



Australian Government
Land & Water Australia

final report

knowledge for managing Australian landscapes

Plants and Animals of Kija and Jaru Country

Aboriginal knowledge conservation and ethnobiological research in the upper Ord catchment, Western Australia

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Publisher

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PLANTS AND ANIMALS OF KIJA AND JARU COUNTRY

Aboriginal knowledge conservation and ethnobiological research
in the upper Ord catchment, Western Australia.

Prepared for the



Ord-Bonaparte Program,



the **Kimberley Land Council,**



and the **Kimberley Language Resource Centre.**

by

Glenn Wightman

Ethnobiology Project



Northern Territory Government
Department of Infrastructure, Planning and Environment

August 2003

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Publication reference for this report:

'Plants and animals of Kija and Jaru country, ethnobiologist's final report; Glenn Wightman, August 2003'.

In the east Kimberley the spelling of **Aboriginal language words** and the names of the languages themselves have varied over time. There is still conjecture about correct spelling for some languages and words. In this report we have used the spellings recommended in the "Guide to writing languages of the Kimberley", produced by the Kimberley Language Resource Centre in 1999, where possible. However, in some instances we have used spellings preferred by senior elders or spellings accepted in wide usage.

It is customary amongst Kija and Jaru people that the **name of a deceased person** is not spoken or written down for some time. In this report the names of deceased people have been abbreviated as a sign of respect and so that the names will not be accidentally read aloud to relatives and friends of the deceased.

I. INTRODUCTION

SUMMARY

The ethnobiologist's final report of the '*Plants and animals of Kija and Jaru country: Aboriginal knowledge conservation and ethnobiological research in the upper Ord catchment*' undertaken between June 2002 and August 2003 is presented.

It has been prepared by Glenn Wightman based on the traditional biological knowledge and perceptions of Kija and Jaru people while undertaking fieldwork in the east Kimberley, as outlined in chapter two.

Landscape changes and concerns about country as expressed by traditional owners on country are presented in chapter three.

The bulk of the ethnobiological research and knowledge conservation is presented in chapter four, Kija plants and animals, and in chapter five, Jaru plants and animals.

Recommendations for the completion of the plant and animal knowledge project for each language is presented in chapter six.

Acknowledgments, an outline of data sets collected during the project and a printout of photographs taken by the author during fieldwork are also presented.

The overpowering desire of the Kija and Jaru people involved in the project to record traditional plant and animal knowledge was the key factor in the success of the project, and the determining factor in the content of this report.

Basic statistics of Kija and Jaru plant and animal knowledge recorded:

Table I provides a summary of the basic statistics of information recorded for each language throughout the project.

Table I: Basic statistics of Jaru and Kija traditional biological knowledge recording during project

	Jaru	Kija
Plant names and uses recorded	183	201
Animal names and uses recorded	219	222
Total taxa recorded	402	423
Audio files recorded	173	174
Images files recorded	202	263
Field days	31	41
Speakers involved	33	58
Total person field days	219	302

BACKGROUND

The primary aim of the project was to record the traditional biological knowledge associated with the Kija and Jaru languages.

An ethnobiologist, Glenn Wightman, and a linguist, Joe Blythe, were contracted by the Kimberley Land Council and the Kimberley Language Resource Centre respectively to facilitate this knowledge recording. Funding for the project was provided primarily by the Ord-Bonaparte Program, with additional funding from the KLRC and the ATSIC Wunan Regional Council.

This report presents the results of knowledge recording undertaken by the ethnobiologist, Glenn Wightman.

However, it should be noted that linguist Joe Blythe has separately recorded most utterances relating to plant and animal knowledge on high quality audio cassette tapes, and has entered this data into a Filemaker Pro 5 database for each language. This database links utterances to time, place, person(s) and species.

Acronyms used in this report:

ATSIC	Aboriginal and Torres Strait Islander Commission
DIPE	Department of Infrastructure, Planning and Environment, Northern Territory
KLC	Kimberley Land Council
KLRC	Kimberley Language Resource Centre
OBP	Ord-Bonaparte Program

PROJECT METHODS AND LOGISTICS

Initially the ethnobiologist was to be employed to work for a 15 week period in the field with a five week write up period to record traditional biological knowledge associated with the Kija and Jaru languages. However during the fieldwork associated with the project it became obvious that to record all biological knowledge associated with both languages would require significantly more than 15 weeks fieldwork and 20 weeks in total.

In reality during the project, fieldwork was undertaken over 18 weeks with in excess of 10 weeks time spent on writing up information recorded and preparing the final report. Details of fieldwork times, places, people and research focus are provided in the following chapter.

The desire of Kija and Jaru people to record traditional biological knowledge has been one of the key reasons for the large amount of material recorded in such a short period. Their ability to work hard for long periods while undertaking knowledge recording research, often in difficult circumstances, has been the most main reason for the success of the project.

The linguistic skill of Joe Blythe, and his ability to converse sensibly and accurately in both languages, was another critical factor in the success of the project.

However due to the limited time frame of the project, less time was spent on other areas of research that were hoped to be covered by the Ord-Bonaparte Program and the Kimberley Land Council during the project.

The priority for fieldwork and research objectives were driven by Kija and Jaru people more or less on a daily basis, within the broader parameters of the project goals and objectives.

Knowledge relating to flora was generally recorded as the plants were encountered in the field, though we often collected plants in bags and discussed them as a group at a later time. Plants were usually encountered several times with common plants being discussed many times.

Animals were more difficult to locate in the field. Specially designed folders containing large scale photographs of natural groups of animals from the region were used to determine identification, in conjunction with discussions about the calls and habits of the animals. These folders were worked through several times with each language group. However, it should be noted that certain groups, such as macropods and small mammals, are always difficult to correctly identify due to the complexity of traditional knowledge associated with the groups and the overlap in general appearance.

As discussions about plants and animals took place they were recorded on audio recorders (separate recordings were made by Glenn Wightman and Joe Blythe), photographs and plant collections were made as needed and when time permitted.

2. PROJECT FIELDWORK

Project fieldwork was undertaken between May 2002 and June 2003 and fieldwork was generally undertaken in two-week periods; this was most suitable for Glenn Wightman and Joe Blythe in relation to other work commitments and travel requirements from Darwin and Broome.

Previous fieldwork experience with similar projects in similar regions has proven this to be a preferred length of fieldwork as it allows significant amounts of recording to be undertaken without excessive fatigue setting in for traditional owners or knowledge recorders.

Usually each language was worked on for about one week of each trip; on occasions this varied due to lack of availability of senior elders from one language or the other.

Major fieldwork: dates and places

03-14 June 2002	Violet Valley, Mabel Downs;
10- 18 July 2002*	Moola Bulla, Lissadell;
29 July-09 August 2002	Halls Creek area, Warrmarn area;
19-30 August 2002	Halls Creek, Bedford Downs, Rukuny;
09-20 September 2002	Marella Gorge, Springvale, Violet Valley;
21 October-01 November 2002	Turner River, Osmond Valley;
24 November-06 December 2002	ADM, Texas Downs, Lake Argyle;
24 March-04 April 2003	Old Lamboo Station, Warrmarn area;
28 April-07 May 2003	Ringers Soak, Bow River, Greenvale;
26 May-04 June 2003	Blue Hole, Violet Valley, Warrmarn area.

(* Glenn Wightman was absent from this fieldwork).

Jaru Fieldwork: dates, locations and people.

Fieldwork associated with recording Jaru plant and animal knowledge is presented in the following order:

date; location; people involved; primary subject recorded.

05 August 2002;

J. and Doris Ryder's house on Mardiwa loop, Halls Creek (18°13'S/127°41'W);
J. Ryder (dec.), Doris Ryder, Bonny Deegan, Tas Tsunoda and Glenn Wightman;
checking plants in the area.

06 August 2002;

Meals on Wheels in Halls Creek (18°13'32"S/127°40'14"W);
Jack Lanigan, Bonnie Deegan, Tas Tsunoda and Glenn Wightman;
also at the Elvire River just north of Halls Creek;
May Butcher, Bonnie Deegan, Tas Tsunoda and Glenn Wightman;
checking plants in the area.

07 August 2002;

Caroline Pool (18°13'25"S/127°45'30"E) and around Halls Creek
(18°13'32"S/127°40'14"W);

May Butcher, Doris Ryder, Barbara Sturt, Bonnie Deegan and Glenn Wightman;
checking plants in the area and Jaru dictionary entries.

20 August 2002;

Palm Spring (18°25'11"S/127°50'42"W) and Dirrgirn, Sawpit Gorge
(18°25'31"S/127°40'13"W);

Bonnie Deegan, May Butcher, Barbara Sturt, R. James (dec.) and Glenn Wightman;
checking plants in the area and Jaru dictionary entries.

21 August 2002;

Halls Creek Hospital Lawn (18°13'S/127°41'W);

Bonnie Deegan, May Butcher, Doris Ryder, Barbara Sturt, Kylie Pursche and Glenn
Wightman;

checking Jaru dictionary entries.

22 August 2002;

Warn.gu (Wungu) Gorge (18°17'35"S/127°58'44"W), old Flora Station;

Bonnie Deegan, May Butcher, R. James (dec.), Biddy Dimbina, Kylie Pursche and
Glenn Wightman;

checking plants in the area.

27 August 2002;

Mary-Anne or Tanami Dam (18°28'25"S/127°33'47"W);

Bonnie Deegan, May Butcher, Doris Ryder, Barbara Sturt, Rhonda Matthews and
Glenn Wightman;

checking plants in area and various animal names and uses.

28 August 2002;

Twenty-mile Gorge (18°16'27"S/127°52'36"E) on the Little Elvire River;

Bonnie Deegan, Doris Ryder, Barbara Sturt, Rhonda Matthews and Glenn Wightman;
checking plants in area and checking dictionary entries.

18 September 2002;

Marella Gorge (18°07'46"S/128°41'06"E);

Bonnie Deegan, Doris Ryder, May Butcher, Barbara Sturt, Nora Badngarri, Desma
Sampi, Joe Blythe and Glenn Wightman;

checking plants in the area.

19 September 2002;

Marella Gorge (18°07'46"S/128°41'06"E);

Bonnie Deegan, Doris Ryder, May Butcher, Barbara Sturt, Nora Badngarri, Desma
Sampi, Joe Blythe and Glenn Wightman;

checking plants in the area.

29 October 2002;

Rijarr, Turner River Station (17°54'S/128°22'E);

Bonnie Deegan, Barbara Sturt, Tarnba Banks, G. Long (dec.), Maggie Long, Phyllis Thomas, Nora Badngarri, Dolly Malgbarriya, Peter Tarnba, Joe Blythe, Janelle White and Glenn Wightman;
checking plants collected on the way to, and around Turner River.

30 October 2002;
Rijarr, Turner River Station (17°54'S/128°22'E);
Bonnie Deegan, Barbara Sturt, Tarnba Banks, G. Long (dec.), Maggie Long, Phyllis Thomas, Nora Badngarri, Dolly Malgbarriya, Peter Tarnba, Joe Blythe, Janelle White and Glenn Wightman;
checking birds and reptiles names and uses.

31 October 2002;
Rijarr, Turner River Station (17°54'S/128°22'E);
Bonnie Deegan, Barbara Sturt, Tarnba Banks, G. Long (dec.), Maggie Long, Phyllis Thomas, Nora Badngarri, Dolly Malgbarriya, Peter Tarnba, Joe Blythe, Janelle White and Glenn Wightman;
checking fish and frogs names and uses.

2 December 2002;
Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);
Barbara Sturt, Maggie Long, G. Long (dec.), Doris Ryder and Glenn Wightman;
checking mammals and other animals.

3 December 2002;
Banjo Bore (18°11'15"S/127°41'30"E) on the Elvire River;
Barbara Sturt, Doris Ryder, May Butcher, G. Long (dec.) and Glenn Wightman;
checking Jaru insects and other animals names and uses.

4 December 2002;
Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);
Barbara Sturt, May Butcher, Doris Ryder and Glenn Wightman;
checking some animal names from Tas Tsunoda's research.

26 March 2003;
Garden Creek (18°37'51"S/127°15'23"E), Lamboo Station;
Jack Lanigan, Stan Brumby, Bonnie Deegan, Doris Ryder, Joe Blythe, Kylie Pursche and Glenn Wightman;
collecting plants and checking mammals;

27 March;
Ngunyjuwirri (18°47'24.9"S/127°12'09.8"E), Lamboo Station;
Jack Lanigan, Stan Brumby, Bonnie Deegan, Doris Ryder, Elizabeth Jinggul, Rosemary Carey, Joe Blythe, Kylie Pursche and Glenn Wightman;
checking plants in the area.

28 March 2003;
Caroline Pool (18°13'25"S/127°45'30"E);
Jack Lanigan, Stuart Morton, Manly Rogers, Bonnie Deegan, Doris Ryder, May Butcher, Elizabeth Jinggul, Rosemary Carey, Joe Blythe and Glenn Wightman;

checking mammals and fish.

31 March 2003;

Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);

Glenn Wightman;

adding Jaru knowledge from previous week to manuscript.

01 April 2003;

Junction waterhole near Ringers Soak (18°42'17.4"S/128°29'11.6"E);

Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Joe Blythe and Glenn Wightman;

checking plants in Ringers Soak area.

02 April 2003;

spring near Mount Brophy, south east of Ringers Soak (19°06'32.8"S/128°49'14.5"E);

Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Ruby Nganggiya, Bonnie Seela, Joe Blythe, Kylie Pursche and Glenn Wightman;

checking plants in the spring area and on the way.

03 April 2003;

Ringers Soak (18°45'S/128°36'E);

Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, Joe Blythe and Glenn Wightman;

checking Jaru knowledge of mammals.

29 April 2003;

Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);

Glenn Wightman and Joe Blythe;

collating and checking information from previous recordings between database and text documents.

30 April;

Yuyurn, Old Lamboo Station (18°32'31"S/127°20'15"E);

Bonnie Deegan, Barbara Sturt, Stan Brumby, Doris Ryder, May Butcher, Bonnie Sampi, Joe Blythe, Janelle White and Glenn Wightman;

checking Jaru bird names and uses.

06 May 2003;

Banjo Bore, near Halls Creek (18°32'31"S/127°20'15"E);

Bonnie Deegan, Barbara Sturt, Stan Brumby, Doris Ryder, May Butcher, Franky Sampi, Joe Blythe and Glenn Wightman;

checking Jaru insects and other animals names, seasons and some plants.

27 May 2003;

travelling to Blue Hole camp, Purnululu (17°33'04"S/128°15'36"E);

Bonnie Edwards, Vincent Edwards, Virginia Edwards, Lily Banks, Bonnie Deegan, Stan Brumby, Joe Blythe, Janelle White and Glenn Wightman;

checking plants on the way.

28 May 2003;

Yirriyarri, Blue Hole, Purnululu (17°33'25"E/128°15'17"E);

Bonnie Edwards, Vincent Edwards, Virginia Edwards, Lily Banks, Bonnie Deegan, Stan Brumby, Joe Blythe, Janelle White and Glenn Wightman;
checking plants in the area and some animals.

29 May 2003;

Echidna Chasm, Purnululu (approx. 17°19'E/128°25'E);

Bonnie Edwards, Vincent Edwards, Virginia Edwards, Lily Banks, Bonnie Deegan, Stan Brumby, Joe Blythe, Janelle White and Glenn Wightman;
checking plants in the area and some animals.

30 May 2003;

Blue Hole (17°33'04"S/128°15'36"E) camp near Purnululu;

Bonnie Edwards, Virginia Edwards, Lily Banks, Bonnie Deegan, Stan Brumby, Joe Blythe, Janelle White and Glenn Wightman;

checking plants and some animals and then returning to Halls Creek checking plants on the way.

31 May 2003;

Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);

Joe Blythe and Glenn Wightman;

collating data recorded from Purnululu area.

Statistics of Jaru fieldwork

The basic statistics of fieldwork associated with Jaru knowledge recording are outlined below. A total of 38 people (33 Jaru) were involved in the fieldwork for a total of 219 person-days fieldwork spread over 31 days spent in the field.

