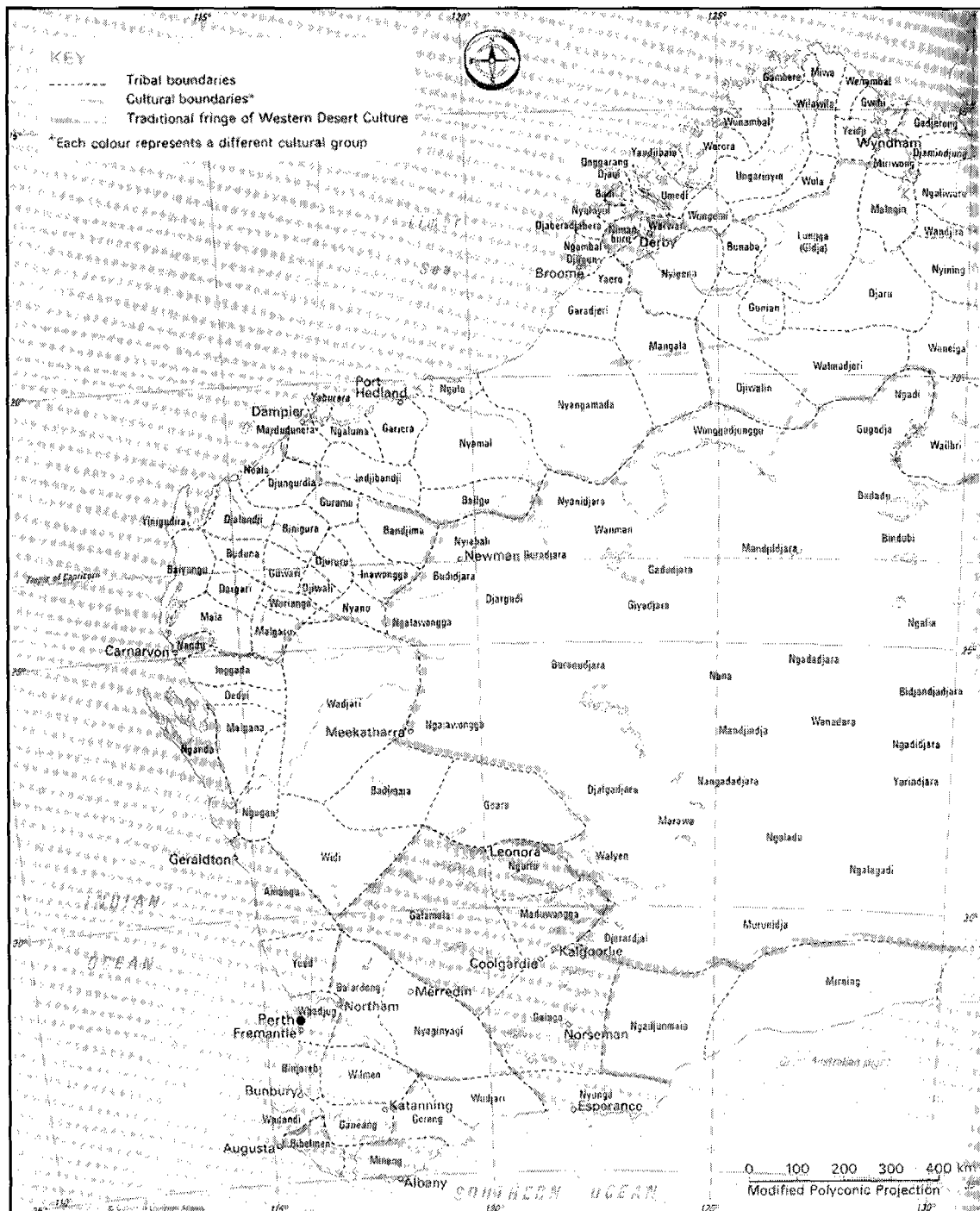
- \* Convert Resource Information Sheet (1) to an overhead transparency, and use this to work with students to identify the tribal area for towns surrounding you. You may need the help of an atlas so that you can use latitude and longitude to accurately locate towns on the Resource Information Sheet. Note that the Resource Information Sheet is a Modified Polyconic Projection, not a Mercator's projection. This means that the spacing between degrees of latitude and longitude varies across the map. This may be ignored on the Resource Information Sheet if you are adding extra lines of latitude. However, be careful when drawing extra longitude lines. You could use these different map types as a lesson in themselves.

Study Resource Information Sheet (1) and make lists of words that have similarities in pronunciation. For example, you may list words ending in 'ara' or 'ari'. Next to each tribal area jot down the spoken language of that region with the help of Resource Information Sheet (2).

Select your town or a town near you from Resource Information Sheet (3). Put the town name on the top of a piece of art paper, and the Nyoongar meaning at the bottom. Draw an emblem for the town incorporating the Nyoongar meaning.

For a dramatisation exercise, place Resource Information Sheet (3) on an overhead. Secretly tell each pair of students the name of their town, selected from the list. The students then dramatise their town's name using the Nyoongar meaning to guide them. The class guesses which town they are depicting.

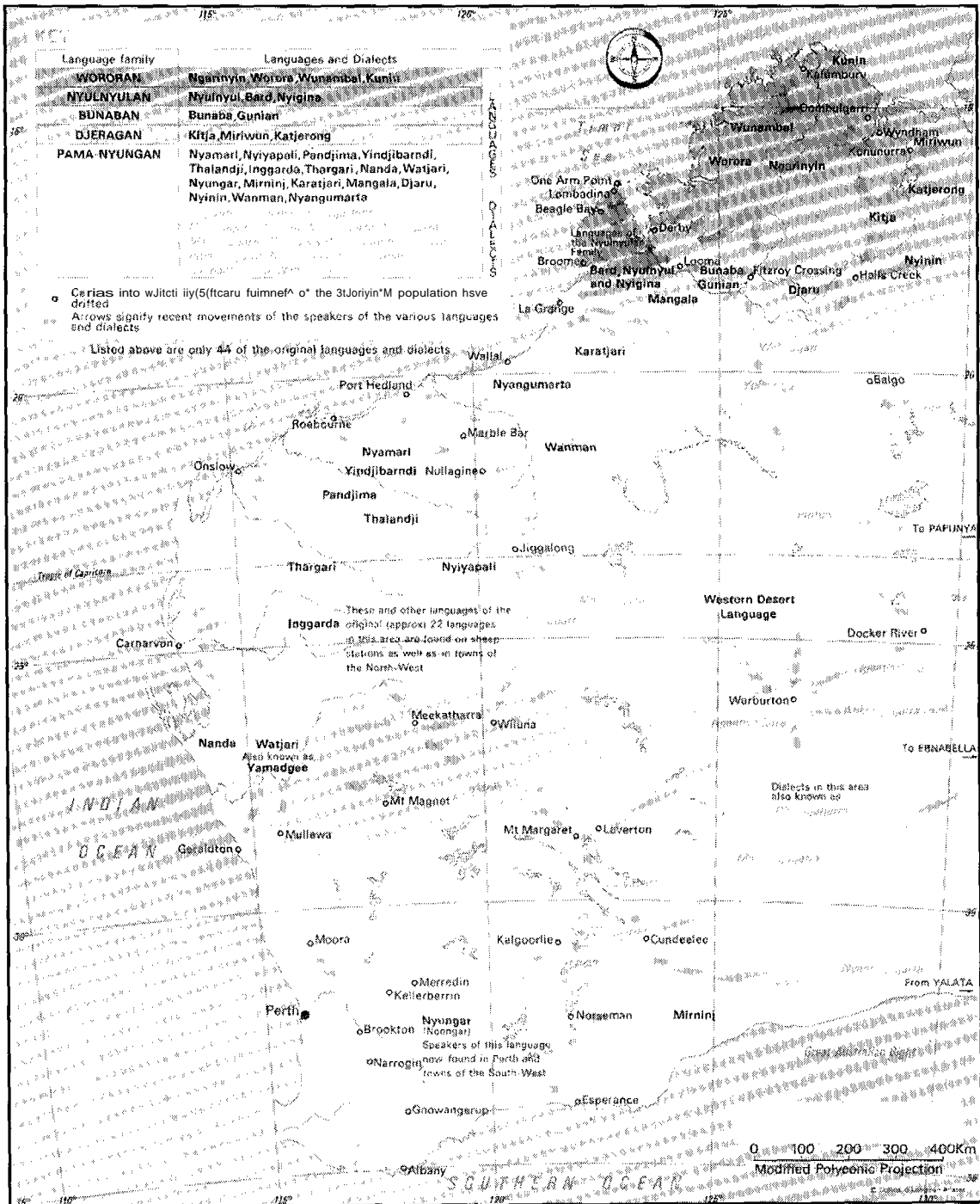
# Aboriginal Tribal Areas



Reproduced from X/te for Young Western Australians by courtesy of the Education Department of WA



# Aboriginal Language and Dialect Areas



Reproduced from 'White or Kohn' Mfenz Australians by courtesy of the Education Department of WA

## Traditional Tribal Areas and Western Australian Towns

Town	MapCoordinates	Tribal Area	Tribal Language
Carnarvon			
Kalgoorlie			
Meekatharra			
Merredin			
Port Hedland			
Katanning			
Perth			
Bunbury			
Newman			
Broome			
Esperance			
Wyndham			
Albany			

## Nyoongar Town Names and Their Meanings

[Adapted from Card 51, in Green, N. 1983. Nyungar - Past and Present, Focus Education Services, Cottesloe, Western Australia.]

### **BALINGUP:**

Believed to honour an Aboriginal hero, **Balingan**.

### **BINDI-BINDI:**

A stick used like a button to close the front of the kangaroo skin cloak.

### **BOYANUP:**

A place where quartz rock for spears was found.

### **BOYUP BROOK:**

Booy means "smoke".

### **CORRIGIN:**

Like many South-west words its meaning is now lost.

### **COWARAMUP:**

Place where the purple-crowned lorikeet was to be found.

### **CUNDERDIN:**

Place of the bandicoot. The name of a waterhole nearby.

### **DANDALUP:**

A place of water.

### **DARDANUP:**

Darda - referring to death or a place where people mourn for their dead relatives.

### **DARKAN:**

Believed to mean black rocks.

### **GINGIN:**

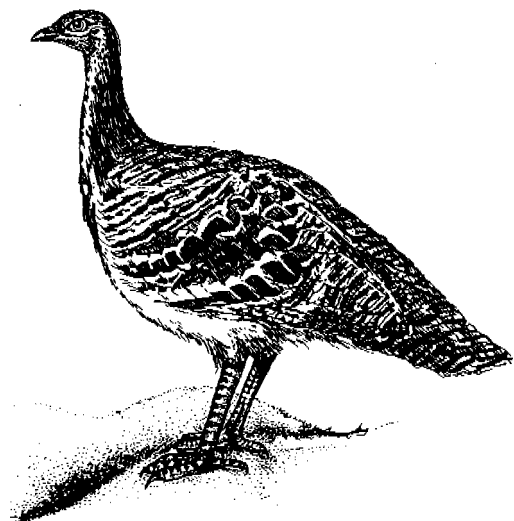
From jin-jin - a word like janjn  
- the bush pear tree.

### **GNOWANGERUP:**

Place of gnow or malleefowl which  
made large ground nests in the area.

### **KOJONUP:**

From kodja - stone axe - suggesting that  
stone for axes was quarried here.



*Malleefowl, ngawoo*

**MANDURAH:**

Place where people meet to trade.

**MANJIMUP:**

Manjim - a swamp plant with edible root.

**MECKERING:**

Moon on the water - perhaps the reflection of the moon on ponds or salt lakes.

**MINGENEW:**

Place of ants - minja.

**MOORA:**

Means good spirit; from a local word Mau-Mau.

**NANNUP:**

A placed where Nyoongar camped for a long time.

**NARROGIN:**

From Gnarajin - a word meaning waterhole.

**NORNALUP:**

Place of norn or black snake.

**PINGRUP:**

Believed to mean a grassy place.

**PINJARRA:**

Swamp lands or many trees.

**QUAIRADING:**

Quarra - bush kangaroo; so, place of the quarra.

**QUINDALUP:**

Means a happy place to live.

**TAMMIN:**

The home of the black-gloved or black-pawed wallaby or of the tammar.

**WAGIN:**

Place of the emu.

**YALLINGUP:**

Perhaps from Yalungup which means a place of love.



*Ant,  
bidlt, boololo*



*Western brush wallaby,  
quarra*

# LET'S TALK

English

Students explore the Nyoongar vocabulary by creating a Dreaming story and replacing English with Nyoongar words.

## Concepts

- There are 270 separate and distinct Aboriginal languages.
- \* All dialects are different.

## Objectives

- \* To understand that there may be many dialects in a region.
- To identify the links of one given Nyoongar dialect with English,

## Curriculum Links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
English	Language Modes - Listening - Speaking - Writing

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
English	Speaking and Listening	Conventions
	Writing	Contextual Understanding

## **Background Information**

Before 1788, around 270 separate and distinct languages, each with numerous dialects, were spoken in Aboriginal Australia. There may have been 600 to 700 dialects. At least 50 of the 270 languages are no longer spoken. Some 50 Aboriginal languages are still regarded as 'strong'.

Aboriginal languages have about 20 sounds. This includes some sounds which are similar to those found in English.

Aboriginal languages are distinctly Australian. Research has not succeeded in linking them to any other language families.