Person	Number of field days		
Glenn Wightman DIPE	31	Peter Tarnba	3
Bonnie Deegan	26	Phyllis Thomas	3
Joe Blythe KLRC	19	Robert Raala	3
Barbara Sturt	18	Tarnba Banks	3
Doris Ryder	15	Vincent Edwards	3
May Butcher	13	Biddy Dimbina	2
Janelle White KLRC	8	Bonnie Seela	2
Stan Brumby	8	Desma Sampi	2
G. Long (dec)	5	Elizabeth Jinggul	2
Nora Badngarri	5	Rhonda Matthews	2
Kylie Pursche KLC	5	Rosemary Carey	2
Bonnie Edwards	4	R. James (dec)	2
Franky Sampi	4	Ruby Nganggiya	2
Jack Lanigan	4	Tiger Jagamarra	2
Lily Banks	4	Gordon Itbeari	1
Maggie Long	4	J. Ryder (dec)	1
Tas Tsunoda KLRC	4	Manly Rogers	1
Virginia Edwards	4	Peter Jagamarra	1
Dolly Malgbarriya	3	Stuart Morton	1
		Total person days	219

Kija Fieldwork: dates, locations and people.

Fieldwork associated with recording Kija plant and animal knowledge is presented in the following order:

date; location; people involved; primary subject recorded.

11 June 2002;

Violet Valley (17°13'08"S/128°00'47"E);

Shirley Bray, Shirley Purdie, Eileen Bray, Mary Thomas, Joe Blythe, Kylie Pursche, Russell Gallagher and Glenn Wightman;

checking plants in the area.

12 June 2002;

Mabel Downs and Violet Valley (17°13'08"S/128°00'47"E);

Shirley Bray, Shirley Purdie, Eileen Bray, Mary Thomas, Polly Widalji, Nora Badngari, Joe Blythe, Kylie Pursche, Russell Gallagher and Glenn Wightman;

checking plants in the area.

10 July 2002;

Moola Bulla (no GPS recordings taken);

Ben Duncan, Henry Achoo, Barbara Imbalong, Joe Blythe, Kylie Pursche and Russell Gallagher;

Checking plants and recording stories.

11 July 2002;

Moola Bulla (no GPS recordings taken);

Doris Fletcher, Mavis Wallaby, Ethel Wallage, Joe Blythe, Kylie Pursche and Russell Gallagher;

Checking plants and recording stories.

16 July 2002;

Camel Creek (no GPS recordings taken);

Peggy Patrick, Mona Ramsay, Phyllis Thomas, Lena Nyadbi, Joe Blythe, Kylie Pursche and Russell Gallagher;

Checking plants and recording stories.

17 July 2002;

Camel Creek and then Lissadell (no GPS recordings taken);

Lena Nyadbi, Goody Barrett, Mona Ramsay, Phyllis Thomas, Chocolate Thomas, Joe Blythe, Kylie Pursche and Russell Gallagher;

Checking plants and recording stories.

18 July 2002;

on Lissadell at the junction of Bow and Ord River (no GPS recordings taken);

Lena Nyadbi, Goody Barrett, Mona Ramsay, Phyllis Thomas, Chocolate Thomas, Joe Blythe, Kylie Pursche and Russell Gallagher;

Checking plants and recording stories.

30 July 2002;

Warmun Art Centre, Warrmarn (17°02'S/128°13'W);

Patrick Mung Mung, Madigan Thomas, Hector Jandany and Glenn Wightman;
checking biological references in artists folders and talking with artists.

1 August 2002;

Warmun Art Centre, Warrmarn (17°02'S/128°13'W);

Patrick Mung Mung, Madigan Thomas, Hector Jandany and Glenn Wightman;
checking biological references in artists' folders and talking with artists.

24 August 2002;

Bedford Downs Station, camping near Elgee Cliffs, and working at Kerlarliyi
(kangaroo dreaming), (17°22'43"S/127°16'14"E);

Lorna Thomas, Lulu Trancollino, Michelle Martin, (Liam, Kent and Cassidy), Dotty
Watbi, Kylie Pursche, Archie Tanner and Glenn Wightman;
checking plants and animals in the area.

25 August 2002;

Bedford Downs Station, and Fig Tree Hole, Ord River (17°25'37"S/127°36'06"E);

Lorna Thomas, Lulu Trancollino, Michelle Martin, (Liam, Kent and Cassidy), Dotty
Watbi, Kylie Pursche, Archie Tanner and Glenn Wightman;
checking local plants and animals.

29 August 2002;

Rukuny, Crocodile Hole on Wilson River (16°38'41'S/128°06'42E);

Lorna Thomas, Lulu Trancollino, Rosie Kupiji Malgil, Michelle Martin, Cassidy
Dempsey, Virgil Malgil, Amanda Malgil and Glenn Wightman;
checking plants in the area.

10 September 2002;

Billymack Spring, Springvale Station (17°37'59"S/127°44'21"E);

Rammel Peters, Rene Peters, Mabel Juli, Mary Thomas, Kylie Bray, Margaret Peters,
Larissa Clifton, Joe Blythe, Kylie Pursche and Glenn Wightman;
checking plants in the area.

11 September 2002;

Rukuny Gorge, Crocodile Hole (16°38'53'S/128°05'40E);

Joe Thomas, Philip Spewer, Patrick Thomas, Cynthia Evans, Joe Blythe, Kylie Pursche
and Glenn Wightman;
checking plants and birds.

12 September 2002;

Violet Valley Homestead (17°13'08"S/128°00'47"E);

Sandy Thomas, Madigan Thomas, Shirley Purdie, Gordon Barney, Joe Blythe, Kylie
Pursche and Glenn Wightman;
recording knowledge of birds.

13 September 2002;

Chinaman's Gardens (17°52'01"S/127°53'44"E);

Shirley Bray, Shirley Drill, Mary Thomas, Rosie Kupiji Malgil, Biddy Malingil, Ivy Drill, Joe Blythe and Glenn Wightman;
recording knowledge of frogs and snakes, with some plants.

15 September 2002;

Morning: Pensioners Place in Warrmarn (17°02'S/128°13'W);

Dotty Watbi, Polly Widalji, Peggy Patrick, Hector Jandany, John Patrick, Joe Blythe and Glenn Wightman;

checking reptiles in part.

Afternoon: March Fly Creek and Neminuwarliny (16°38'28"S/128°11'47"E);

Dotty Watbi, Polly Widalji, Peggy Patrick, Shirley Purdie, Nora Badngari, Phyllis Thomas, Mary Thomas, Roseanne Patrick, Latoya Evans;

checking goannas and feral animals.

16 September 2002;

March Fly Creek waterhole (16°39'51"S/128°12'22"E);

Shirley Purdie, Peggy Patrick, Mary Thomas, Nora Badngarri, Phyllis Thomas,

Queenie Malgil, Latoya Evans, Joe Blythe and Glenn Wightman;

recording knowledge of mammals and fish.

22 October 2002;

Parlankirr, Big Bream Gorge, Osmond Valley Station (17°14'09"S/128°19'09"E);

Shirley Drill, Bruce Wangkardiny, Churchill Caan, Phyllis Gallagher, Felicity Smith,

Kasey Johnson, Olive Johnson, Joe Blythe, Kylie Pursche and Glenn Wightman;

checking plants in the area.

23 October;

Little Bream Gorge, Osmond Valley Station (17°14'25"S/128°18'11"E);

Shirley Drill, Bruce Wangkardiny, Churchill Caan, Phyllis Gallagher, Felicity Smith,

Kasey Johnson, Olive Johnson, Joe Blythe, Kylie Pursche and Glenn Wightman;

recording plant knowledge.

24 October 2002;

Wirnapa Spring, Osmond Valley Station (17°11'56"E/127°41'34"E);

Shirley Drill, Bruce Wangkardiny, Churchill Caan, Phyllis Gallagher, Felicity Smith,

Kasey Johnson, Olive Johnson, Joe Blythe, Kylie Pursche and Glenn Wightman;

checking local plants.

25 October;

Wirnapa Spring, Osmond Valley (17°11'56"E/127°41'34"E);

Shirley Purdie, Sandy Thomas, Gordon Barney, Kelvin Ramsay, Joe Blythe and Glenn Wightman;

talking about insects and a few plants.

26 October 2002;

Warrmarn Community (17°02'S/128°13'W);

Rusty Peters (part of the time), Phyllis Thomas, Sandy Thomas, Madigan Thomas, Joe Blythe and Glenn Wightman;

talking about insects and other animals.

27 October 2002;
Warrmarn Community (17°02'S/128°13'W);
Rusty Peters, Phyllis Thomas, Goody Barrett, Joe Blythe and Glenn Wightman;
talking about plants and some animals.

27 November 2002;
Warrmarn Community (17°02'S/128°13'W);
Patrick Mung Mung, Betty Carrington and Glenn Wightman;
talking about Kija seasons.

28 November 2002;
Argyle Diamond Mine (16°44'S/128°22'E);
Goody Barrett, Lena Nyadbi, Phyllis Thomas, Michelle Martin, Nora Badngarri, Mona Ramsay, Chocolate Thomas and Glenn Wightman;
checking names and uses of animals caught in ADM fauna survey trapping program.

29 November 2002;
Warrmarn Community (17°02'S/128°13'W);
Phyllis Thomas, Shirley Purdie, Dotty Watbi, Nora Badngari, Michelle Martin, Ellen Clifton, Kylie Pursche and Glenn Wightman;
talking about seasons, plants, names of plant parts, implements, habitats.

30 November 2002;
Kawunyji or Cattle Creek (16°49'56S/128°29'41"E) on Texas Downs, and at the homestead (Parlankil), and through part of Lissadell;
Patrick Mung Mung, Betty Carrington, Nancy Nodea, Winnie Putparriya, Phyllis Thomas, Michelle Martin, Kylie Pursche, Archie Tanner and Glenn Wightman;
talking about Kija skins for plants and animals and plants generally at Texas Downs.

1 December 2002;
Kurlawuny on Lake Argyle (16°29'04"S/128°35'01"E);
Goody Barrett, Phyllis Thomas, Michelle Martin, Nora Badngari and Glenn Wightman (Patrick Mung Mung and Betty Carrington travelled in a different vehicle and visited a different part of Lake Argyle);
talking about the Lake, Kija fish and some plants.

25 March 2003;
Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);
Glenn Wightman and Joe Blythe;
correlating data sets and checking names and uses of plants and animals.

29 March 2003;
Warrmarn Community (17°02'S/128°13'W);
Doris Fletcher, Lena Nyadbi, Goody Barrett, Joe Blythe and Glenn Wightman;
checking Kija mammals and some plants.

30 March 2003;
Warrmarn Community (17°02'S/128°13'W);
Doris Fletcher, Lena Nyadbi, Goody Barrett, Peggy Patrick, Joe Blythe and Glenn Wightman; checking plant data from Joe's database and checking fish names and uses.

31 March 2003;
Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);
Glenn Wightman and Joe Blythe;
adding Kija knowledge from previous day recording to file.

29 April 2003;
Kimberley Language Resource Centre, Halls Creek (18°13'S/127°41'W);
Glenn Wightman and Joe Blythe;
collating and checking information from previous recordings between database and text documents.

01 May 2003;
travelling to Handling Pool, Bow River Station (17°09'06"S/127°45'06"E);
Peggy Patrick, Shirley Purdie, Mona Ramsay, Lena Nyadbi, Nora Badngarri, Phyllis Thomas, Lucella Martin, Joe Blythe, Janelle White, Kylie Pursche and Glenn Wightman;
collecting plants in area and checking animals.

02 May 2003;
Greenvale Homestead area, Bow River Station (17°04'57"S/127°50'28"E);
Peggy Patrick, Shirley Purdie, Mona Ramsay, Lena Nyadbi, Nora Badngarri, Phyllis Thomas, Lucella Martin, Joe Blythe, Janelle White, Kylie Pursche and Glenn Wightman;
recording water plants and other plants in area and checking animals.

03 May 2003;
Jarnjarn, Foal Creek area (17°15'28"S/127°42'24"E) and Handling Pool, Bow River Station;
Peggy Patrick, Mona Ramsay, Lena Nyadbi, Phyllis Thomas, Joe Blythe, Janelle White and Glenn Wightman;
checking plants collected previous days and checking fish and snake names and uses and hunting goannas.

04 May 2003;
Returning from Handling Pool, Bow River Station (17°09'06"S/127°45'06"E);
Peggy Patrick, Mona Ramsay, Lena Nyadbi, Phyllis Thomas, Joe Blythe, Janelle White and Glenn Wightman;
hunting for goannas and sugarbag and recording knowledge.

01 June 2003;
Warrmarn Community (17°02'S/128°13'W);
Dotty Watbi, Lena Nyadbi, Goody Barrett, Joe Blythe and Glenn Wightman;
checking plant names and skins.

02 June 2003;
Violet Valley (17°13'08"S/128°00'47"E);
Dotty Watbi, Sandy Thomas, Madigan Thomas, Joe Blythe and Glenn Wightman;
checking mammal names, uses and skins;
briefly in the morning;

Rusty Peters, Joe Blythe and Glenn Wightman;
checking plants in the Warrmarn area.

03 June 2003;

Warrmarn Community (17°02'S/128°13'W);

Dotty Watbi, Goody Barrett, Phyllis Thomas, Nora Badngari, Polly Widalji (am),
Peggy Patrick, Helen Clifton, Mona Ramsay (pm), Shirley Purdie (pm), Joe Blythe and
Glenn Wightman;
checking Kija seasonal indicators and names and sugarbag names and classification.

Statistics of Kija fieldwork

The statistics of fieldwork associated with recording Kija plant and animal are
outlined below.

A total of 64 people (58 Kija) were involved in the fieldwork, for a total of 302
person days fieldwork spread over 41 days spent in the field.

Person	Number of field days		
Glenn Wightman DIPE	36	Olive Johnson	3
Joe Blythe KLRC	31	Phyllis Gallagher	3
Kylie Pursche KLC	19	Rusty Peters	3
Phyllis Thomas	16	Shirley Bray	3
Lena Nyadbi	11	Eileen Bray	2
Peggy Patrick	10	Gordon Barney	2
Shirley Purdie	10	Latoya Evans	2
Goody Barrett	9	Lucella Martin	2
Mona Ramsay	9	Rosie Kupiji Malgil	2
Dotty Watbi	8	Amanda Malgil	1
Michelle Martin KLRC	7	Biddy Malingil	1
Russell Gallagher KLC	7	Cassidy Dempsey	1
Mary Thomas	6	Cynthia Evans	1
Madigan Thomas	5	Ellen Clifton	1
Nora Badngari	5	Ethel Wallage	1
Patrick Mung Mung	5	Helen Clifton	1
Janelle White KLRC	4	Ivy Drill	1
Polly Widalji	4	Joe Thomas	1
Sandy Thomas	4	John Patrick	1
Shirley Drill	4	Kylie Bray	1
Archie Tanner KLC	3	Larissa Clifton	1
Betty Carrington	3	Mabel Juli	1
Bruce Wangkardiny	3	Margaret Peters	1
Chocolate Thomas	3	Mavis Wallaby	1
Churchill Caan	3	Nancy Nodea	1
Doris Fletcher	3	Patrick Thomas	1
Felicity Smith	3	Philip Spewer	1
Hector Jandany	3	Queenie Malgil	1
Kasey Johnson	3	Rammel Peters	1
Lorna Thomas	3	Rene Peters	1
Lulu Trancollino	3	Roseanne Patrick	1
		Virgil Malgil	1
		Winnie Putparriya	1
		Total person days	302

Total fieldwork statistics

In total 72 days fieldwork were undertaken with 96 people involved, 33 Jaru speakers, 58 Kija speakers and two people who spoke both languages.

A total of 521 person days were spent in the field recording knowledge of plants and animals.

Major fieldwork contributors

Glenn Wightman, DIPE	67 days
Joe Blythe, KLRC	50 days
Bonnie Deegan, Jaru	26 days
Kylie Pursche, OBP/KLC	24 days
Phyllis Thomas, Kija and Jaru	19 days
Barbara Sturt, Jaru	18 days
Doris Ryder, Jaru	15 days
May Butcher, Jaru	13 days
Janelle White, KLRC	12 days
Lena Nyadbi, Kija	11 days
Peggy Patrick, Kija	10 days
Shirley Purdie, Kija	10 days
Nora Badngarri, Kija and Jaru	10 days.

Joe Blythe fieldwork

It should be noted that Joe Blythe missed some fieldwork due to a shoulder dislocation sustained during fieldwork in the Turner River area. While Joe was able to continue recording knowledge immediately following the injury, the subsequent restorative surgery meant he was unable to participate in fieldwork undertaken during November and December 2002. Joe also suffered serious lower-back trauma during fieldwork in March and April 2002 and he was in serious pain and had very restricted movement at times.