Losing a language is not just to lose a method of communication, it is also to lose a part of a cultural tradition. Gail Vines, writing in *New Scientist* (see References), describes how different researchers view the loss of languages that is occurring in the world today. One view is that different languages provide valuable insights into the way humans think, and the way they perceive the world. Therefore studying different languages may help us to understand how humans think. It may also provide us with new ways to look at, and to think about, our environment. Thus the loss of languages may have unexpected, and undesirable, effects.

Nyoongar is the word used by early South-west Aborigines to describe themselves. There are several spellings of the word - including Nyoongah, Noongar and Nyungar. These various spellings probably reflect different pronunciations within different dialects.

There are two sets of resource sheets that accompany this activity. Both have been written by Ray Garstone, a Western Australian farmer and naturalist from Woodanilling. Ray interviewed both Herbie Jackson and Paddy Coyne and wrote down the English equivalent to the words spoken in their Nyoongar dialect. The two men spoke different dialects, hence the variation in their usage of words.

## **Key Words**

Dialect, Nyoongar, cultural, phonetically.

## **References**

- \* Meagher, S.J. 1974. The Food resources of the Aborigines of the South-west of Western Australia. *Records of the Western Australian Museum*, (1) Part 3.
- \* Anon. 1989. *Australian International Aboriginal Culture*. Australian Government Publishing Service, Canberra.
- \* Vines, G. 1996. Death of a mother tongue. *New Scientist* **149** (2011): 24-27.

## Teacher Directions

### *Materials*

- \* Dreaming stories
- 4 Resource Information Sheets (1), (2) and (3).

### *Lesson Outline*

Expose students to numerous Dreaming stories. There should be a good range in your school or local library. A local Nyoongar story has been included in this package (refer to the activity 'Nyoongar Dreaming').

Students select a plant or animal local to their area from Resource Information Sheet (1) or (2) and make up their own Dreaming story using as many words as they can using the resource information sheets. Teachers may select either of the two resource sheets to use with their students. Use Nyoongar words instead of English words where possible, with a key at the beginning to explain what the words mean.

### *Evaluation*

- \* Were students able to write a creative story using Nyoongar words where possible?

### *Complementary Activities*

- \* Refer to Card 4 'Language of the Nyungar' from *Nyungars - Past and Present* a curriculum package by Neville Green.
- \* Invite some local Nyoongars to talk about their language and add their words to your spelling lists, or make up a new list.
- \* Compare Resource Sheet (1) and Resource Information Sheet (2) and find the English words that have the same Nyoongar word in both lists and the English words that have different Nyoongar words from both lists. Discuss why this may be so.
- \* Discuss the newspaper article on Resource Information Sheet (3). Students can suggest ways in which to save the Nyoongar language.
- \* Students do a News Plan and a Recount Plan for the news article using Resource Sheet (1) and (2).

## Let's Talk 1

Herbie Jackson (Chinneree) was born in the bush near Cobin Soak (Boscabel) around the year 1900.

Herbie was given his Nyoongar name, Chinneree, because during his birth, a kangaroo came to drink at a nearby waterhole. As it drank they could hear it lapping the water "chinneree - chinneree - chinneree" and so he was named.

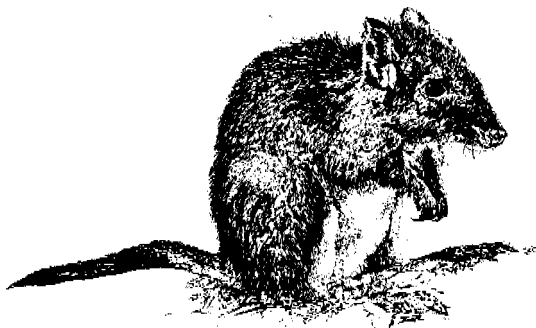
As a young boy Herbie lived in Woodanilling and later drifted to Katanning, working with horses.

These words have been phonetically spelt as they sounded when Ray Garstone interviewed Herbie Jackson.

The Nyoongar language is a difficult one to record because of the many dialects and because it was never written down.

### PLANTS

blackboy	parlock
blackboy gum	peeook
flooded gum	moritch
banksia	mungitch
bluebell	kummick
native potato	you-ork
mallet	beenock
mana gum	mee-an
tea tree	tort
spearwood	por-et
salmon gum	wor-ook
sheoak	quoi-ell
quandong	quorp
York gum	pooet
morrel	bor-at
parrot bush	pee-ent
native potato	you-ork
wandoo	worrent



Woylie

### MAMMALS AND REPTILES

goanna	- karda
green frog	- quorda
gecko	- birraburra
bandicoot	- quaint or quent
bettong	- woil
dingo	- morgitch
native cat	- chuditch
male kangaroo	- yonga
female kangaroo	- war
young kangaroo	- chouding
bobtail skink	- yourin

### BIRDS

pied cormorant	- wamjan
whistling kite	- coorup
bush curlew	- weelo
mountain duck	- wernitch
black duck	- wahnna
bustard	- cooly-cooly
black cockatoo	- moolack
emu	- waitch
eagle	- warlitch
mallee fowl	- gnar
magpie lark	- cool - yer - bernuck
boobook owl	- or-up
white cockatoo	- munnitch
tawny frogmouth	- kumbung
bird	- cherrick



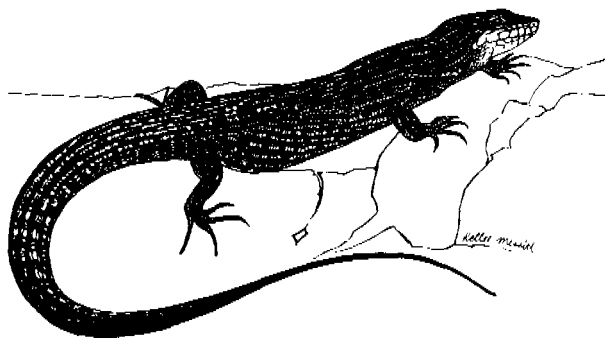
**OTHER**

dying	- warding
egg	- nooruck
corroboree	- mortawa
fire	-karl
food	- merrinj
boomerang	- kylie
old	- munjong
dust	- pullera
honey	- nork
big	- dicoombar
wood	- pooen

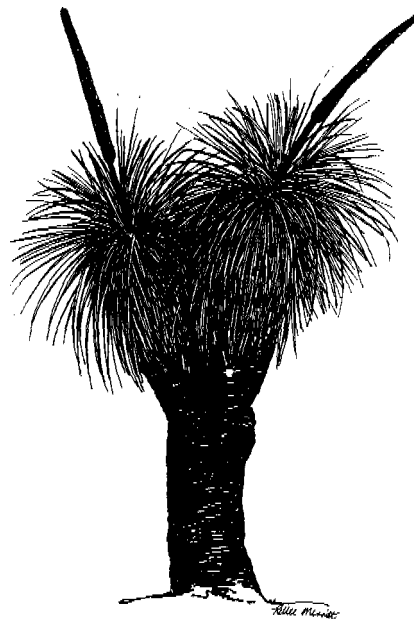
**BODY PARTS**

back	boogal
blood	morook
eye	mell
ear	twonk
foot	chen
hair (head)	choumber
stomach	korbell
nose	moij
head	kart
hand	marr
nose	moij

This information was compiled by Ray Garstone. Ray is a wheat and sheep farmer, and naturalist, from Woodanilling in Western Australia. He has spent a good deal of time interviewing and talking to the Nyoongar people of his area.



*King skink*



*Grasstree, balga, kooroop*

## Let's Talk 2

Paddy Coyne (Megarlitch) was born under a Christmas tree (mungart) along the rabbit proof fence near Ravensthorpe on Bill Moir's station "Carlingup". His father was Dave Coyne and mother Daisy Yates (Mungar).

Paddy worked all his life in the Gnowangerup/Albany area, mainly clearing land and shearing sheep for local farmers.

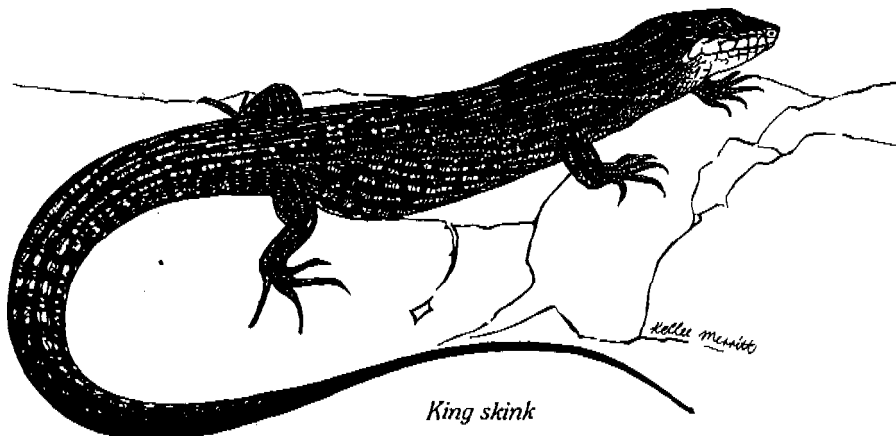
These words have been phonetically spelt from how they sounded when Ray Garstone interviewed Paddy Coyne in 1981. The Nyoongar language is a difficult one to record because of the many dialects and because it was never written down.

### PLANTS

scrub	kural
jam tree	quaoil
white gum	wornt
yate	mow
brown mallet	wonnert
salmon gum	werrick
blue mallee	warrial
marri	morik
flooded gum	yundie
swamp oak	qual
peppermint tree	warnie
paperbark	yourl
yam	youuk
pigface fruits	paying
quandong	quondong
native potato	yourk
banksia	mungatch
blackboy	parlick
melaleuca	tooart
blue-bell	kumuk

### ANIMALS OTHER THAN BIRDS

brushtail possum	- koornal
brush wallaby	- queer
goanna	- ghargal
ringtail possum	- wardar
water rat	- koodar
dugite	- dugitch
bettong	- worj
bat	- parlin
goanna	- chargal
race horse goanna	- karda
bobtail	- youran
carpet snake	- warlgal
kangaroo-male	- yonger
kangaroo-female	- yonger narnk
kangaroo-joeey	- ghoutin
termite mound	- wee-it
dugite	- dugitch
red-backed spider	- karr
tadpole	- korbung
king skink	- yondee



King skink



### BODY PARTS

teeth	- narlock
tongue	- tarling
tail	- hint
nose	- moul
foot	- chen
stomach	- kobble

### OTHER

storm	- mullwa
sun	- too-itch
stone	- poy
water	- kep
wind	- marr-colinja
rain	- ke-ep collinj
smoke	-poy
star	- mullyin
sick	- menditch
walking	- jening collinji
sand	- yang
spear	- keetch
hill	- pudger
native hut	- cornt
ground	- pudge

### BIRDS

magpie	kulbardie
Port Lincoln parrot	toonyat
regent parrot	gnoran
elegant parrot	keel-kirini
wedge-tail eagle	yarlitch
owlet nightjar	parlin
black duck	fait
grey teal duck	mull
willy-wagtail	chitti-chitti
black swan	nymerukor wondie
quail	boolrun
raven	wardong
rosella	yellick

### PEOPLE

baby	- norp
woman	- york
sister, cousin, girl	- chuk
father	- marm
grandmother	- kun
boy	- yung marm
auntie	- kayan
small child	- koolangi
young girl	- yark
uncle	- kank
aboriginal man	- nungar marm
grandfather	- tunnen
brother	- nurnie
mother	- narnk
old person	- tabby

This information was compiled by Ray Garstone. Ray is a wheat and sheep farmer, and naturalist, from Woodanilling in Western Australia. He has spent a good deal of time interviewing and talking to the Nyoongar people of his area.

## Race to Record Oral Histories

*The following article, entitled "Tales of the Supernatural" was printed in The West Australian ("Big Weekend" section, page 5) on August 19, 1995. The article was written by Mark Thornton.*

Cliff Humphries sits quite still in front of a pot-bellied stove, his gnarled old hand clasped together on top of his walking stick. His near-blind eyes are almost invisible behind thick glasses which glitter red in the reflected firelight.....

As his extraordinary tales pour out, smoke escaping from the ill-fitting fire door roils and coils in the still air like a wraith, adding to the mystery. One of Mr Humphries' earliest recollections gives an insight into the supernatural side of Aboriginal culture which whites find so fascinating.

He was eight years old and living with his parents just outside Beverley, where he was born in 1910, when his grandfather decided to test him.

"My mother and father took me to some very sacred ground to have my fortune told," says Mr Humphries.

"There was some fresh water in a pool and we went to drink it. My grandfather said he would see whether I would have a long life. There was a wooden rail along the water's edge. My grandfather told me to lie on my stomach, look into the water and see how far I could see.

"I said I could see a long, long way. He said that was good, I would live a long time. Then my brother came along and looked in the water. My brother said I was lying, he could only see a few centimetres. He died 12 months later."

Mr Humphries met Leticia, whom he calls Lettie, in Pingelly. She was working for seven shillings a week doing housework and cleaning. She was also a Nyoongar midwife with an interesting family history. Her grandfather escaped the infamous massacre of Nyoongars at Pinjarrain 1834.

At the time they met, Mr Humphries was working as a shearer. Later, in the 1940s, he began working as a charcoal maker. It was while smothering flames to keep the wood smouldering in the charcoal-making process that a flurry of ash and cinders flew into his eyes, seriously damaging them. He has had to wear thick glasses ever since. But although he can hardly see to read, if you drive in a car with him he will name all the landmarks you pass.