His ability to continue recording knowledge in a technically correct manner with a positive, and indeed happy, frame of mind while suffering significant pain and restricted physical movement played an important role in the quality and quantity of knowledge recorded.

3. LANDSCAPE CHANGES AND CONCERNS ABOUT COUNTRY

Kija and Jaru people made the following observations relating to changes in landscapes and concerns about country as we undertook fieldwork. The person, or people, who made the comments and the date they were made are provided. The comments are altered as little as possible from what was originally stated, apart from translating non-English words and some alterations to improve readability without altering meaning.

These discussions are recorded on Glenn Wightman's digital audio files and in notebooks; the audio recordings are generally replicated on Joe Blythe's cassette recordings (KLRC).

These comments generally occurred without prompting, as environmental indicators or locations provided the catalyst.

It should be noted that Kija and Jaru guides raised the current and future loss of traditional biological knowledge almost on a daily basis.

This concern was exemplified by the fact that almost all field discussions centred around the names, uses and stories associated with plants and animals. In fact it proved very difficult to maintain discussions and interest on subjects other than names, uses and stories about plants and animals.

This desire to record traditional biological knowledge has manifested in the sheer volume of material relating to plant and animal knowledge we have recorded in a relatively short period. The strength of desire of Kija and Jaru to record this knowledge, and the enjoyment gained from doing so, is difficult to exaggerate.

Kija and Jaru people consider the loss of traditional biological knowledge as a natural resource or indeed a land management issue. Many Aboriginal people throughout the Kimberley and the Top End of the Northern Territory hold this view of traditional knowledge in fact being a management issue.

In simple terms the loss of biological knowledge equates to poor natural resource or land management.

Western science has a similar understanding of names and other knowledge associated with plants and animals. In fact the most important management tool for western biological science is the correct application of scientific names to organisms; the establishment of state and national herbaria and museums and the employment of taxonomist by all Australian government agencies illustrate the importance of biological names.

Similarly the recording of names and basic information relating to biota is invariably the first stage of management for areas managed by western conservation agencies.

Kija landscape changes and concerns about country

- Traditional knowledge of plants and animals is not being learnt by young Kija people. It is important to record materials so that when children get older they can at least learn the names and uses of plant and animals. If they don't know the plants they might eat poisonous ones (Dotty Watbi, Goody Barrett, Phyllis Thomas, Nora Badngari, Peggy Patrick, Mona Ramsay, Shirley Purdie, 03 June 2003).
- Traditional knowledge is being lost as elders pass away; for example, Dotty Watbi knows things about plants and animals that no one else knows. Other senior Kija elders also have unique knowledge; this will be lost when they pass away. This is what has happened in the past when elders have passed away (Dotty Watbi, Goody Barrett, Phyllis Thomas, Nora Badngari, Peggy Patrick, Mona Ramsay, Shirley Purdie, 03 June 2003).
- Baiting of dingoes is dangerous for children as they could pick up the baits; other animals could also eat the baits. Poisoning dingoes is thought to be cruel and reminds older people of when Aboriginal people were poisoned (Mary Thomas and Eileen Bray 11 June 2002).
- Baiting dingoes by dropping poisoned baits from a plane is very dangerous; the baits could land in waterholes and poison the water so that you could get poisoned by drinking or swimming in the water. Also kids, camp dogs and animals can pick up the baits and get poisoned (Shirley Drill, Phyllis Gallagher, 23 October 2002).
- There are a lot of tourists camping at Springvale on the creek crossing, making a mess in the area. There should be some management of the area (Mary Thomas and Eileen Bray 11 June 2002).
- Young people are not learning the knowledge about plants, animals and country, there needs to be materials for them to learn about it (Mary Thomas and Eileen Bray 11 June 2002).
- Weeds need to be stopped especially along creek lines. *Calotropis procera*, rubber bush, is especially bad along roads and creeks (Mary Thomas and Eileen Bray 11 June 2002).
- There used to be more emus around, including some large groups, now not so many and no large groups (Mona Ramsay 18 July 2002).
- Ord River used to have sandy banks near the Bow River junction. Area near the south of the lake used to be more open and clear, now it is all bugged up (Chocolate Thomas 18 July 2002).
- Magpie Geese, *Anseranas semipalmata*, **Ngalakangarriny** are now common around the lake, never used to be there (Chocolate Thomas 18 July 2002).

- There are too many trees on the country now, used to be all grassy areas with less trees (Doris Fletcher 11 July 2002).
- Cane toads will kill lots of important bush tucker animals, including goannas, fish, birds, crocodiles and others (Peggy Patrick, Lena Nyadbi, Shirley Purdie, Nora Badngari, Mary Thomas, Phyllis Thomas, 16 September 2002).
- There are too many trees and shrubs around now, the country used to be a lot more open (Patrick Mung Mung 30 Nov 2002, Texas Downs).
- The country is softer now; you get bogged everywhere. In the past you could drive around in the wet and not get bogged, now you get bogged everywhere (Patrick Mung Mung, 30 Nov 2002).
- There is too much drinking; it stops people working hard and learning cultural knowledge. This affects the whole cultural life of communities and people in a bad way (Patrick Mung Mung, 30 Nov 2002).
- There are too many meetings talking about things, and no one ever does anything, everyone sits around towns and communities talking but not going out bush to look at country. At most meetings countrymen get treated like school kids and can not understand what is being talked about (Patrick Mung Mung, 30 November 2002).
- When Lake Argyle filled with water it killed a lot of trees, and now the country is more humid because of all the water (Goody Barrett, 1 Dec 2002, Lake Argyle).
- Black-boy, *Cycas pruinosa*, **nganthanji** bread was eaten in the past but has not been eaten in recent times (Lorna Thomas, Lulu Trancollino, Michelle Martin, Dotty Watbi, 24 August 2002).
- In the past it was more common to get mid year rains in **warnkany**, the cold weather time. This rain was particularly unpleasant due to the low temperatures, however it was important for the country as it replenished waterholes a little and kept grass green for longer into the dry season. The older ladies remember these rains as being quite common when they were young but have rarely experienced them as adults (Dotty Watbi, Goody Barrett, Phyllis Thomas, Nora Badngari, Peggy Patrick, Mona Ramsay, Shirley Purdie, 03 June 2003).
- **Yumpany**, *Ipomoea* sp. aff. *graminea*, is a yam that only grows in the **Tiringiny** area on the road to Greenvale. The yam is dug up, roasted and eaten, it is very tasty and was eaten a lot in the past. It only occurs in a fairly small area and needs to be looked after (Shirly Purdie and Peggy Patrick, 02 May 2003).
- The quoll, *Dasyurus hallucatus*, **pawukuny** or **yinamuny** used to be seen in the Bedford Downs area, it has not been seen in recent times (Shirley Purdie, Peggy Patrick, Mary Thomas, Nora Badngarri, Phyllis Thomas, Queenie Malgil, 16 October 2002; Doris Fletcher, Lena Nyadbi, Goody Barrett, 29 March 2003).

- The Golden Bandicoot, *Isodon auratus*, **Nyarkul** used to occur in Kija country and some old people remember eating the tender and tasty flesh. It has not been seen in recent times. It is thought all the bandicoots have gone south to Jaru country (Shirley Purdie, Peggy Patrick, Mary Thomas, Nora Badngarri, Phyllis Thomas, Queenie Malgil, 16 October 2002; Doris Fletcher, Lena Nyadbi, Goody Barrettt, 29 March 2003).
- Agile Wallabies, *Macropus agilis*, **warlpawuny** are more common in the Argyle Diamond Mine and Lake Argyle area than they were in the past (Shirley Purdie, Peggy Patrick, Mary Thomas, Nora Badngarri, Phyllis Thomas, Queenie Malgil, 16 September 2002; Doris Fletcher, Lena Nyadbi, Goody Barrettt, 29 March 2003).
- Short-eared Rock-wallabies, *Petrogale brachyotis*, **marluwal** used to be common in the Rukuny area but have not been seen in the area for quite some time (Shirley Purdie, Peggy Patrick, Mary Thomas, Nora Badngarri, Phyllis Thomas, Queenie Malgil, 16 September 2002; Doris Fletcher, Lena Nyadbi, Goody Barrettt, 29 March 2003).
- Spectacled Hare-wallabies, *Lagorchestes conspicillatus*, **murlukurnturllukurnturllji** used to occur in Kija country and the flesh was tender and tasty, it has not been seen in recent times (Shirley Purdie, Peggy Patrick, Mary Thomas, Nora Badngarri, Phyllis Thomas, Queenie Malgil, 16 September 2002; Doris Fletcher, Lena Nyadbi, Goody Barrettt, 29 March 2003).
- Sand Frogs, *Limnodastes ornatus*, **nangalanangala** and Brown Frogs, *Neobatrachus aquilonius*, **jirrakiny** used to be eaten in the past but have not been eaten in recent times (Shirley Bray, Shirley Drill, Mary Thomas, Rosie Kupiji Malgil, Biddy Malingil, Ivy Drill, 13 September 2002).

Jaru landscape changes and concerns about country

- Plant names and uses need to be written down and put into a book so that they will be there in the future. When young Jaru people get older they will want to know the names and uses of the plants, if all the old people are gone they will be able to get it from the book (Bonnie Deegan 06 August 2002).
- There used to be freshwater crocodiles, **dirrmird** in Caroline Pool and on the Elvire River, but there are none there now (Bonnie Deegan, Barbara Sturt, Maggie Long, 02 October 2002).
- Before country was fenced off into stations the grass used to get burnt to clean up country. When cattle came along the fires were stopped because they wanted all the grass for the cattle. Now we still can't burn because of the stations and the fences. Old people used to burn to make green grass come up, to signal each other and to make it easier to move around (Bonnie Deegan, Barbara Sturt, Maggie Long, 02 October 2002).

- There are too many weeds around rivers and creeks and it makes getting to the water hard. The worst weeds are Rubber bush, *Calotropis procerus*, and Physic nut, *Jatropha gossypifolia* (Bonnie Deegan, May Butcher, Biddy Dimbina, Roy James, 22 August 2003).
- The riverbanks and creeks have a lot more trees and bushes than in the past (Bonnie Deegan, May Butcher, Biddy Dimbina, Roy James, 22 August 2003).
- Animals are being taken from the bush and put in zoos in Perth and other parts of southern Australia. This is bad for the country and cruel for the animals being put in cages (Stan Brumby, 26 March 2003).
- Fires should be lit in the cold weather time so that the flames are low and do not burn the eggs and chicks in the nests (Stan Brumby, 26 March 2003).
- There is a need for Aboriginal rangers to look after Jaru country, especially the rivers, creeks and waterholes. Stan Brumby would like to be a ranger to look after country (Stan Brumby, 26 March 2003).
- Sprays should not be used near rivers and creeks as the poisons can end up in the water and poison the fish. People may catch the fish, eat them and die (Stan Brumby, 26 March 2003).
- Emus, *Dromaius novaehollandiae*, **karnanganyjal** are very common on Jaru country, there are big mobs around even with the bullocks in the same paddocks (Stan Brumby, 26 March 2003).
- Cattle should be looked after like all the other animals, cattle and native animals can easily live together and not bugger up the country (Stan Brumby, 26 March 2003).
- Golden Bandicoots (*Isoodon auratus*), **Lilgurn** or **Junguny** used to be all around Jaru country but now there are none. In the past they were often seen around stock camps looking for food where they sometimes became quiet, and were also flushed out by cattle moving through grassy areas (Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, 03 April 2003).
- Rufous Hare-wallabies (*Lagorchestes hirsutus*), **Wijari** or **Mala** used to be seen in southern Jaru areas, for example, around Ringers Soak, Tanami and near the NT border, it prefers country with ant hills. They are far less common now and are rarely seen; the flesh has not been eaten for a long time (Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, 03 April 2003).
- Spectacled Hare-wallabies (*Lagorchestes conspicillatus*), **Milbardiri** or **Manggawan** were eaten in the past but have not been eaten in recent times due to low numbers. They are believed to be still present but hard to find

(Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, 03 April 2003).

- Brushtail Possum (*Trichosurus vulpecula*), **Jangarn** or **Jambiyin** used to be common anywhere there where hollow trees but now rarely seen in eastern Jaru areas (Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, 03 April 2003).
- Bilby (*Macrotis lagotis*) **Nyarlg** is still present on Jaru country in the southern desert areas, though numbers are reduced. However, the burrows are still seen quite often (Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, 03 April 2003).
- Quoll (*Dasyurus hallucatus* or *D. geoffroii*), **Minija** were eaten in the past but have not in recent times, they are believed to be still present (Barbara Sturt, Bonnie Deegan, Franky Sampi, Robert Raala, Tiger Jagamarra, Peter Jagamarra, Gordon Itbeari, Ruby Nganggiya, Bonnie Seela, 03 April 2003).
- Milkwood, *Alstonia actinophylla*, is less common now, possibly due to hotter fires in recent times (Bonnie Edwards, Vincent Edwards, Stan Brumby, Bonnie Deegan, 28 May 2003).
- The cabbage palm, **ngururn**, *Livistona victoriae*, used to be found around Sturt Creek, Flora Valley and springs south east of Halls Creek, however they are not found there now. It is possible that they all cut out to be used to build sheds and yards by men working at the stations (Bonnie Edwards, Stan Brumby, Bonnie Deegan, 30 May 2003).
- Black-boy, *Cycas pruinosa*, bread was eaten in the past but has not been eaten in recent times. It only occurs in northern Jaru areas (Bonnie Edwards, Vincent Edwards, Stan Brumby, Bonnie Deegan, 28 May 2003).
- In the past the fruit of **wiliriny**, *Grevillea pyramidalis* was used to make ceremonial scars, it is not used now and is considered dangerous and poisonous (Jack Ryder, Doris Ryder, Bonny Deegan, 05 August 2002).
- Bush Turkeys, *Ardeotis australis*, **bin.girrjaru** are still common, especially in areas away from towns, communities and roads (Bonnie Deegan, Barbara Sturt, Gracie Long, Maggie Long, Phyllis Thomas, Nora Badngarri, 30 October 2002).

Previously published material, Kija and Jaru.

Deborah Bird Rose undertook ethnographic research in the Bungle Bungle region during July 1984 (Rose 1984). Rose reported absences of several important food resources including 'root foods, seeds and lilies', and noted absence or decline of botanical resources since the ethnographic studies undertaken by Kaberry in the

mid-1930's (Kaberry 1939). The grave concerns of local Aboriginal people about the loss of 'resources, which are gone or diminished,' were highlighted in the report (Rose 1984).

During our research on Kija and Jaru country there appeared to be no discernible reduction of 'root foods, seeds and lilies', nor were any reductions or losses of plant species reported by Kija and Jaru elders. In fact in some of the Jaru areas, such as Rijarr (Turner River), there were large numbers of 'Bush Potato, **biyura** (*Ipomoea costata*) present that had not been harvested for some time. Likewise the food plant richness of some Kija areas, such as the old Greenvale Homestead area, was predicted by Kija elders and was borne out by fieldwork undertaken in the area.

It is likely that the apparent lack of resources was a reflection of season when many of these plants exist as seeds or tubers and are not easily found. It is also possible that overgrazing at that time had further reduced resources in the short term. The short period of fieldwork (ten days) and lack of reliable transport may have further exacerbated the apparent lack of resources.

Burbidge et al. (1988) recorded Aboriginal views on changes in distribution and abundance of mammals in central Australia, including southern Jaru areas. This paper reported significant declines in populations and reductions in distributions for a number of mammal species; these trends were corroborated by our research. These reductions of range and possible local extinctions are of very serious concern to traditional owners.

The cabbage palm, *Livistona victoriae*, **ngururn** (cabbage), used to be a lot more common in southern Jaru areas. It is still common around escarpment edges and range areas in northern Jaru areas but seems to have disappeared from southern Jaru areas such as Sturt Creek and Flora Valley. The palms were possibly cut out by previous station managers to build sheds and yards (Willey 1971; Rodd 1988).

4. KIJA PLANTS AND ANIMALS

Aboriginal flora and fauna knowledge from the east Kimberley, north Australia

This manuscript is a working document that was developed during the “*Plants and Animals of Kija, Jaru country: Aboriginal knowledge conservation and ethnobiological research in the upper Ord catchment*” project.