Many years ago in Kellerberrin he says the locals were upset by a continuing drought.

"People thought of me as a witch doctor and asked me to do a rain dance; that was what they called it.

"Lettie and I went out into the bush and all I could find to help me was a little stick. I picked it up and chucked it into the water. I called out to the Wagyl: 'You blunt-nosed thing, it is time for rain, people are dying for a drink of water.'

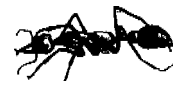
"The next day it poured and poured. The locals were very happy. But the rains went on and on and soon they came to me to get the rain to stop, which I did."

Naturally enough for a man whose people live under the threat of periodic drought, water appears often in Mr Humphries' stories.

"There is a place near where I had my fortune told and I went there very early one morning with my grandfather. Before sunrise we went up to a round pool near where there are two swamps.

"We sat down and waited behind some bushes. Just as the sun rose it was like a big fella came out of the water - a big snake rose out of the pool. Everywhere I looked there were water snakes. Then my grandfather clapped his hands and everything disappeared.

"I have seen the Wagyl, but it was not the really big one."



## News Plan for a **Recount**

NEWS PLAN	
Title of newssoaer article	
When?	
Who?	
Where?	
What?	
Why?	

## RECOUNT PLAN

Topic:

### 1. Setting

Who?	Where?	When
What?	Why?	

2. Events in Time Order Event (i)	Event (ii)
Event (iii)	Event (iv)
Event (v)	Event (vi)
3. Concluding Statement/Ending	



*Tammar wallaby, damar*

# NOT ART FOR ART'S SAKE

The Arts  
English

Students create artwork that illustrates significant landmarks along a travel route. This is compared with Aboriginal Song Lines. The differences between Aboriginal cultures is emphasised.

## Concepts

- \* Aboriginal narrative art has meaning.
- 4 To fully understand Aboriginal art it must be related to its local environment.
- \* Significant differences exist between the cultures of the various Aboriginal groups.

## Objectives

- \* To gain an understanding of Aboriginal art and its relationship to culture.
- \* To raise awareness that there are significant differences between the cultures of the various Aboriginal groups.

## Curriculum links

### *Learning Area Statement*

LEARNING AREAS	MAJOR LEARNING OUTCOMES
The Arts	Arts, Skills and Processes
English	Language Modes - Context

### *Student Outcome Statements*

LEARNING AREAS	STRAND	SUB-STRAND
The Arts	Using arts skills, techniques, technologies and processes	
English	Reading	Contextual Understanding

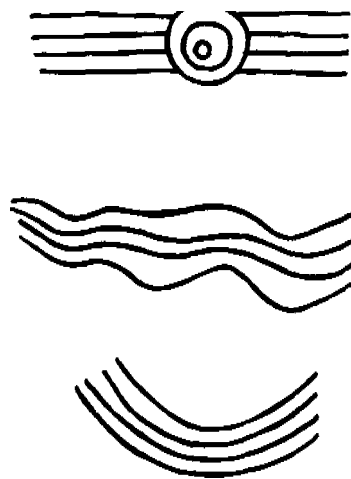


## **Background Information**

Peter Bindon of the Western Australian Museum provides the following account of Nyoongar narrative painting.

Some Aboriginal art tells the stories of journeys made by Ancestral heroes. People who wish to paint a story must get permission from the relevant owner of that story before they may use the related designs and motifs. Each painting of a Dreaming story is linked to the geography, the resources and the life ways of the people who move through the particular landscape of that story.

Most people will be familiar with the concentric circles of desert art. While these are the focus for various activities in Dreaming stories, this form of art was never used by Nyoongars in traditional times. Most of these desert art stories can be depicted as a line, often a wavy line in Aboriginal art, along which various events took place. The distance between points in the landscape is not directly related to distances marked on the lines.



*Aboriginal symbols*

A symbol that relates the Dreaming story to the landscape, which is common all over Australia, and also occurs in the artwork of other societies, is the hand stencil or hand print. This was a kind of signature showing that the person who used it had some relationship with the place, with the Ancestral hero, or with the Dreaming story.

The only traditional Nyoongar paintings that have been recorded are the hand print and the hand stencil. However, on some outcrops in the south-west there are engravings and bird tracks. The reasons for the lack of rock painting by Nyoongars probably reflect the lack of sheltered surfaces combined with the type of available surfaces (mostly granite in the south-west). There are many important cultural differences between the various Aboriginal groups. In many cases these variations are related to differences in local environments.

Other examples of cultural differences between groups that reflect environment are the restricted use of didgeridoos and the use of skin cloaks. The former were only used in the north of Australia, and this may be because they were introduced through contact with cultures to the north. In the case of cloaks, these were used in the colder south, but not in the hot north.

Nyoongars used ochre as "paint" for their hand stencils and prints. Ochre (wilgi) is a raw material found in special places. It can be found in powdered form or stone like lumps that need to be ground using stone mortars, barks, spear-throwers, etc. Pipe-clay and charcoal were also commonly used in Aboriginal art. An ochre pit may still be seen in the Dryandra Woodland near Narrogin.

Powdered ochre was mixed with water or animal fat until it was of the correct consistency. Sometimes pigments were blown from the mouth onto a rock surface to make a stencil.

### ***Key words***

Ochre (pronounced 'Oh-car'), Dreaming, pigment.

### ***References***

- \* Keighery, B. and Huston, J. 1994. *Our Wild Plants*. Greening Western Australia, Western Australia.
- \* Jacob, T. 1991. *In the Beginning: A Perspective on Traditional Aboriginal Societies*. Ministry of Education, Western Australia.

### **Teacher Directions**

#### **Materials**

- \* Resource Information Sheet (1)
- \* water
- \* containers (a few per student, for example, a small yoghurt container)
- \* paints or other material, such as charcoal, for artwork.

(Ochre paint look-alike can be purchased from hardware stores as cement colouring.)

### ***Lesson Outline***

1. Students, either individually or as a group, select a route with which they are familiar. For example, between your town and Perth (country teachers), or between your suburb and Perth City centre (city teachers). If working individually, each student could choose a well-travelled route between their house and that of a relative.
2. Discuss with students significant features along the selected route or routes. These could be rocks, salt lakes, bends in a river, community buildings, railway and road crossings, and so on. List the features on a board. A strip map of the route (see example below) could be prepared and run down the side of the classroom. It is suggested that you have a good road map of your route available to help with ideas if the students have difficulty thinking of features. The road map will also provide names for some of the creeks and other features that are not named on the roadside.