The project was funded by the **Ord-Bonaparte Program** and the **ATSIC Wunan Regional Council**.

The project was managed by the **Kimberley Land Council** and **Kimberley Language Resource Centre**.

Data recording was undertaken by **Glenn Wightman** and **Joe Blythe**.

© The Kija plant and animal names and uses in this manuscript are the intellectual property of Kija people. This knowledge can only be used with the consent of the intellectual property owners.

Previous ethnobotanical research

Neville Scarlett recorded ethnobotanical information relating to the Kija language with residents of the Bungle Bungle outcamp in 1984 (Scarlett 1984). This research recorded plant names and uses at ‘traditional camps between Kirliwarl (Fowl House) in the east, Wurlwurlji (Samim Mining Camp) to the north and the ‘Blue Hole’ on the Ord River to the south’. It was undertaken over a ten-day period during July in the mid dry season. This material has been incorporated into this manuscript.

Deborah Bird Rose also undertook ethnographic research in the Bungle Bungle region during July 1984 (Rose 1984). Rose reported absences of several important food resources including ‘root foods, seeds and lilies’, and noted absence or decline of botanical resources since the ethnographic studies undertaken by Kaberry in the mid-1930’s (Kaberry 1939). The grave concerns of local Aboriginal people about the loss of ‘resources, which are gone or diminished,’ were highlighted in the report (Rose 1984).

Patrick McConvell recorded Kija language materials whilst based at Warmun in the 1980’s and produced a preliminary dictionary (McConvell 198?).

Francis Kofod has undertaken research with Kija people since the early 1980’s recording materials for the production of a Kija Dictionary, using the earlier work by McConvell as a base. This should include significant knowledge that relates to plant and animal names and their uses. A version of the dictionary is held at AIATSIS (reference number 483 AIATSIS library). This material has not been incorporated into this manuscript.

Fieldwork

Meetings were held at Warmun and Halls Creek in March 2002 to plan fieldwork and discuss the aims and methods of the project. These meetings were attended by traditional owners, Kimberley Land Council and Ord-Bonaparte Program staff members.

Fieldwork was undertaken between May 2002 and June 2003 over a range of Kija country with a range of Kija people; details of fieldwork are outlined in Chapter 2.

Kija seasons

There are five major Kija seasons in each year, though within these seasons other weather patterns or minor season are also recognised. These seasons are quite variable in length and onset and the Gregorian calendar months are offered only as a guide. The major seasons are outlined below with the main plant and animal food resources available during each season.

Yuwinji: December to mid March.

This is the wet season, it is the time of water, with heavy rain and lightning and thunder. The rivers are flowing fast and there are often floods with roads cut and it is difficult to move around. This season can also be called **kurlun**.

The first rains are called **mukurruny** or **murlkuny**, and they make the grass seeds sprout and the other annual plant seed shoot.

The last rains of the wet season are called **kuluwanginy**, and are referred to as the 'knock em down rains'. They cause the tall grasses to fall over and the 'lightning splits the seeds from the grasses' and they fall to the ground ready for the next wet season rains.

The main plant foods available are:

minyjiwarrany, the black plum (*Vitex glabrata*),
piriyalji, the conkerberry (*Carissa lanceolata*),
taaluny, the green plum (*Buchanania obovata*),
parnariny, the small bush potato (*Brachystelma glabriflorum*),
yimarlji, the sandpaper fig (*Ficus opposita*),
kuwarrulji, the white currant (*Flueggea virosa*),
pinyjipinyjil (*Erythroxylum ellipticum*), and
kirliny, the wild gooseberry, (*Solanum echinatum*).

Many of the bush fruits from trees near the river get washed away with the high water levels; fruit from trees in the bush away from rivers and creeks can be collected and eaten.

The main animal foods available are:

pinkany, the sugarleaf,
kurntarril, any type of fish, but especially **talinyji**, the catfish,

kilpany, the rough-tailed goanna,
jarrampayiny, the sand goanna,
lumukul, the blanket lizard,
nangalanangalal, sand frogs and
ngamarrany, any type of snake.
Laarnngarnany, the big green frog is very noisy at this time of year.

Lintharrk: mid March to mid May

This is the wet and green grass time, when the thunder storms stop and it begins to get cooler, though it can still be quite hot due to the green grass everywhere. Rivers and creeks begin to slow up and the green hair-like plant **marlingin** is common in the water.

The most common plant foods are:

japayiny, the river fig (*Ficus coronulata*),
piriyalji, the conkerberry (*Carissa lanceolata*),
jumuluny, the boab tree fruit (*Adansonia gregorii*),
karrjany, the waterlily (*Nymphaea violacea*),
yamuny, the small water yam (*Triglochin dubium*), and
nagwunji, the pencil yam (*Vigna lanceolata* var. *latifolia*).

Common animal foods at this time of year are:

jaliikel, the freshwater crayfish,
pinkirrpal, the bush turkey,
lalangkarrany, the freshwater crocodile, the meat can be eaten, and the eggs have also been laid in the sand nests and can be dug up and eaten,
jarlangarnany, the big red kangaroo,
kernanjil, the porcupine, and
jamantil, white-ant larvae.

Warnkany: mid May to end of July

This is the time of cold weather; night time temperatures can get down to zero, though the days are warm and pleasant. There is still some water in the rivers and billabongs though water is becoming less common as the season progresses.

Common plant foods are;

jurntany, bush onions (*Cyperus bulbosus*),
yalarri, the bush potato (*Ipomoea costata*),
yampany, the yam (*Ipomoea* sp.),
karntiny, the black soil yam (*Ipomoea aquatica*),
kulipil, the bush banana (*Marsdenia viridiflora*),
yangajalil, the palm tree cabbage (*Livistona victoriae*)
kunjal, yellow kapok (*Cochlospermum fraseri*) yams and
jumuluny, boab nuts, *Adansonia gregorii*.

Animal foods for this time of year are:

jampinparuny, black bream that are fat and tasty,
wiyarril, the emu has eggs,
jarrampayiny, the sand goanna,

jalijkel, freshwater crayfish and
tarntal, turtle.

Kangaroos are fat and good to hunt at this time of year, and emus have babies in the last of the cold weather. **Ngamarrany**, snakes are very poisonous during this season.

Parnten: August and September

This is the time of going from cool weather to hot weather. The ground begins to heat up and waterholes dry up. Many trees drop their leaves. It is the time of least bush foods and water resources are also becoming scarce.

Plant foods are:

ngawunji, the pencil yams (*Vigna lanceolata*),
jurnta, the bush onions (*Cyperus bulbosus*), and
kelewurriji, the waterlily seeds and roots (*Nymphaea violacea*).

Animal foods are

kanyarrany, goannas,
winini-pal, emu with chicks,
ngarrkalangarnany, small hill kangaroo and
lakarnel, witchetty grubs.

Werrkalen: October and November

This is the time of very hot weather and the ground can be too hot to walk on. Waterholes are dry and there is very little water around. Sometimes there are small, patchy storms around, but not like the full wet season.

When the flowers on **jumuluny**, the boab tree dry out and fall off, it indicates that rain will fall down soon. **Teriitteriit**, the white-lined honeyeater can be heard whistling to make **taaluny**, the green plum fat.

The Kija name means green and probably refers to the conspicuous pre-wet season flush of new leaves on many of the trees and shrubs

The main plant foods are

jumuluny, boab nuts (*Adansonia gregorii*),
nganyjarli, the bush tomato (*Solanum chippendalei*),
perangkarrji, the white currant (*Flueggea virosa*),
piriyalji, the conkerberry (*Carrisa lanceolata*),
taaluny, the green plum (*Buchanania obovata*),
minyjiwarrany, the black plum (*Vitex glabrata*) and
parnariny, the small bush potato (*Brachystelma glabriflorum*).

The major animal foods are:

pinkirrpal, the bush turkey,
talinyji, catfish are fat and good to eat,
ngareem, sugarbag is full of strong tasty strong honey,
pinkany, sugarleaf, and

kernanjil, porcupine.

In the past it was more common to get cold weather rains, that is late rains during the colder temperatures of the mid dry season, from about April to June. This has not happened in recent times. These cold wet periods were very uncomfortable but had the effect of keeping country moist for much longer into the dry season.

Kija names for implements

Axe, stone head	ngajural
Boomerang, large	karrabiri
Boomerang, small	jarrangkel
Clap-sticks	karrpakji
Coolamon	laanturri
Digging stick	karnanyji
Didgeridoo	kurlumpung
Fighting-stick	nawuluny
Fire-sticks	kungkala
Grinding stone	kurtuny
Shield	mirtal
Spear, small	nguwiny, malmurri
Spear, large	karlumpuny
Woomera, small	warremeri
Woomera, large	ngawalel

Kija names for plant parts

Leaf	kanarrany
Flower	tawalam
Fruit	mayi
Seed	kanyji
Wood or logs	kunyjany
Small sticks	marlurlu
Bark	pernngany
Roots	karntim, lengkam
Gum	nyaarntiny
Sap, bloodwood	kaliwuny
Sap, milky	kaanum
Leafless tree	wirrkawarri
Ashes	kawurn

Kija habitats or types of country

Rocky areas	juwerlenywerleny
Swamps and billabongs	yawurl-yawurl
Treeless plains	palnganawuparriny
Black soil flats	kawurnparri
Jungles or thickets	yingentewerreny
Limestone outcrops	minyjuwurri

Small hills

kuwaliny

Kija language

Kija is an Aboriginal language spoken in the east Kimberley area of north Australia. It belongs to the Jarrakan language family along with the Miriwoong and Gajirrawoong/Gajirrabeng languages to the north. Traditional Kija lands occur in areas known as Warmun, correctly spelt Warrmarn (Turkey Creek), Purnululu (Bungle Bungles), Osmond Range and Lake Argyle, Argyle Diamond Mine Project, Moola Bulla, Bow River and a lot of the Ord River catchment.

Kija has also been spelt gidja, kitja and gija in the past.

Spelling Kija words

The orthography used here is recommended by the Kimberley Language Resource Centre (KLRC 1999). It was originally developed by Patrick McConvell for the language program at Ngalangangpum School in Warmun (Turkey Creek).

Consonants

	Bilabial Velar	Dental	Alveolar	Retroflex	Palatal	
Stops	p	th	t	rt	j	k
Nasals	m	nh	n	rn	ny	ng
Laterals			l	rl	ly	
Rhotics			rr	r		
Glides	w				y	

Vowels

	Front	Central	Back
High short	i		u
Long	iyi		uwu
Mid short		e	
Long			
Low short		a	
Long		aa	

Pronunciation of Kija sounds

The list below provides approximate English equivalents of the letters used in the Kija spelling system.

a	like the u in but
aa	like the a in father
e	like the er in father
i	like the i in pit , but also like the ee in feet
iyi	like the ea in easily
j	like the j in jam
k	like the k in skite

l	like the l in lock
rl	like the rl when an American says girl or curl
ly	like the lli in million . Not like the ly in happily
m	like the m in meat
n	like the n in nut
rn	like the rn when an American says barn
ng	like the ng in singing and bring
nh	no similar sound in English, put the tip of your tongue between your teeth and make an 'n' sound
ny	like the ni in onion . Not like the ny sound in many
p	like the b in boat and big , but also like the p in spin
r	like the r in red and orange
rr	like the Scottish 'r' or the tt in butter when spoken very fast
rt	like the rt sound when an American says cart , but the tongue curls back a little more
t	like the d in dog ; sometimes like the t in stun
th	a little like the th in that . Put the tip of your tongue between your teeth and make a 't' sound
u	like the u in put
uwu	like the oo in pool
w	like the w in wait
y	like the y in yellow

Kija plant names and uses

The word **kunyjany** is used to refer to trees in general, while grasses are called **mangkayany** or **rurrany**.

Minyperniny refers to dry grass and **werrkalji** to green grass.

<i>Abelmoschus ficulneus</i>	'Yam'	kurnukal
MALVACEAE		

The yam can be eaten after roasting on hot coals and ashes. The yam is not very big and is quite stringy.

This small plant grows on black soil areas that become boggy in the wet season, it has pretty pale pink hibiscus flowers.

It has the **nyawurru** skin.

<i>Abrus precatorius</i>	'Necklace vine'	tinpulel
FABACEAE	GMW	tintuwulpel

This climber has bright red and black seeds; it grows in creek lines and gorges but is not common on Kija country.

The seeds can be made into necklaces and bracelets. A fine hole is poked into the seeds with sharpened fine wire that has been heated. The seeds are threaded onto fishing line or fine bush string to make decorative necklaces or bracelets.

It has the **nangala** skin.

Acacia acradenia
MIMOSACEAE

jiwiny
tankenji

The gum from this tree can be eaten; it is called **nyaarnte**.

It has the **jungurra** skin.

Acacia ampliceps?
MIMOSACEAE

‘Wattle’
GMW 8086

merenyji

This is a good shade tree; sometimes sugarbag is found in the hollows.

Acacia coriacea
MIMOSACEAE

kurnarnturu

The wood is used to make axe handles, boomerangs and fighting sticks.

It has the **janama / jawan** skin.

Acacia sp. aff. *cowleana*
MIMOSACEAE

jiwiny

The stems are used to make spear shafts and the pegs of woomeras, **mirliti**.

Acacia farnesiana
MIMOSACEAE

pakawakany
murrulumpuny
pakawakany

The timber can be used to make boomerangs and fighting sticks.

It has the **janama / jawan** skin.

Acacia hemignosta
MIMOSACEAE

‘Wattle’
GMW

purrurnji
purruru

This wattle is quite large and it has pretty yellow flowers.

Acacia holosericea
MIMOSACEAE

karntawarranginy

The stems and branches can be used to make spear shafts of big spears and the hard middle section of short spears. These short spears have a base part made from **kamangkarrji** and a tip made from stone. It has gum that can be eaten.

Acacia lysiphloia
MIMOSACEAE

'Turpentine'
GMW

paalinyji

Lakarnel, witchetty grubs, are often found in the roots and lower trunk of this tree. The leaves from this plant have a strong smell, especially in the hot weather. Long, straight stems can be used to make spear shafts.

It has the **janama / jawan** skin.

Acacia lamprocarpa
MIMOSACEAE

'Wattle'
GMW 8040

check Kija name

The hard wood can be used to make fighting sticks.

Acacia pellita
MIMOSACEAE

karnkulji

The green pods are beaten and then thrown into small waterholes to 'poison' fish, which can then be easily collected, cooked and eaten.

The branches can also be dragged through waterholes until the water becomes soapy, the fish will then float to the surface where they can be easily collected.

The first fish are left to float for a while until the poison has had time to work on all the fish. If the fish are collected too quickly the poison will not work on the rest of the fish. After using **karnkulji** the water from the waterhole cannot be drunk for at least one full day.

It has the **juwurru** skin.

Acacia platycarpa
MIMOSACEAE

Wattle

karnkulji

The young pods are baked in a ground oven and then eaten, they are available in the later dry season.

It has the **juwurru** skin.

Acacia plectocarpa
MIMOSACEAE

'Wattle'
GMW

pirritilinji

The leaves and pods can be used to poison fish.

It has the **juwurru** skin.

Acacia tumida
MIMOSACEAE

GMW 7432

karnkulji
jiwiny

The gum from this tree can be eaten; it is called **nyaarnte (jiwiny)**. Witchetty grubs are often found in the lower stems and roots, they can be cooked and eaten.

The green pods are smashed up and then thrown into small waterholes to 'poison' fish, which can then be easily collected, cooked and eaten (**karnkulji**).

The stems are used to make spear shafts and the pegs of woomeras, **mirliti**.

<i>Acacia</i> sp large grey leaf		jiwiny
MIMOSACEAE	GMW 8059	

Nyaarnte, edible gum, can be found on the trunks and branches of this tree.

<i>Acacia</i> sp.	'Wattle'	winparniny
MIMOSACEAE	GMW 8056	

Nyaarnte, edible gum, can be found on the trunks and branches of this tree. The wood from straight stems and branches can be used to make spear shafts.

<i>Acacia</i> sp.	'Wattle'	yarliyilji
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MIMOSACEAE	tiwinji
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The stems of straight trees can be used to make spear shafts. The gum can be eaten. Witchetty grubs are often found in the lower stem and roots, they are collected and eaten raw or lightly roasted.