Example of part of a strip map:

Narrogin	14 Mile Reserve	Dryandra	Pumphreys	Nth Bannister
I	I	I	I	I

---

3. Each student selects a significant feature along this route. Students then illustrate their significant feature through painting or other artwork. They 'sign' their artwork with either a hand print or a hand stencil.
4. To go with their picture, each student writes a short description of the significance, to them, of their feature. Encourage students to think of an event linked to the spot. For example, 'the place I was car sick', or 'the spot we always stop for lunch'.
5. Place students' artwork and descriptions at the appropriate spot along the strip map. Discuss the ideas presented in the Background Information, especially the use of hand prints as a personal 'signature' and means of linking a person to a particular place of significance. Emphasise that different Aboriginal groups had very different cultures. The limited use of painting by Nyoongars in comparison with other groups is a good example.
6. Give students a copy of Resource Information Sheet (1) to read. Discuss with students the similarities and differences between their illustrated strip map and actual Song Lines. For background information on this topic, teachers should read the 'Background Information' section in the activity 'Nyoongar Dreaming'.

### ***Evaluation***

- \* Were students able to identify significant features along a selected route?
- \* Were students able to illustrate their feature with artwork, and link the feature to an event(s) in their own lives?
- \* Did students understand that different Aboriginal groups have different cultures? Were they able to provide examples and link this to the particular group's environment?

### ***Complementary Activities***

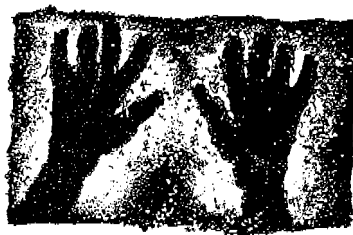
- » Refer to Activities 4.1,4.2,4.6 'People and Wild Plants' *from Our Wild Plants*, a primary school curriculum package produced by Greening Western Australia.
- \* Refer to 'Images' *from Keeping the Spirit Alive*, a curriculum package by the Western Australian Museum.
- \* Invite local Nyoongars to your class to demonstrate an art form from an Aboriginal culture. Maybe they could draw a design and supervise painting of it by students. (Year six students at St. Patricks Primary School in Katanning have done this and the finished product can be viewed outside the school in their under-cover area.)

Contact the art gallery and ask about the Aboriginal Art exhibition.

Have students make their own paints and paint brushes from natural materials. A lesson outline could be as follows:

1. Students collect a couple of different sized twigs and pound the ends to form a brush.
2. Students search the school grounds for different coloured sand and clay that could be used as a basis for their paintings. Place a small handful in each container.
3. Small amounts of oil or water are mixed with the soils and students sit in groups so their soils can be shared.
4. Paintings, perhaps representing a significant story or place from the painter's life, can be drawn on an A4 sheet of paper. When completed, a caption may be added to explain the significance of the story or site represented.
5. Artwork and stories can be placed in a plastic display book and given a name such as 'Our Stories'.

Ask students to provide examples of the use of art in European culture. In particular, discuss the use of art in religion, or to tell a narrative history. A good example of the latter is the Bayeux Tapestry. This is a needlework panorama representing the invasion and conquest of England by William the Conqueror. It was made in the 11th century. It shows the costumes, arms and manners of the Normans before the Conquest and gives more details of the events represented than does the contemporary literature.



## Dreaming Trails

The Dreaming stories, songs, and dances of Nyoongars described the creation of their environment. They also provided the law and customs that guided how life should be lived.

Dreaming stories and songs were connected to actual places. Sometimes these places were linked together into a Dreaming Trail. For example, Mulkas Cave, Wave Rock, Jilakin Rock, Jitarning Rock, Dumbleyung Lake and Puntapin Rock are all connected via an ancient Dreaming Trail that reaches the coast at Augusta.

To Nyoongar people this Trail and some others were created by the Wagyl (Spirit Serpent). At certain places between Mulkas Cave and Augusta the Wagyl stopped and performed heroic deeds. Dreaming stories that involve creative beings other than the Wagyl are also connected with places along the Trail. The Wagyl is only one of many creative beings - another is Chitti-Chitti, the Willie Wagtail.

To keep their customs and laws alive, Nyoongar people travelled along the ancient trails. At significant sites they performed special ceremonies. They also sang songs relating to the Trail as they travelled along it.

Dreaming trails (or Song Lines) are a combination of knowledge and a general understanding of how to pass through different country, knowing which path to take, where to obtain food and where to find resources to survive the journey.

Dreaming trails and the ceremonies associated with them also provide an understanding of the spiritual significance of the country's special places, plants and animals. Everything has a spiritual side that needs to be recognized and respected, and this knowledge is just as important as general knowledge. Survival requires a combination of spiritual support and general knowledge.

Therefore, Dreaming trails not only provided the general knowledge needed to live in a particular part of the country, they also told people what rituals, ceremonies and customs were required.

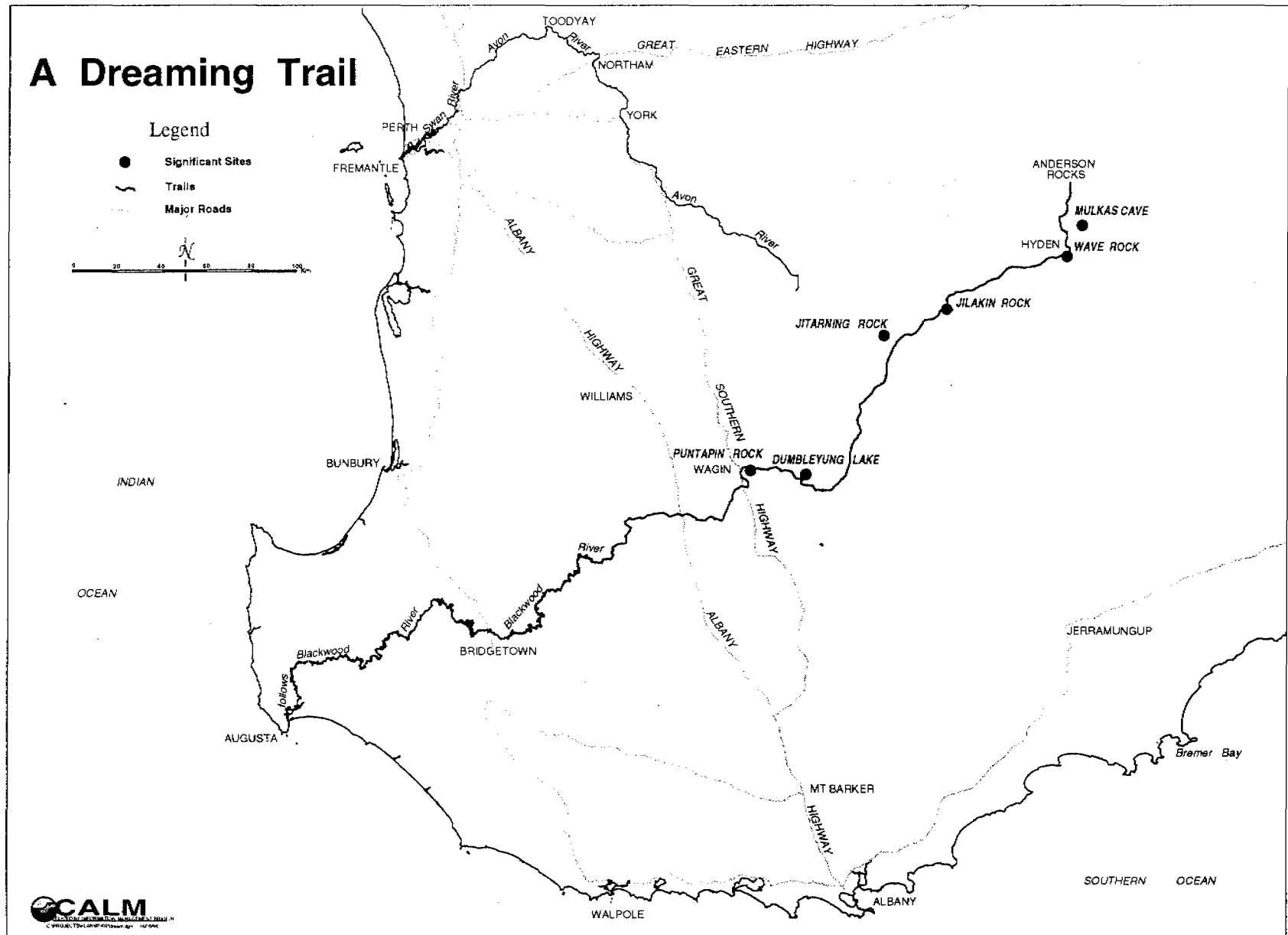
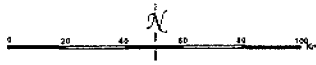
Some of the sites along a section of a Dreaming Trail on the map are described below:

- \* *Mulkas Cave*: this place is sometimes called Bates Cave, but is known to Nyoongar people as Mulkas Cave. It is the home of Mulkin-Jal-lak, a giant evil spirit (charrnok). It is a very significant site in the Nyoongar Dreaming.
- \* *Wave Rock*: is known to Nyoongar people as Gnardie-Daran-E-Noo. This is also a very significant site.
- \* *Jilakin Rock*: is the place where the salt water and freshwater peoples met and separated. It was also an important place for trade between the two groups of people.
- \* *Jitarning Rock*: is a place where, through special ceremonies, Nyoongar people ensured that all animals would be healthy and fat for the next hunting season.

# A Dreaming Trail

## Legend

- Significant Sites
- ~ Trails
- Major Roads



# BIOGRAPHIES OF THE PROJECT TEAM

## **Kezia Cruttenden**

Kezia has taught for 26 years in a variety of classroom and support roles. She has worked in Narrogin since 1984, and her first experience of teaching Aboriginal children was in Darwin where she taught for 2 years. Kezia has previously participated in developing curriculum activities and has had a long-standing interest in multicultural programs. For the last two years she has worked in an English Language and Numeracy program (known as ELAN, a teacher development program focusing on teachers of Aboriginal children). Presently she is co-runner of Narrogin District's K-2 Aboriginal Project. Kezia considers that *Exploring Woodlands with Nyoongars* is important because it promotes the idea that, although cultures may be different, they are equal in worth. In this package Kezia worked with Beth to produce 'Nyoongar Dreaming', 'Nomads of the Wheatbelt' and 'Tribal Voice'.

## **Beth Gibb**

Beth grew up with Aboriginal children in Carnarvon and has maintained an interest in Aboriginal culture since that time. She has taught for more than 30 years including nearly 25 years in rural and metropolitan Western Australia and over five years in Vanuatu. Currently Beth teaches at Narrogin Primary School where she has worked for four years. Beth has worked with Nyoongar children in homework classes for most of her time in Narrogin. She believes that this package of activities is important because it will help develop mutual understanding and tolerance between children of different cultures within Western Australia. In this package Beth worked with Kezia to produce 'Nyoongar Dreaming', 'Nomads of the Wheatbelt' and 'Tribal Voice'.

## **Janette Huston**

Janette is an Environmental Education Consultant. She has been involved with two other CALM curriculum packages *Wheatbelt Woodlands: Teaching Activities for Upper Primary School* and *Exploring Coastal Waters*. Janette has been teaching since 1985 and is currently working part-time at St Anthony's Primary School in Greenmount. She is also the Education Officer for Greening Western Australia. Janette is committed to the belief that teachers need local curriculum materials. *Exploring Woodlands with Nyoongars* does this by focusing on the local Nyoongar peoples' relationship with the wheatbelt woodlands. Janette was responsible for co-editing this package and writing six of the activities: 'Not Art For Art's Sake', 'Let's Talk', 'Back To the Bush', '101 Uses for a Grasstree', 'The Kangaroo Connection' and 'Table Tucker'.

«. **Jill Nottle**

Jill has lived in the Narrogin area for many years as a student, teacher and farmer. She has been teaching since 1969 in both city and country schools. Jill was part of the project team that developed *Wheatbelt Woodlands: Teaching Activities for Upper Primary School*. She enjoyed that project, and given her broad interest in the land and its history, agreed to continue her involvement by contributing to *Exploring Woodlands with Nyoongars*. Jill produced 'Shelters and Structures', 'Animal Tracks' and 'Life in the 40s and 50s'.

• **Ken Wallace**

Ken is CALM's Regional Manager for the Wheatbelt Region. Responsible for the management of some one million hectares of conservation lands, he believes it is important that people understand the past history of the land, including both its natural history and cultural history. It is only in this way that we will make judicious decisions about the future management of our land. Ken is project manager for the *Exploring Woodlands* series. His role in *Exploring Woodlands with Nyoongars* has been as project supervisor, information resource and co-editor.



# APPENDIX 1

## Hints for Non-Aboriginal Teachers

Nyoongars call people of European descent "Wadjilas". Many Wadjilas do not understand, or forget, that Nyoongar culture is still quite different from that of Wadjilas. Therefore Wadjila teachers must be aware of, and sensitive to, these cultural differences. This is even more so where Aboriginal issues and topics are planned for the classroom.

The following tips are designed to help Wadjila teachers teach Aboriginal topics and issues in the classroom.