It has the **jungurra** skin.

The **yarliyilji** name of this tree is the traditional Kija name for the Halls Creek area.

<i>Acacia</i> sp.	'Wattle'	warnamperrel
MIMOSACEAE		

The stems can be used to make spear shafts, it has pretty yellow flowers and is closely related to **jiwiny**.

It has the **nampin** skin.

<i>Acacia</i> sp.	kernampuwurriny
MIMOSACEAE	

The straight stems can be used to make spears.

<i>Adansonia gregorii</i>	'Boab tree'	jumuluny
BOMBACACEAE	GMW	

The soft inner part of the fruit is called **wawangkuny** and it can be eaten; it is especially good to eat when you are thirsty as it makes lots of saliva (spit). When the fruit are green they can be steamed prior to eating.

If the fruit are dry inside, it is pounded up and mixed with water, and sometimes honey or sugar, and then eaten. The fruit are green in the early dry season and become dry later in the dry season. Eating the fruit is a good treatment for coughs and colds.

The seed is called **jililiny**; it can be eaten raw or roasted.

The soft inner wood is full of water and can be eaten when there is nothing else to eat. It provides moisture and makes the mouth produce more spit to stop the feelings of thirst.

Rope can be made from the fibrous bark of young plants. Young plants have a large swollen tap-root. Like a yam. This can be dug up and eaten raw or lightly roasted. It is very watery food.

It has the **jangala** / **nangala** skin.

<i>Amyema</i> spp. LORANTHACEAE	Mistletoes GMW 8060	manthurnji manthunji
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This plant grows on trees; its presence in trees is a good indicator of sugarbag, native beehives, being in the tree. The fruit are edible but are not eaten by Kija people for cultural reasons. Various birds eat the fruit.

In the past the bright red flowers were used to attract emus when hunting them.

It has the **jangala** skin.

<i>Antidesma ghesaembilla</i> EUPHORBIACEAE	'Black currant' GMW	kuwaarrurlji perengkarrji
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The fruit are eaten when ripe, black, in the early wet season, at the time of the first rains.

This plant is closely related to the white currant, *Flueggea virosa*, and has the same Kija names, even though the fruit are black when ripe.

It has the **jungurra** skin.

<i>Aponogeton vanbruggenii</i> APONOGETONACEAE	'Hairy water yam' GMW	yarrkalel yarrkalal
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The small, hairy yams are pulled out of the mud at the bottom of slow moving creeks and billabongs; they are lightly roasted and then eaten.

It has the **nakarra** skin.

<i>Arundinella nepalensis</i> POACEAE	'Grass' GMW 7442	wiluwinj welaweny
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The stems are used by children as small, toy spears.

Atalaya hemiglauca
SAPINDACEAE

GMW

luwarrior

The wood is used to make fighting sticks. The leaves cause walking disease if eaten by horses.

Bambusa arnhemica
POACEAE

GMW

milinyinyji

This large clumping bamboo does not grow on Kija country, however it used to be traded down from northern Aboriginal groups to be used as strong, yet light and flexible spear shafts.

Barringtonia acutangula
LECYTHIDACEAE

'Freshwater Mangrove'
GMW 8082

malawanji
mangunyji
werlarlampalji

The leaves, roots and twigs can be used as fish poison. They are pulled through the water and splashed around until the water becomes soapy, the fish then float to the surface. They are then easily collected, cooked and eaten.

The roots are particularly good fish poison and are called **werlarlampalji**.

This can only be used in small waterholes and the water cannot be used for a few days after poisoning the fish.

In the past only old people were allowed to poison fish, and young people were not told about the use of fish poisons. This knowledge was not passed on until people were older.

It has the **jaangari** skin.

Bauhinia cunninghamii
CAESALPINIACEAE

'Bauhinia'
GMW

kunjiny
wanyarriny
wanyjarriny

The ashes from the timber are rubbed on **karnawiny**, *Dioscorea bulbifera*, yam slices prior to cooking.

The bark can be burnt to make ashes for chewing tobacco. The flowers contain sweet nectar that can be sucked out of them. When the flowers are produced it indicates that hot weather will arrive shortly.

The inner bark is boiled in water and it makes the water go red. This is used as a wash to treat skin sores.

When the red flowers are produced in the dry season, it indicates that the weather will now start to heat up, and the build up is beginning.

The resin can be used like glue. It has the **janama / jawan** skin.

Brachychiton diversifolius
STERCULIACEAE

'Kurrajong'

werlalji
wirlal
therrangelji

Young green fruit are cooked in hot ashes and eaten after rubbing off the spiky hairs, available during the wet and early dry seasons. Check whether seeds or whole fruit are eaten.

Rope can be made from the fibrous bark of young plants.

Small sticks and twigs are frayed at the tip and used as a brush to dip out bush honey.

Brachychiton viscidulus
STERCULIACEAE

GMW 7459

panjaruny

The seeds eaten after cooking in hot ashes and rubbing off the spiky hairs, fruit are available in the wet season to early dry season.

Panjaruny grows around the Warrmarn area, where as **theyparlji** or **tayimpalji** (*Brachychiton* sp., see below) grows in the Bedford Downs area and not around Warrmarn.

Check preparation and whether whole fruit is eaten or just seeds.

It has the **jangala** skin.

Brachychiton sp.
STERCULIACEAE

GMW 8132

tayimpalji
theyparlji

The seeds eaten after cooking in hot ashes and rubbing off the spiky hairs, fruit are available in the wet season to early dry season.

It has the **janama / jawan** skin.

Brachystelma glabriflorum
ASCLEPIADACEAE

'Round sweet yam'
GMW

panariny

The small round yam is white; it is very sweet and tasty. The stems are only above the ground during the wet season and early dry season. The yams can be easily dug up as they are not far below the ground. They can be eaten raw or lightly roasted in hot sand and ashes. The yams are dug up during **werrkalen**, the build up and **yuwinji**, the wet season.

It has the **janama / jawan** or **jaangari** (Dotty Watbi) skin.

Buchanania obovata
ANACARDIACEAE

'Green plum'
GMW 8045

taaluny

The green fruit are eaten when ripe, they stay green but are soft to touch. The fresh fruit are available in the wet season and early dry season. The **territerrit** bird (White-lined Honeyeater) sings the fruit to make it fat and ripe during the build-up season, **werrkalen**.

The fruit are often available in large amounts and the flesh and seed can be pounded and smashed up and formed into a large ball, wrapped in paperbark and stored for later use.

It has the **jampin** skin. **Taaluny** is closely related to **thanthiliny**, the milky plum (*Persoonia falcata*).

Calandrinia uniflora
PORTULACACEAE

GMW

panyiny

The small pale coloured yams can be eaten raw or lightly roasted in ashes and hot sand. The yams can be pulled straight out of the sandy soil that **panyiny** grows in; they are especially favoured by children. **Panyiny** has pretty pink flowers and comes up during the wet season rains.

It has the **jangala** skin.

Callitris intratropica
CUPRESSACEAE

'Pine tree, Ironwood'
GMW 7445, 8048

kuweriny
kuwuru

The wood is good firewood as it burns easily and makes a pleasant smell. The smoke is used to cleanse areas of bad spirits after funeral ceremonies. The smoke is also wafted around people to make them feel strong and healthy.

The burnt wood is crushed up and the ashes rubbed onto any area of the body that is sore. It can be mixed with **mapurany**, conkerberry, ashes as well. It is also mixed with water and rubbed onto the head of a newborn baby to help close the gap in the bones of the head.

The dark coals from burnt wood can be crushed and mixed with water or glue to be used as a black paint.

Green inner bark is soaked in water and used to wash for kids and old people to make them strong in the body and mind. The leaves and twigs can also be boiled in water and the liquid used as a washing medicine.

The smoke from burning wood repels mosquitoes, due to its strong smell. It has the **jawan** or **janama** skin.

Calotropis procerus
ASCLEPIADACEAE

'Rubber Bush'
GMW

no Kija name

This plant is introduced; it is considered poisonous. Cattle eat the leaves when there is no other food around, however it may make them sick with a swollen stomach.

Calytrix brownii
MYRTACEAE

wangalji
mangatany

The hard wood is used to pressure flake the heads of spears. It has the **jangala** skin.

Calytrix exstipulata
MYRTACEAE

wangalji
mangatany

The stems can be used to make small spears. These are very strong and cannot be broken. It has the **jangala** skin.

Canavalia papuana 'Blackfella Bean'
FABACEAE

tikurlel
wulngal

The young pods are roasted in a ground oven and then eaten. They are available during **warnkany**, in the cold weather of the mid dry season.

It has the **nakarra** skin.

Capparis lasiantha 'Bush pawpaw'
CAPPARACEAE GMW

marrarnyil

The fruit can be eaten when they are yellow-orange in colour and have split open. They are very sweet and tasty. The stems often grow up tree trunks and are covered in small cheeky prickles.

Check where the names **pampilyiny** and **pampiliny** are from and what they refer to.

Capparis umbonata 'Wild orange'
CAPPARACEAE GMW

jukurrul
kurtital

The inner fleshy part of the fruit is eaten when the fruit are ripe, green but soft to touch. When the fruit are ripe they have a strong sweet smell that can be smelt from a long way away. If the fruit are not quite ripe they can be buried in warm sand which helps to ripen them. When they are ripe it is easy to smell them. The fruit begin to ripen during **werrkalen** and **yuwinji**, from the late build-up to the early wet season.

The leaves are used as a steaming medicine to treat colds and influenza. The leaves can also be boiled in water and the liquid used as a washing medicine to treat colds.

It has the **nampin** skin.

Carallia brachiata
RHIZOPHORACEAE GMW

junjunul

The wood from small trees can be used to make the shafts of woomeras. The timber is light but strong.

Birds eat the fruit, and some Kija people eat the fruit but some people think it is not edible.

Carissa lanceolata
APOCYNACEAE

'Conkerberry'**piriyalji**(tree and fruit)
GMW 7448 **mapurany**(fruit)
manumarnuny(wood)

The small fruit are eaten when ripe, black, in the late wet to mid-dry seasons. The fruit are important because they are often found in large amounts and are available for a relatively long period each year.

The wood can be burnt and the smoke inhaled to treat colds and coughs. The leaves can also be boiled and the liquid swallowed to treat colds.

The orange roots are burnt and the smoke used to keep bad spirits away from children up to their early teen years. The smoke also chases away mosquitoes and is placed on a fire when mosquitoes are in the area.

The branches can be used as a bush broom to sweep up around camp. The v-shaped part of a branch is used to form the hook part of a woomera.

It has the **jakarra** skin.

Cassytha filiformis
LAURACEAE

Dodder'**warirrinji**
GMW

The stems can be used as medicine. They are collected, smashed up with a stick or stone and soaked in water. The liquid is used as a wash and like shampoo to cure headaches, and make you feel fresh and strong. The stems can also be wrapped around the head during the night to stop headaches. The plant has a good smell that makes you feel better.

In the past the stems were smashed up in a shallow depression on a rock. This was filled with water and allowed to heat in the sun all day. The liquid was then ready to use as medicine.

It has the **nangala** skin.

Celtis philippensis
ULMACEAE

thewengkiny
kururriji

The round red fruit are eaten by various birds but not by people. This plant is common on limestone ridges and on creek banks in heavy soils. Kangaroos often sleep under the dense overhanging branches as it is cool and they are well hidden.

It has the **jawalyi** skin.

Chrysopogon fallax
POACEAE

‘Grass’
GMW

jartiny

The stem bases are burnt to ash and the black fine soot rubbed onto babies like talcum powder. Kangaroos also eat the fleshy stem bases, especially in the dry season after fires when there is not much other food around.

It has the **janama / jawan** skin.

Citrullus colocynthis
CUCURBITACEAE

‘Piemelon’
GMW

kakulanyil

The fruit can be eaten but they are not very good to eat. Bullocks, horses and bush turkeys also eat the fruit.

It has the **nakarra** skin.

Citrullus lanatus
CUCURBITACEAE

‘Watermelon’
GMW

ngayalel

The fruit from this introduced plant are occasionally found in the bush in moist areas near rivers and springs. The flesh is sweet, watery and very tasty.

It has been given the **nyawurru** skin.

Clerodendrum floribundum
VERBENACEAE

GMW 8047

**kungkalany
pirrintilinyji
kerlarriny**

Dry straight stems are used as fire-stick to make fire using the traditional drilling method.

The fruit can be used as fish poison, it can be mixed with **karnkulji**, wattles. It has the **jakarra** skin.

Cochlospermum fraseri
BIXACEAE

‘Yellow Kapok’
GMW 7427

kunjal

The swollen roots can be eaten after cooking in ashes. It is best in the mid dry season when it is cold and the wind blows, and the yellow flowers are present. The resin content is lower at this time (Scarlett 1984). The roots of small plants are sweetest; in larger plants the roots become woody and cannot be eaten.

Twigs can be frayed at the end and used as a brush to dip honey out of native beehives.

Dry stems can be used as firesticks, using the traditional drilling method to start a fire. The bark can be used to make bush string, in the past it was used to make a harness for carrying babies.

It has the **nyawana** or **nyaajarri** skin.

Colocasia esculenta
ARACEAE

'Taro'
GMW

jimarniny

This plant has large leaves like an 'Elephant Ear'; the underground stem tubers can be eaten after cooking. Old people say that eating this yam will make you turn into a kangaroo.

In certain areas this yam is very common, for example Wirnapa Spring, Old Osmond Valley Homestead, though it only occurs in springs and areas that are wet all year round.

In the past it was used in the traditional welcome to country ceremony to ensure a visitors safety while on Kija country, it was hit on the back and rubbed on the legs of the visitor.

It has the **janama** / **jawan** skin.

Crinum angustifolium
LILIACEAE

GMW

parrjangkerri

This plant comes in the early wet season and has pretty white flowers; the tuber below the ground is like an onion but it cannot be eaten.

Cucumis melo
CUCURBITACEAE

'Small Bush Cucumber'
GMW

jilinyepel

The fruit can be eaten when ripe, yellow-green. They are just like a small cucumber and the flesh is very tasty and quite sweet. For some people they are too sweet. When the fruit are ripe you can smell them when you walk near them.

This plant has smaller fruit than **karerlel** (below) and it grows in river areas. It has the **nakarra** skin.

Cucumis melo
CUCURBITACEAE

'Big Bush Cucumber'
GMW

karerlel

The fruit can be eaten when ripe, yellow-green. They are just like a small cucumber and the flesh is very tasty and quite sweet. For some people they are too sweet. When the fruit are ripe you can smell them when you walk near them.

This plant has larger fruit than **jilinyepel** (above) and grows in black soil areas. It has the **nangala** skin.

Curculigo ensifolia
LILIACEAE

"Grass Yam"
GMW

jawurluwiliny
jawurluwuliny

The slender yams are dug up and lightly roasted. The dark skin is then peeled off and the flesh eaten. The leaves look just like grass, but there are small yellow flowers in amongst the leaves.

It is common in the Greenvale area and has the **jampin** skin.

Cycas pruinosa

‘Black-boy, Palm tree’

nganthanji

CYCADACEAE

GMW 7453 ngawanthanji

The seed coatings are cracked open and the flesh ground into a coarse paste, this is placed in paperbark and soaked in running water for a week. The paste is made into dampers and cooked in hot sand and ashes. The seeds are available during the late dry season to the wet season.

Some Kija people think that you cannot eat the seeds because they are poisonous.

It has the **jangala** skin.

Cymbidium canaliculatum
ORCHIDACEAE

‘Tree orchid’
GMW 7434

kalungkuny

Kalungkuny has special powers and must be treated with respect. Sugarbag or bush honey from a tree where this plant is growing cannot be eaten. Pregnant women must not touch this plant or go near it as it may harm their baby. If you stand down wind of this plant or touch it, it will cause your hair to fall out.

It has the **jakarra** skin.

Cymbopogon bombycinus

‘Lemon grass’

ngarrngarrji

POACEAE

GMW 7440 malmalji

The leaves are soaked in water and the liquid drunk and used as a wash to treat colds, coughs and headaches. This is also a good treatment for skin sores. This lemon grass is short, about 1 metre tall.

It is very similar to the cultivated lemon grass that is grown in gardens.

It has the **jaangari** skin.

Cymbopogon procerus
POACEAE

‘Lemon grass’
GMW 7441

ngarrngarrji
malmalji

The leaves are soaked in water and the liquid drunk and used as a wash to treat colds, coughs and headaches. This is also a good treatment for skin sores. This lemon grass is quite tall, up to 2 metres.

It has the **jaangari** skin.

Cynodon dactylon
POACEAE

'Couch Grass'
GMW

werrkalji

This grass often forms nice lawn-like areas near rivers; it is good to sit on but has no specific use. The name **werrkalji** refers can be used for any green grass.

Cyperus bulbosus
CYPERACEAE

'Bush onions'
GMW

jurntany

The small yams are dug up and eaten. They are lightly roasted in hot sand and ashes and then rubbed between the palms to remove the skin, this is then gently blown off the little yams and they are ready to eat.

Brolgas also eat the yams.

Cyperus javanicus
CYPERACEAE

"Lice Grass"
GMW

yiwiny

The small black seeds resemble lice. These are crunched between the teeth for fun, and the seeds are shaken over the heads of people to look like lice

Cyperus sp.
CYPERACEAE

'Sedge'
GMW 7439

The stems are made into small bags that are hung around the necks of small babies that are cranky. They bite on the bag and it settles them down.

Cyperus vaginatus
CYPERACEAE

GMW

theltheny
thilinjany
thelinjany

The fibrous stems are used to clean wax from the ears. This plant indicates that water is present, either at the surface or just below, for most of the year.

Dichrostachys spicata
MIMOSACEAE

'Prickle Bush'

kulumarram
murrulumpuny
pakawakany

This bush has strong sharp prickles. It has the **janama / jawan** skin.

Dioscorea bulbifera ?
DIOSCOREACEAE

'Cheeky yam'

karnawuny

The yams are chopped into pieces or slices and rubbed with ashes from the wood of **kunytjin** or **wanyarri**, *Bauhinia cunninghamii* or **lawiny**, *Dolichandrone filiformis*. These are then cooked in a ground oven covered in paperbark overnight. In the morning the flesh is taken out and soaked in water until it is soft and yellow. This is then washed in water and can now be eaten; it tastes good like sweet potato.

It has the **jampin** skin.

Dioscorea transversa
DIOSCOREACEAE

'Long Yam'
GMW

jilirrjilirrji

The long yams can be eaten raw or lightly roasted, the flesh is very tasty and similar to a sweet potato. These yams are not very common and will not grow in areas where there is too much grass, if areas are burnt to remove the grass more yams will grow.

The yams are best dug up during **warnkany**, the cold weather season, when the stems are still visible and the yams are fattest. When cooked in ashes and hot coals it is similar to a damper to eat. The yams are found by tracing the dry stems down to the ground and into the soil. The yams are sometimes quite deep and a large hole is dug to get the yams out.

It has the **jakarra** skin. Sandy Thomas has a song about this yam.

Dodonaea oxyptera
SAPINDACEAE

thewinyji

This plant has no specific use.

Dodonaea polyzyga
SAPINDACEAE

mangatany

An implement made from the dried stems is used for trimming and sharpening flakes for the 'bottle spear', **kurlwalel**. Check whether mangatany refers to the plant or dried stems in general. The term mangatany also now refers to sharpened lengths of iron used for flaking.

Dolichandrone heterophylla

lawiny

BIGNONIACEAE

GMW 7437 lawuny

The leaves and bark are boiled in water and the liquid used as a washing medicine for treating sunburn, measles, coughs, skin sores and arthritis. A small amount can also be drunk.

It has the **jaangari** skin.

Eragrostis tenellula
POACEAE

'Grass'

**wirlarrji
malawany**

The small grass is collected and placed on paperbark and belted with a stick. The seeds are winnowed to remove chaff and rubbish. They are then ground into fine flour that is mixed with water and made into 'johnny cakes'. These are cooked in hot coals and ashes. The seeds are available in the early dry season and often occur in large quantities.

Erythrina vespertilio

karntiwarlel

FABACEAE

GMW 8042 karntiwarl

The pale, light wood is used to make woomera shafts and wood from larger trees can be used to make a coolamon.

Young plants have a swollen taproot; it can be dug up and cooked, then eaten like a yam. The straight dry sticks can be used to make fire using the traditional drilling technique. The bright red seeds are used to make necklaces.

It has the **nampin** skin.

Erythrophleum chlorostachys
CAESALPINIACEAE

'Ironwood'
GMW

perawuruny

This tree has very hard, dark wood and is sometimes called 'steel wood'. The wood is used to make fighting sticks and digging sticks.

A fighting stick made from this timber is a deadly weapon. It is only known to occur in the northern areas of Kija country

It has the **jungurra** skin.

Erythroxylum ellipticum

pinyjipinyjil

ERYTHROXYLACEAE GMW

mintimintil

The small red fruit are eaten when they are ripe, they are sweet and tasty. The fruit occur in the wet season. The fruit can be collected in large amounts and put in water, the ripe ones, **paapij**, sink and are then eaten. The unripe fruit are kept until they ripen.

The wood can be used to make boomerangs and axe handles, it is also good firewood.

Eucalyptus abbreviata

marlampeny

MYRTACEAE

GMW

The straight hollow stems can be used to make didgeridus. Sugarbag can be found in this tree.

Eucalyptus aspera
MYRTACEAE

'Hill Bloodwood'
GMW

puniny

Sugarbag can be found in this tree.

It has the **jaangari** skin.

Eucalyptus brevifolia
MYRTACEAE

'Snappy gum'
GMW 7428

thalngarnji
thalngarr

The leaves are used as flavouring when cooking meat to give it a spicy flavour. Sugarbag can be found in this tree, and it is usually very sweet.

The timber is excellent firewood, **maarnam**. The wood can also be used to make clap sticks.

A few new leaves can be eaten to treat coughs and colds. The smoke from burning new leaves is allowed to waft around a person, who is suffering from bad dreams, this stops the dreams.

It has the **jungurra** skin.

Eucalyptus camaldulensis
MYRTACEAE

'River gum'
GMW 8034

pilirnji
karrangkany

Branches may be thrown into waterholes to 'poison' fish. The leaves have the effect of stupefying the fish, which float to the surface and can be easily collected, cooked and eaten.

The leaves are used as flavouring when cooking meat to give the meat a spicy flavour.

The leaves are also used as a steaming medicine for the treatment of colds and influenza. The wood is considered excellent firewood.

Pilirnji has the **nakarra / jakarra** skin.

Eucalyptus collina
MYRTACEAE

'Bloodwood'

puniny

The straight trunks are useful for building stockyards.

It has the **jaangari** skin.

Eucalyptus confertiflora
MYRTACEAE

'Cabbage tree'
GMW 7452

punpany

The timber is good firewood. When this tree is in flower the sugarbag in the area makes good clean tasting honey.

The ashes from burnt bark and wood is added to chewing tobacco to make it taste better.

It has the **nakarra / jakarra** skin, and is considered to be the brother of **pilirnji**, *Eucalyptus camaldulensis*.

Eucalyptus cupularis
MYRTACEAE

‘Halls Creek white gum’
GMW 7460

thaaliwanji
thilinythilinyji
thelinythelinyji
juwuruny

The bark is burnt to ash to be mixed with chewing tobacco. Sugarbag, native beehives are often found in this tree. Hollow stems and branched can be used as didgeridus.

The trunks are used to make fence posts.

It has the **jampin** skin.

Eucalyptus dichromophloia
MYRTACEAE

‘Bloodwood’

mawurriny
mawurrul

The red hardened sap or kino, **kaliwuny**, is dissolved in water and the liquid used as a washing medicine to treat skin sores.

The ash from bark that has been dried and burnt is added to chewing tobacco. It is the best ash to add to tobacco.

Lerp scale, **pinkany**, is often found on the leaves. The branches are pulled off and the scale allowed to dry out, then knocked off the leaves and eaten. **Pinkany** is also called **mawurru ngarnany** or ‘dweller on mawurru’.

The timber makes excellent firewood as it burns evenly for a long time and produces long lasting coals.

The fruit can be used as a toy top by spinning between the fingers. The charcoal can be used as a black colour in paintings.

This plant has the **nakarra** skin.

Eucalyptus (C. bella) papuana
MYRTACEAE

‘Ghost gum’

warlarriny
lawurany

The dry white bark is burnt to ash and mixed with chewing tobacco to improve the flavour and make it stronger.

The timber is good firewood as it burns evenly and makes long lasting coals. The heavy timber is used to make boomerangs and fighting sticks.

Sugarbag can be found in this tree, and it is usually very sweet.

It has the **nampin** skin.

Eucalyptus grandifolia
MYRTACEAE

‘Cabbage tree’

punpany

The timber is good firewood. The bark and wood can be burnt to make ashes to add to tobacco.

It has the **nakarra** skin.

Eucalyptus herbertiana

wenthawulenji

MYRTACEAE

The hollow straight stems can be used to make didgeridus. The timber can be used to make fighting sticks.

Eucalyptus jensenii

‘Ironbark’

mawurruny

MYRTACEAE

GMW

The wood is hard and it is used to make stockyards or as firewood.

It has the **nakarra** skin.

Eucalyptus microtheca

‘Coolabah’

jaaruwenyji

MYRTACEAE

GMW

The wood is good for firewood, sugarbag and sugarleaf. The bark and wood can be burnt to make ashes to add to tobacco.

It has the **janama / jawan** skin.

Eucalyptus miniata

‘Woollybutt’

puniny

MYRTACEAE

GMW

Sugarbag, native beehives are often found in this tree. Hollow stems and branches can be used to make didgeridus.

The large ribbed fruit can be used to make necklaces, they are threaded onto string or fishing line. The fruit can also be spun like a toy top. The fruit can also be used as the bowl for a bush pipe for smoking tobacco.

This tree occurs in the northern most areas of Kija country; it has the same Kija name as *Eucalyptus ptychocarpa*, which has similar fruit.

It has the **jaangari** skin.

Eucalyptus polycarpa

‘Bloodwood’

mawurriny

MYRTACEAE

When this plant is in flower sugarbags are full of sweet honey. The wood can be used as firewood.

It has the **nakarra** skin.

Eucalyptus pruinosa
MYRTACEAE

linyilji

The timber is good firewood, **maarnam**. When this plant is in flower it is a good time to find sugarbag, as it will be full of sweet honey.

It has the **jangala** skin.

Eucalyptus ptychocarpa
MYRTACEAE

‘Bloodwood’

puniny

The red, dry sap can be collected and boiled in water, the cooled liquid is used as a wash to treat skin sores and boils, and it is good medicine. Sugarbag, native beehives are often found in this tree. Hollow stems and branches can be used to make didgeridus.

The large ribbed fruit can be used to make necklaces, they are threaded onto string or fishing line. The fruit can also be spun like a toy top. The fruit can also be used as the bowl for a bush pipe for smoking tobacco.

It has the **jaangari** skin.

Eucalyptus tephrodes
MYRTACEAE

‘Grey Coolibah’
GMW 8041

warernyji

Sugarleaf is often found on the leaves of this tree. Sugarbag can be found in this tree. The bark can be burnt to ash and the ashes mixed with chewing tobacco.

Hollow stems can be used to make didgeridus. The dense leaves and spreading canopy of this tree makes it an excellent shade tree.

It has the **naminji** skin.

Eucalyptus sp. aff. *tectiflora*
MYRTACEAE

warernyji

The timber is good firewood and the bark can be used to make ashes for tobacco.

It has the **naminji** skin.

Eucalyptus sp aff. *confertiflora*
MYRTACEAE

Wiliwirrirrel
Wiliwurrul
Wiliwirrel

The hollow trunks and branches can be used to make didgeridus.

Ficus coronulata
MORACEAE

‘River fig’

japayiny
GMW 7455, 8084, 8044 **kanampiny**

The fruit are eaten when ripe in the wet season. Turtles and fish also eat the fruit.

The leaves and bark can be used as fish poison.

It has the **juwurru** skin.

Ficus opposita var. *indecora*
MORACEAE

GMW 7435

Sandpaper fig' **yingarrjiny**

The small fruit are eaten when ripe, black, in the wet season. The leaves can be used as sandpaper to smooth implements such as clap sticks, digging sticks, spears, fighting sticks and didgeridus.

It has the **jampin** skin.

Ficus opposita var. *micracantha*

'Sandpaper fig'

yimarlji

MORACEAE

GMW 8039 yingarrjiny

The small fruit are eaten when ripe, black, in the wet season. The leaves can be used as sandpaper to smooth implements such as clap sticks, digging sticks, spears, fighting sticks and didgeridus.

It has the **jampin** skin.

Ficus platypoda
MORACEAE

'Rock fig'
GMW 8050

pangkurnji

The fruit are eaten when ripe in the wet season. This fig tree is always found in rocky areas.

It has the **jaangari** skin.

Ficus racemosa
MORACEAE

'Cluster Fig'
GMW 7451

jawunany
ngalalapany
jamarntaji

The fruit are eaten when ripe, brown, in the wet season. The fruit can also be mashed up with sugar and water into a sweet tasty paste and then eaten.

It has the **jakarra** skin.

Ficus scobina
MORACEAE

'Sandpaper fig'
GMW

yingarrjiny

The small fruit are eaten when ripe, black, in the wet season.

It has the **jampin** skin.

Ficus virens
MORACEAE

'Fig, Banyan'

parlŋgel

The fruit are eaten when ripe in the wet season. It has the **naangari** skin.

Flueggea virosa
EUPHORBIACEAE

'White currant'
GMW

kuwarrulji
ngurrwany
perangkarrji
ngulurrji

The small white fruit are eaten when ripe in the wet season. When fireflies, **ngurrwangarnal**, can be seen in the air at night it indicates that the fruit are ready to collect and eat. They are sweet and taste like grapes.

The straight dry stems can be used to make fire sticks.

It has the **jawalyi** skin.

Gardenia sp B (FoK)
RUBIACEAE

GMW 7446

martany

This plant can be used to stop rain. It is also placed in the pillows of young boys who play up to make them behave themselves. It can also be carried in a motorcar to make it safe to travel in.

The leaves and stems can be used as fish poison.

It has the **jampin** skin.

Gossypium australe
MALVACEAE

GMW

no Kija name

This plant is considered to be an introduced plant, when you walk through it makes you feel itchy.

Green slime
Check identification

marlinji
marlinpe

There is a story about babies coming from water in the dreamtime.

Grevillea miniata
PROTEACEAE

jiwiny

The stems are used to make spear shafts and the pegs of woomeras, **mirliti**.

It has the **jungurra** skin.

Grevillea pteridifolia
PROTEACEAE

GMW

jawilyiny

The burnt bark produces a fine black ash, this can be rubbed into the hair to make it grow and keep it black. Straight stems are used for making spear shafts. The timber can also be used for boomerangs.

The pretty orange flowers can be sucked to get the sweet nectar; they can also be soaked in water and the sweet water drunk like cordial.

It has the **jawalyi** skin.

Grevillea pyramidalis
PROTEACEAE

'Caustic Bush'
GMW 743 I

wilinyji
wilinyil

The timber is used for making boomerangs and slender shields used for fending off boomerangs.

The shiny black fruit are covered in a sticky varnish that causes rashes and burning of the skin if touched. In the past it was used to create ceremonial scars.

When the flowers are produced, it indicates that kangaroos are fat and good to hunt. The burnt bark is used in young men's ceremonies.

It has the **jampin / nampin** skin.

Grevillea refracta
PROTEACEAE

GMW 7450

tharriyarri
karntarntarrji

Bees collect the pollen from this plant to make bush honey.

Check the use of the seeds.

Grevillea striata
PROTEACEAE

'Beefwood'
GMW

jawilyiny

The hard dark wood is very strong and can be used to make boomerangs.

It has the **jawalyi** skin.

Grevillea wickhamii
PROTEACEAE

GMW

jiwiny

The straight stems and branches can be used to make small spear shafts.

It has the **jungurra** skin.

Grevillea sp.
PROTEACEAE

GMW 8054

karntarntarrji

Emus eat the fruit. The pretty flowers are visited by birds and bees.

Grewia retusifolia
TILIACEAE

Emu berry '**karrawuny** (heavy)
GMW 7458 **nguwartuny** (light)
karrawiny

The fruit are eaten when ripe, brown. The skin, flesh and seeds are all eaten when available in the wet season and early dry season. Emus and turkeys also eat the fruit.

The bark is boiled in water and the liquid drunk to treat a pain in the stomach.

It has the **jawalyi** skin.