### *General Hints*

- \* The initial letters of the words "Aboriginal" and "Aborigine" should be in capitals.
- \* Abbreviating the word "Aboriginal" to "Abo" is offensive. Librarians are requested to use the letters "Abl" as the first three letters of a subject name.
- \* Generally, Aboriginal people do not see time as an issue and this may mean they arrive early or late for an engagement. This needs to be respected as part of their culture.
- « It is suggested that aspects of spirituality, historical excerpts and some art and craft be taught, where practicable, with representatives of the local Aboriginal Community.
- \* Aboriginal students in your class should not be expected to answer questions on Aboriginality. Wait till information is volunteered rather than asking questions.
- \* Avoid using emotive language when referring to or speaking about Aboriginal people, for example, "poor Aborigines".
- \* There is no such thing as a single Aboriginal culture as Aboriginal people are a diverse group with many different languages, cultural practices and beliefs.
- \* When teaching Aboriginal language and history, it is important to teach local dialects and history first.
- \* Some Aboriginal people will avoid eye contact with you. This is especially so if you are from the opposite sex.
- « Local Aboriginal Community members should be asked to check the suitability of new Aboriginal Studies materials planned for use in schools to ensure that they are appropriate for children and women.

### *Guest Speakers*

The next tips apply to the use of any guest speakers in the classroom:

- \* It is often quite difficult for guest speakers to speak to a large audience. Small groups or single classes may be preferred.
- \* In an unfamiliar situation, guest speakers from local communities may be shy and may take some time to overcome their shyness. Avoid putting them immediately in the spotlight.
- \* Ensure that guest speakers understand the content to be covered in the classroom.
- \* Ensure that your class are properly prepared, and that they have been given a number of build-up lessons.

## APPENDIX 2

### Videos from the State Film Library of Western Australia

The State Film and Video Library has an excellent range of videos including many relevant to this set of teaching activities. These videos are listed under subject headings for your convenience.

Your school should be a member of the State Film and Video Library, but if you would like further information, please use the following contact numbers:

Telephone: (08) 9427 3159

Fax: (08) 9427 3212

### *The Arts*

» *The Quest of Jimmy Pike*

Sydney 1990 51 mins BRN612326

A member of the Walmajarri tribe, in the Great Sandy Desert at the age of 14. Today his exciting, brilliantly coloured prints and paintings can be seen in all Australian State Art Galleries.

\* *The Morning Star Painter*

Australia 1979 29 mins BRN607625

Arnhem Land Aboriginal artist, Jack Wanuwun, is shown gathering the bark, preparing the paints, and creating a bark painting of his people's totem, the morning star.

\* *Land of the Lightning Brothers*

Lindfield NSW 1987 26 mins BRN 561 845

Records a spectacular collection of Aboriginal rock art paintings and rock engravings, dominated by Yagjadbula and Jabaringi - the Lightning Brothers. This video shows how the Wardamen people see this act as part of their living culture. They perform traditional songs and ceremonies associated with special Dreamtime places where art occurs.

\* *Roland Robinson: the Land as Voice*

Australia 1987 20 mins BRN 626143

A poet with a strong attachment to the Australian landscape, Roland Robinson has a deep interest in Aboriginal lore and performs his poetry with a memorable verve.

\* *Gunanamanda: the People of Mornington Island*

The Mornington Island Aboriginal people demonstrate the various dances based on the Rainbow Serpent mythology. Demonstrations of body painting and its significance are also included.

***Dreamtime***

- *Frame on Dreaming*  
Australia, 1984 29mins BRN548513  
Events in an Aboriginal Arts Festival, the songs, dances and paintings. Explores how the narratives in these events, and by extension, the narratives of Aboriginal culture in general, have always been framed by parallel narratives of the dominant white culture.
- *The Greedy Frog: An Aborigine Folk Tale*  
Adelaide 1988 20mins BRN614594  
The story of a frog who drinks up all the water in a lake and grows to a huge size. The problem is, however, that now the other animals have no water, and they must induce the frog to give his water back. Live action and animation.
- *The Emu and the Sun*  
Melbourne 1990 8 mins BRN608642  
An animated film based on the Aboriginal legend about how emus became wingless and how sunlight came to earth, to the accompaniment of a song sung by women of the Walpiri tribe.
- *The Rainbow Serpent*  
Weston 198? 11 mins BRN600513  
The Australian Aboriginal legend of creation, tells how a giant serpent named Goorialla journeyed across Australia and created the topographical features and animal life found today.
- *Ngurenderi, a Ngarrindjeri Dreaming*  
South Australia 1987 8 mins BRN 583 751  
Tells of an Aboriginal Dreamtime legend about an ancestral hero of the Ngarrindjerri people and creator of the lower reaches of the Murray River and South Australia's Coorong.

***History***

- « *The Coming of Man*  
Sydney 198? 60 mins BRN 502159  
Examines the history of Aboriginal man in Australia prior to the arrival of Europeans. Leading anthropologists explain their recent finds in several locations, including the Nullarbor Plain, where relics of implements and human bones have been radio-carbon dated to 39 000 years.
- *The First Born - a Land Looking West*  
W.A. 1980 50 mins BRN 500155  
Traces the story of the original Australians, the Aboriginals, and goes back in time some 40 000 years. Told by an Aboriginal man and woman, it reveals a people with a strong affinity to the land and its people.

## ***Aboriginal Lifestyles***

- \* *Tracks of the Rainbow*  
USA                    1982                    55mins                    BRN617684  
The journey of six Aboriginal teenagers. They travel from the southern, urbanised areas of Australia, where memories of tribal life are disappearing - to seek the traditional ways of their people, in the far north of Australia. The Dreamtime Rainbow Serpent is their symbolic guide.
  
- \* *Eden*  
Sydney                1989                    7mins                    BRN611794  
The Aboriginal relationship with the land in Australia is very close. The European conquest continues, with little change, in the destruction of New South Wales south-east forest.  
A particularly relevant film in the age of environmental awareness.
  
- + *Looking After Yaimini*  
Brisbane            1986                    45mins                    BRN492081  
The lifestyle of contemporary Aboriginal people living in Arnhem Land. Their lifestyle needs very little European assistance, and their culture is strongly tied to the traditions passed on by their ancestors.
  
- \* *Lalai Dreaming*  
Australia            1973                    53mins                    BRN223505  
A re-enactment by people of the Mowanjum Community of aspects of earlier lifestyles of Aborigines in the traditional Worora tribal land of north-west Australia. Tells of the Wandjinas, the creation of the world, and the Dreamtime, to explain the Aborigine's affinity with sacred sites and strength of tradition. Dialogue in native tongue with English sub-titles.

## ***Bush Tucker***

- \* *Mayi Wiru: Part One, Winter Foods: Wanganu, Angara, Itunpa*  
Alice Springs 1986                    35mins                    BRN597891  
Demonstrates traditional bush foods and shows the traditional implements used to gather and prepare food.
  
- \* *Bush Tucker Man*  
Canberra            1986                    57mins                    BRN550070  
The Australian Army's Bush Tucker Man, ethno-botanist, Major Les Hiddens, travels the vast remote wilderness of Northern Australia. He discovers from Aboriginal people the native bush food and medicine that has sustained their culture for more than forty thousand years.