Gyrocarpus americanus
HERNANDIACEAE

'Shitwood'
GMW 7456

jarlarluny

The soft light wood is used to make coolamons, both the flat type **larnturriji** and the square deep type for honey, **yawunyji**.

The fruit are used as toy helicopters by small children.

The bark is boiled in water and the liquid used as a washing medicine to treat skin sores and itchy skin.

It has the **jawan** skin.

Haemodorum ensifolium
HAEMODORACEAE

'Red Root'

kerrerlel
minyngel
minyngil

The red coloured tuber is dug up and chipped into small pieces, it is then added to fibre or cloth to dye it a red to brown colour.

Hakea arborescens
PROTEACEAE

GMW 7429

jirrirntiny

The timber is used for boomerangs, **kurrupartul** and fighting clubs, **wirlki**. The wood is good to light fires in the wet season.

It has the **jakarra** skin.

Hakea ? macrocarpa
PROTEACEAE

GMW 7462

kunanturuny
kunanteruny

The timber is used for boomerangs and fighting clubs, **wirlki**. The burnt bark is used in ceremony.

It has the **jaangari** skin.

Heteropogon contortus
POACEAE

GMW

marlil

The seeds from this grass are a nuisance at the end of the wet and the early dry season as they poke into your clothes and swag when you are camping in the bush.

It is the smaller female version of **marliny**, *Heteropogon triticeus*, the bush sugar cane (below).

<i>Heteropogon triticeus</i>	'Bush Sugarcane'	marliny
POACEAE	GMW	

The stems of this grass contain sweet, watery juice. The stems are broken off during the late wet season and early dry season and chewed and sucked to get the sweet juice. They are especially popular with children.

It is the bigger male version of **marlil**, *Heteropogon contortus*, the bush sugar cane (above).

<i>Ipomoea aquatica</i>	'Black soil yam'	karntiny
CONVOLVULACEAE		yuwalany
		yuwarlany

The yams can be eaten lightly roasted in hot ashes or raw. They are mainly found on black soil areas and in swamps and floodplains, the yams can be found in large amounts and are similar to sweet potatoes.

<i>Ipomoea costata</i>	'Bush potato'	larrwany
CONVOLVULACEAE		tawanyil
		yalamarri
		perlayiny

This plant has large, tasty yams; there are often several yams under each plant. The yams are dug up, lightly roasted in hot coals and ashes and then eaten. The yams are very tasty; the younger yams are tender and can be eaten without roasting.

When the yams have reached full size they can crack the ground above the, tapping on the ground makes a hollow sound which indicates the presence of the yams in the ground. The yams are best harvested during **warnkany**, the cold weather season, when they are fattest and sweetest. However, they can also be dug up at other times of the year.

There is a rounded rock which is a dreaming site for this species on Springvale Station, near the Great Northern Highway on the road to Billymack Spring (17°38'52"S/127°46'33"E) [from Rammel Peters, 10/09/02, check species identification). It has the **nyawurra** skin.

<i>Ipomoea</i> sp. aff. <i>graminea</i>	yumpany
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CONVOLVULACEAE GMW

The long, cylindrical yam can be eaten after roasting on hot coals. The yam is similar to the yam of kunjai but the leaves look a bit those of panariny. This plant only grows in one area near **Tiringiny**, on the road to Greenvale, where it is quite common. When Peggy Patrick was a girl she used to eat it all the time. The yams can grow to be quite large and you need to dig a big hole to get it.

After removing the yam the top is replanted back in the ground so that more yams can grow. This plant grows in sandy soil run on areas that get waterlogged in the wet season.

<i>Leptospermum madidum</i>	'Ti-tree'	wungenji
MYRTACEAE	GMW	

The forks in the stem are used to make the hook part of a woomera, the wood is very strong. The leafy twigs can be tied to a stick to make a broom that is good for sweeping campsites. This small tree is found near springs and waterholes.

<i>Livistona victoriae</i>	'Cabbage Palm'	yangajalil
ARECACEAE	GMW 803 I	yingajalil
		ngamalil

The upper stem and leaf bases can be steamed in an earth oven or cooked in the coals, and then eaten. The cabbage can also be eaten raw. The inner part is very tasty and almost sweet, further out it gets more fibrous and less tasty, but you can still eat it.

Young plants at the right height for chopping open the cabbage are called **tanarril**.

When chopping open the leaf bases it is best to chop down the length of the leaf bases and peel back the leaves to expose the cabbage. The pith can be easily obtained by chopping straight into the leaf bases but this wastes quite a lot of cabbage.

<i>Lobelia quadrangularis</i>	'Bush tobacco'	pingkunji
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SCROPHULARIACEAEGMW 7447

ngunyju
pingkunyl

The leaves are dried and mixed with ash from **mawurrin**, *Eucalyptus dichromophloia*, then chewed in the same way as commercial tobacco.

<i>Lophostemon grandiflorus</i>		jingkurli
MYRTACEAE	GMW	jingkurli

The timber is used for firewood and to make fighting sticks. Sugarbag is often found in this tree. The ashes from burnt bark or wood can be used to mix with chewing tobacco.

It has the **naangari** skin.

Lysiana subfalcata
LORANTHACEAE

'Mistletoe'
GMW

janil

The fruit are eaten by birds, and also by children but generally not by adults. This small plant grows on other trees.

Mallotus nesophilus
EUPHORBIACEAE

kunturlpal

The fruit are eaten when they are ripe, yellow, during the wet season. The fruit can be gathered in large amounts and put in water, the ripe ones, **paapij**, sink and are then eaten. They have a slightly bitter taste and are quite dry in texture.

Marsdenia viridiflora
ASCLEPIADACEAE

'Bush Banana'
GMW

**kulipil
ngujal**

The young green fruit can be eaten; they are sweetest and softest before they get to full size. When they get too big they become fibrous and harder to eat, these older fruit can be softened by placing them in hot ashes and sand for a few minutes.

The skin of older fruit and the stems can be sucked and chewed when walking long distances, this provides energy and helps keep the mouth moist when thirsty.

Marsilea sp.
MARSILEACEAE

'Nardoo'

no Kija name

This plant grows in water and keeps the water alive; it is seen as indicator of healthy water.

Melaleuca acacioides
MYRTACEAE

'Paperbark'

jinjilji

This small paperbark has hard bark that cannot be peeled off the trunk like some of the other types.

Melaleuca bracteata
MYRTACEAE

'Ti-tree'
GMW 8046

wengenji

Ngarlu or sugarbag can be found in this tree. The bark is too small to be used though the timber can be used for firewood. Bowerbirds often make their nests under the dense shade of this tree.

Melaleuca lasiandra
MYRTACEAE

Paperbark

mungkulji

Melaleuca leucadendra
MYRTACEAE

Paperbark
GMW 8087

merntany

The leaves are used as a steaming medicine to treat colds and influenza.

The papery bark can be peeled off the trunk in large sheets. The bark is used for making traditional houses, for blankets, for wrapping food for storage and cooking and for cutting up meat.

The old name for this tree is **lamerntarlel**, it is not used much now.

Check the name **wenthawurriny** grows in the rivers and creeks (Dotty Watbi).

<i>Melaleuca minutifolia</i> MYRTACEAE	Paperbark GMW	mungkulji
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<i>Melaleuca nervosa</i> MYRTACEAE	Paperbark GMW	panteranil
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The bark from this small paperbark tree is generally too small to be used. The leaves can be used as a steaming medicine to treat colds and influenza.

This tree is common in some areas near the Argyle Diamond Mine. It has hard bark that does not peel off the trunk.

<i>Melaleuca viridiflora</i> MYRTACEAE	Paperbark GMW	mungkulji
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<i>Mimosa pudica</i>	'Sleepy Plant'	no Kija name
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MIMOSACEAE GMW

This is an introduced plant, when you touch the leaves they close-up and go to sleep.

<i>Mnesithea rottboellioides</i> POACEAE	'Cane Grass' GMW	kilamperrji
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The stems are used as toy spears by young boys. The stems can only be used to make toy spears when they have turned brown. If the green stems are broken it will cause big rains.

<i>Monochoria cyanea</i> MARSILEACEAE		no Kija name
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This plant has pretty blue flowers, it grows in water and keeps the water alive, it is seen as indicator of healthy water.

<i>Myoporum acuminatum</i> MYOPORACEAE	GMW	
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Emus eat the small black fruit.

Nauclea orientalis 'Leichhardt tree' **ngimilil**
RUBIACEAE

The large round fruit can be eaten when ripe, brown, in the wet season. The light yellow coloured wood can be used to make coolamons and clap sticks. In the past the logs were used as floats when swimming across large rivers.

It has the **nangala** skin.

Newcastelia spodioptricha no Kija name
VERBENACEAE

This is an introduced plant that has become a weed along roadsides. The fluffy fruit can be used as body decoration during ceremony if no other native fluffy seeds are in the area.

Nicotiana benthamiana 'Bush tobacco' **ngunyju**
SOLANACEAE

The leaves are dried, pounded and then chewed with ash from bark of various trees.

Nitella sp. 'Green Slime' **marlirn**
CHARACEAE GMW **malirnji**

This green slime grows in water and often forms long hair-like threads in shallow water. It has no specific use.

Nymphaea violacea 'Water lily' **karrjany**
NYMPHAEACEAE GMW **kelawurrji**

The flower stem, **tangkarriny**, can be eaten after peeling off the outer skin; it is tasty and similar to celery. It can also be used as a straw to suck up water or to blow bubbles in water.

The fruit can also be eaten, the outer skin is peeled off to expose the small, oily seeds which can be eaten raw or lightly roasted; they are very tasty. The seeds can also be ground into flour and made into small dampers that are then cooked in hot ashes and coals.

The tubers in the mud below the water can also be eaten, after roasting in ashes and hot coals. They have to be dug out of the mud and can be felt with the toes, then dive down to dig them out. The large tubers are called **wununguny** and the smaller tubers on the side are called **karrjany** and are the sons of **wununguny**.

There is a creation period legend about this plant, a young girl, a fish and mermaids. There is a dreaming site for this plant near old Greenvale.

Nymphoides crenata no Kija name
MENYANTHACEAE

This plant keeps water alive where it grows in billabongs and creeks. It has pretty yellow flowers and looks like a small waterlily.

Ocimum tenuiflorum
LAMIACEAE

‘Wild tea’

manyanyiny
parnapeliny

The leaves and twigs are used to make tea or **nalija**, and this plant is often called bush tea-leaf. It has a licorice-like smell that is very pleasant.

Opilia amentacea
OPILIACEAE

‘Grape’

jimiripirl
jimirpil

The fruit are eaten when ripe, yellow, in the wet season. They are sweet and tasty.

Ottelia ovalifolia
HYDROCHARITACEAE

no Kija name

This plant keeps water alive and healthy where it grows in billabongs and creeks.

Owenia vernicosa
MELIACEAE

nguyu

The fruit are eaten by emus; they are not eaten by people.

Pandanus aquaticus
PANDANACEAE

‘River Pandanus’
GMW

wirnpel

The fruit are eaten by fish and turtles when they fall into the river in little pieces.

This pandanus is found growing along rivers and beside waterholes, the fruit become yellow-green when ripe.

Pandanus spiralis
PANDANACEAE

‘Spring Pandanus’
GMW 8037

wirniny

The large red fruit are roasted on a fire, and then cut open with an axe so that the seed, **thanawul**, can be taken out and eaten. The seed is tasty and is like a peanut.

The leaves can be used to make baskets, mats and other fibrecrafts, but Kija people did not commonly do this.

This pandanus grows near springs, and the big fruit turn red when ripe. This spring pandanus is also sometimes called **wirnpel**, the Kija name of the river pandanus (above).

Parkinsonia aculeata
CAESALPINIACEAE

GMW

Needle tree’**murrulumpiny**
pakawakany

This is an introduced weed; the Kija name refers to the sharp prickles on the stems. It is quite common in some areas on Texas Downs, including around the old homestead. The branches can be used as a broom to sweep around a camp.

Persoonia falcata 'Milky plum' **kantheliny**
PROTEACEAE GMW

The fruit are eaten when ripe, green but soft to touch. They are ripe during **werrkalen** and **yuwinji**, the build-up and early wet season.

The seeds can be used as medicine. They are smashed up and soaked in water and the liquid used as a wash to treat sores and influenza.

Kantheliny is closely related to **taaluny**, the green plum (*Buchanania obovata*).

Petalostigma pubescens 'Emu Tucker' **welrayiny**
EUPHORBIACEAE GMW8035

The round orange fruits are eaten by emus. When **welrayin** is in fruit emus are often found around this tree looking for fruit to eat.

Phragmites karka' Little Bamboo' **kamangkarrji**
POACEAE

The stems are used to make light bamboo spear shafts with a wooden upper shaft and point.

Phyllanthus reticulatus **nyirntiwarliny**
EUPHORBIACEAE

This plant grows at Nyitparriya; it has no specific use

Physalis minima 'Gooseberry' no Kija name
SOLANACEAE

The fruit can be eaten when they are ripe, yellow, they have to be taken out of the papery covering first. This is an introduced plant that grows in the bush sometimes.

Podaxis pistillaris 'Stalked Puffball' **langany**
TULOSTOMATACEAE GMW

This black toadstool fungus grows in the wet season. It is sometimes called mushroom. When it is growing in an area you cannot eat the sugarbag as it may make you sick.

Pouteria sericea **pinyjirliny**
SAPOTACEAE GMW 7457

The fruit can be eaten when they are black; they are sweet and very tasty. This tree is also a good shade tree, it is often found on rocky areas.

Premna acuminata
VERBENACEAE

GMW 7444

**kungkalany
pirrintilinyji
kerlarriny**

Dry straight stems are used to make firesticks, to start fire using the traditional drilling method. Kangaroo droppings can be used as dried material to light the fire.

Pterocaulon serrulatum
ASTERACEAE

GMW 7430

kurunguny

The leaves and stems are used as a washing medicine to treat colds and influenza. The leaves have a pleasant smell, they can be placed in a pillow and make you have a good sleep by keeping bad dreams away.

Pterocaulon sphacelatum
ASTERACEAE

GMW

kurunguny

The leaves and stems are used as a washing medicine to treat colds and influenza. The leaves have a pleasant smell, they can be placed in a pillow and make you have a good sleep by keeping bad dreams away.

Rhynchosia rhomboidea
FABACEAE

nyarerriji

The whole plant, including the roots are beaten and then thrown into small waterholes to 'poison' fish. The fish can then be easily collected, cooked and eaten.

Santalum lanceolatum
SANTALACEAE

Sandalwood
GMW 7463, 8033

wurlnguruny

The leaves are used in a steaming treatment for colds and influenza. The leaves can also be boiled in water and the cooled liquid used as a washing medicine to treat colds and congestion.

The small black fruit are eaten by emus but not by people.

Sarcostemma australe
ASCLEPIADACEAE

'Caustic vine'
GMW 8049

**kanyjewuny
karnjiwuny**

The stems can be smashed up and thrown into small waterholes to poison fish. This makes the fish float to the surface where they can be collected, cooked and eaten.

The stems contain sap that is white like milk, this can be used as a medicine to treat ringworm or skin sores by simply dabbing it onto the affected area.

It has the **jawalyi** skin.

Senna notabilis
CAESALPINIACEAE

GMW

Emus eat the shiny pods; this plant is closely related to **parrakal** (*Sesbania cannabina*), below.

Sesbania cannabina
FABACEAE GMW

parrakal
lampalamparrji

The dry stems can be used as firsticks, although they are relatively soft. The stems can also be used for making light hunting spears for small game like fish.

Sesbania simpliciuscula
FABACEAE GMW

parrakal
lampalamparrji

The dry stems can be used as firsticks, although they are relatively soft. The stems can also be used for making light hunting spears for small game like fish.

Sesbania formosa
FABACEAE

‘Corkwood’
GMW

wirrwirrjel
wirrwirrel

The pale, strong but light wood is used for making woomera shafts and coolamons. The corky bark can be burnt to ashes and crushed to make black ochre for painting.

Dried twigs and straight branches can be used to make firesticks.

Solanum echinatum
SOLANACEAE

‘Wild gooseberry’
GMW

kirliny
kirlil

The fruit are eaten when ripe in the mid-dry season. The prickly sepals around the fruit are pulled off and thrown away.

Solanum quadriloculatum

no Kija name

SOLANACEAE

GMW

This plant is similar to **kirliny**, the wild gooseberry (*Solanum echinatum*), but the fruit can not be eaten, they are considered to be poisonous.

Sporobolus australasicus
POACEAE

‘Grass’
GMW

wirlarrji

The small grass is collected and placed on paperbark and belted with a stick to remove the seeds. The seeds are then winnowed to remove chaff and rubbish. They are then ground into fine flour that is mixed with water and made into ‘johnny cakes’. These are cooked in hot coals and ashes. The seeds are available in the early dry season and often occur in large quantities.

Stemodia lythrifolia
SCROPHULARIACEAE

GMW

kurunguny

This small plant has purple flowers and strong smelling leaves. The leaves can be boiled in water and the liquid used as a wash to treat colds and keep away bad spirits.

The smelly leaves can also be placed inside the pillow at night to make babies and adults feel stronger.

Streptoglossa bubakii **manyanyi**
 ASTERACEAE GMW 7438

The leaves and stems are used as medicine. This plant grows on black soil areas.

This plant has the same Kija name as *Ocimum tenuiflorum*, the bush tea leaf, but is recognised as being different.

Streptoglossa odora **manyanyi**
 ASTERACEAE GMW 7426

The stems and leaves can be placed around or hung up to repel flies.

This plant has the same Kija name as *Ocimum tenuiflorum*, the bush tea leaf, but is recognised as being different.

Syzygium eucalyptoides ‘Pink River Apple’ **kawurriny**
 ssp. eucalyptoides **rungkuny**
 MYRTACEAE GMW

The small round fruit can be eaten when ripe, pink; they are sweet and tasty. The fruit are also eaten by kangaroos. This tree grows near rivers and creeks.

Tacca leontopetaloides ‘Bush Yam’ **pikirniny**
 TACCACEAE GMW

The yam can be dug up and eaten after roasting in hot ashes for a long period. It has not been eaten much in recent times but was eaten a lot in the past. The stems and leaves come up during **yuwinji**, the wet season and die off during **lintharrk** and **warnkany**, the dry season. It is quite common in the bush.

Tephrosia rosea ‘Pink Flowered Pea’ no Kija name
 FABACEAE GMW

The pink flowers are often produced in large numbers. Bees from ground sugarbags visit the flowers to get nectar and pollen.

Terminalia arostrata ‘Nut tree’ **parekel**
 COMBRETACEAE GMW **partikil**

The seeds are eaten after breaking open the hard fruit. The fruit are often found in large numbers below large trees and are available all year round.

The leaves are used for a steaming treatment of colds and influenza.

Branches from young plants can be used to make 'bush brooms' to sweep or rake camping areas.

Terminalia bursarina
COMBRETACEAE

GMW 8085

warraruny

The gum from this tree can be eaten; it is called **nyaarnte**. The gum can sometimes be found in large amounts. If it is hard, it can be softened by boiling in water or heating on a fire. Sometimes it is mixed with water and sugar to make a sweet.

This tree always grows in riverbeds and banks; it is the brother of **yirriyarriny**, *Terminalia canescens*.

Terminalia canescens
COMBRETACEAE

GMW 8080

yirriyarriny
piriwuriny

The gum from this tree can be eaten; it is called **nyaarnte**. Nanny goats eat the leaves of this plant, but horses can't.

This grey leaved tree always grows in the bush often on rocky country; it is the brother of **warraruny**, *Terminalia bursarina*.

Terminalia platyphylla
COMBRETACEAE GMW 8036

nyaarntiny
nyamparrkin
thalekin

The gum from this tree can be eaten; it is called **nyaarnte**. This large tree always grows on the banks of rivers and creeks. The fruit are eaten by birds.

The wood is good firewood for cooking. An ash from burnt bark is good for tobacco.

Terminalia platyptera
COMBRETACEAE

GMW 8081

kururriji

The winged fruit are eaten by cockatoos and parrots. The red coloured gum is eaten, and can also be used to fix spearheads to spearshafts.

The wood is light and is not much good for anything.

Terminalia volucris
COMBRETACEAE

marlarrinj
marrlarriny

The gum from this tree can be eaten; it is called **nyaarnte**.

Fine shavings of the wood are stuck to the skin as decoration for dancing and ceremony.

Timonius timon

RUBIACEAE

GMW

junjunul

The wood is used for boomerangs and woomeras.

Tinospora smilacina

MENISPERMACEAE

warampurriji

The stems can be used as medicine. They are pounded up and wrapped around painful areas to stop the pain.

This plant also has magical powers; it can be used by a man to attract a woman and by a woman to attract a man. It can also be used to wrap around kids who are overweight to make them lose weight and become skinny.

The dried stems can be wrapped around a fighting stick and then burnt to make a pattern on the stick.

Tribulus terrestris

ZYGOPHYLLACEAE

‘Bindi-eye’

**pakany
muluyurrji
muluyirrji**

The fruit have very hard and sharp prickles on them; they stick into your feet if you walk near this plant. This plant is common in some areas in Warmun.

Triglochin dubium

JUNCAGINACEAE

‘Small Water-yam’

GMW

yamuny

The small yams are pulled out of the mud at the bottom of slow moving creeks and billabongs; they can be eaten raw or lightly roasted and are very tasty. Sometimes they are found in large numbers and are a very good food source.

Triodia procera

POACEAE

‘Spinifex’

**miluwiny
kerlerniny**

The leaves are used as a steaming medicine to treat colds and influenza.

The resin is called **kaalji** or **kaale** and it is collected from leaf bases and is used to make glue. The leaves are collected and dried in a heap, then beaten to release the resin. The resin is molded into a lump by heating over a fire. When the resin is ready to be collected you can smell it when you walk near the spinifex.

The leaves and stems are rolled up and thrown into waterholes to poison fish. It can also be used as a fence or net to catch fish if a lot of people line up with across a waterhole and walk through.

The leaves can be used to make a bush tea if nothing else is available.

Check spelling kerlerniny, kerlerneny or kalarniny (Scarlett 1984).

<i>Triodia</i> spp. POACEAE	'Spinifex'	kerlerneny
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The leaves are used as a steaming medicine to treat colds and influenza. The leaves can also be pounded and thrown into waterholes to 'poison' fish, which can then be easily collected, cooked and eaten.

The resin from leaf bases can be used to make glue. The leaves are collected and dried in a heap, then beaten to release the resin. The resin is molded into a lump by heating over a fire.

<i>Triodia</i> sp. POACEAE	'Tall Spinifex'	jirrinyjirrinyji karrarlkarrarlji
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A tall prickly spinifex known from Picaninny Creek, it has hard leaves that poke you badly if you walk through it.

<i>Triodia</i> sp. POACEAE	'Spinifex'	nyiyirrinny
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When someone loses their husband they paint themselves with the ash from this spinifex. It is also used during **junpa**. The leaves on this spinifex are weak and soft and easier to walk through.

<i>Typha domingensis</i> TYPHACEAE	'Bulrush' GMW 7443	jankerriny peramarral
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This bulrush is common and it always occurs in areas where water stays for most of the year. It keeps the water clean, healthy and fresh; fish, insects and small animals hide in the stems and roots.

This plant is used in the welcome ceremony for new visitors to Kija country. The wooly seeds can also be used as decoration during some ceremonies.

<i>Vallisneria</i> HYDROCHARITACEAE	GMW	jankirreny
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This plant grows in creeks and billabongs, it has no specific use.

<i>Ventilago viminalis</i> RHAMNACEAE	'Supplejack' GMW 7436	warlakarri
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The timber is used for making boomerangs, fighting sticks and slender shields used for fending off boomerangs. This plant has the same Kija name as *Grevillea pyramidalis*.

The bark and leaves can be boiled in water and the liquid used as a washing medicine.

<i>Vigna lanceolata</i> var. <i>latifolia</i>	'Pencil Yam'	ngawunji
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FABACEAE

GMW

The yams can be eaten after lightly roasting in hot ashes. Yams are available during the dry season. It is closely related to **wanarrji** (*Vigna vexillata*), however this plant has short upright stems. It has the **janama / jawan** skin.

Vigna vexillata
FABACEAE

'Yam'
GMW

wanarrji

The yams can be eaten after lightly roasting in hot ashes. It is closely related to **ngawunji**, (*Vigna lanceolata* var. *latifolia*). This plant has long runners from the yam that spread along the ground.

Vitex acuminata
VERBENACEAE

'Black Plum'

mamparnel

The fruit can be eaten when ripe, dark yellow to black.

This plant is very similar to **minyjiwaara**, *Vitex glabrata*, but it is not as common and occurs around the Bedford Downs area.

Vitex glabrata 'Black plum'
VERBENACEAE

GMW 7433

minyjiwarrany
minyjaarrany
minyjuwarrany

The fruit are eaten raw when ripe, black, in the wet season. The fruit are often available in large amounts and they can be pounded and formed into a large ball. These balls can be sun dried or dried in a dry ground oven. When dry they are wrapped in paperbark and stored for later use.

These large balls were used during ceremonies where large numbers of people needed to be fed and for exchange in the **winan** cycle.

During **werrkalen**, the hot weather time, when **kurrjarlji**, the march fly bites, it indicates that the fruit are ripe and ready to collect.

It has the **jakarra** skin.

Wedelia sp. A
ASTERACEAE

lampalamparrji

The leaves are soaked in hot water and the cooled liquid drunk to treat colds, influenza and 'feeling weak'. Recorded as *Wedelia verbesinoides* by Scarlett 1984.

Wrightia saligna
APOCYNACEAE

GMW 7461

kirlkirlji
karnpakji

The stems can be used to make clap sticks. They have a light sound compared to clap sticks made from heavier woods.

Ziziphus quadrilocularis
RHAMNACEAE

matarrkuny

The skin of the fruit can be eaten after baking, **kurrakun**, or boiling. The fruit are ripe in the wet season; emus also eat the fruit.

Kija animal names and uses

Birds

Bush Turkey, Australian Bustard
Ardeotis australis

Pinkirrpal
Watpil
Manmil
Jurlakal
Pinkirrepal

The flesh can be roasted and eaten, it is very tasty and one of the best bush meats. Generally, they are cooked in ground ovens. Pregnant women can not eat the meat.

They were hunted with light spears with a shaft made from **kamangarrji** (*Phragmites karka*) and with a head made from **jirintin** (check name). These spears fly very fast like a bullet and can skim off the ground due to their lightweight.

It has the **nyaajarri** skin.

Check the name **kalamutal**.

Emu
Dromaius novaehollandiae

Karnanganyjal
Ngaraparral
Wiyarril

The flesh can be roasted and eaten, it is dark red and tasty. It has the **nyawurru** skin.

When hunting emus in the past a small piece of red rag or the red flowers from **manthurnji** (mistletoe) would be placed in a tree or gently waved around to attract the emu. The hunter would cover their smell with ochre rubbing it over their body, especially rubbing it in to the armpit area.

Cattle Egret, Little Egret
Ardea ibis, Egretta garzetta

Kinyany

This bird is often seen following cattle and horses and eating the insects that fly up.

Rufous Night Heron
Nycticorax caledonicus

Kupil

This bird is not seen often it hides in thick bushes, it hunts around the waters edge at night.

Sacred and Straw-necked Ibis
Threskiornis molucca and T. spinicollis

Jantiyantiny

The flesh from these birds can be roasted and eaten.

Dollarbird
Eurystomus orientalis

Timperraljkarlji

Stormbird, Common Koel
Eudynamis scolopacea

Tuwaakkel

The sound of the call frightens children because it sounds like the call of **juwany** (male) or **kilkuwal** (female), the Bush Thick Knee.

Stormbird, Channel-billed Cuckoo
Scythrops novaehollandiae

Kurrukurral

This large bird has a loud and raucous call, when it makes this call it signals that rain is not far away. There is a Kija song about this bird.

Young children used to cover their heads and groins when **kurrukurral** called because they were frightened it would make their hair grow very long.

Bush Thick-knee, Bush Stone-curlew
Burhinus magnirostris

Juwany (male)
Kirikuwal (female)
Juwal, juwalji
Wintuwul

This bird has a mournful call that it makes at night; there is a powerful dreamtime story associated with this bird.

Rainbow Bee-eater
Merops ornatus

Jikirrel
Jekerrel

Blue-winged Kookaburra
Dacelo leachii

Jawurrul

Jawurrul is a noisy bird with a loud distinctive laughing call.

Grey-crowned Babbler, Message Bird
Pomatostomus temporalis

Kangkangel

This bird passes on the message to look back because you are being followed, it was especially useful during the killing times.

Great Bowerbird, Stealing-bird
Chlamydera nuchalis

Juwijkarniny
Juwijngarniny

Juwijkarniny picks up any small colourful thing, like glass, tin or paper, and places it around the bower built from sticks.

Pied Butcherbird and Magpie
Cracticus nigrogularis, Gymnorhina tibicen

Kerrerangkulji

Pee-wee, Mudlark, Magpie-lark
Grallina cyanoleuca

Pirlirrikel
Perlirrijil
Pirlirrij
Tiyatiya

The nest is mud from mud and is built around small branches high in trees. The Kija name is based on the sound of the call.

It has the nangala or nampin skin.

Torresian Crow
Corvus orru

Wangkarnali
Waakwaakjil

There is a special dreamtime story for this bird. It has the **naangari** skin. And is a brother for the eaglehawk.

Some children sing a song for this bird at Christmas so that he will bring presents.

Little Friarbird
Philemon citreogularis

Jengkerawukuny

This bird is very noisy and is always fighting with other birds.

Silver-crowned Friarbird
Philemon argenticeps

Kakuwany

This bird has poor eye sight; children should not play near this bird.

Pheasant Coucal
Centropus phasianinus

Thulthulji

The distinctive 'woop...woop...woop...' call of **thulthulji** is heard during the hot build up season of **werrkalen**, and the wet season, especially in the floodwater time during **yuwinji**.

Willie Wagtail
Rhipidura leucophrys

Jikirrit-jikirritji
Jikirritji
Jintiwirrij

These small birds are very active looking for food and flying around. The Kija name is based on the sound of the call.

Yellow-throated Miner
Manorina flavigula

Piyikpiyikkel

This bird often scares off kangaroos when people are hunting. The Kija name is based on the sound of the call.

Pardalotes

Jurnjurnunukkul

Pardalotus spp.

**Jurnjurnulikjil
Junjununukjel**

These small birds dig out a burrow to lay eggs in; the burrows are often dug in creek banks or roadside cuttings.

Rufous Songlark
Cincloramphus mathewsi

**Kawarnngarnany
Pinyjirrmianma**

This bird is often seen in black soil areas, it has a good song. It often flies straight up while singing and then falls back to earth exhausted.

Black-tailed Treecreeper, Woodpecker **Tiyirnel**
Climacteris melanura

**Tiyirntiyirnel
Tiyirntirnel**

This black bird climbs around on the trunks of trees looking for insects to eat. There is a dreamtime story about this bird and how it was burnt black while hunting on the stems of paperbark trees. It has the **nangala** skin.

Red-backed Fairy-wren
Malurus melanocephalus

Yirrilyyirrilyji

A small pretty bird with a distinctive red back, it often lives near rivers and pandanus. The Kija name is based on the sound of the call.

Black-faced Cuckoo-shrike
Coracina novaehollandiae

**Miliwurrangel
Miluwurrangel**

White-bellied Cuckoo-shrike
Coracina papuensis

**Yirringarakjil
Yirringarakjil**

Fairy Martin
Hirundo ariel

**Jirrinyngarlel
Jirrinyngalel
Jirrinyngalil**

This small bird makes a nest from mud in caves or under rock ledges. Snakes often go into the nests to hunt for eggs and chicks.

White-breasted Woodswallow
Artamus leucorhynchus

Jinpajinpalji

Rufous Whistler or Mistletoebird
Pachycephala rufiventris or *Dicaeum hirundinaceum*

Jiyikjiyikjil

This bird is placed on the tongue of small babies who are slow to talk, it makes them learn to talk quickly and well. **Jiyikjiyikjil** is a small bird who sings a lot and hunts for flowers in trees and bushes.

Cockatoos and Parrots

Budgerigar

Melopsittacus undulatus

Kulyulyul

Kulyulyul is often seen in large noisy groups; it has the **nyaajarri** skin.

Red-tailed Black-cockatoo

Calyptorhynchus magnificus

Terranel

Tiyirran

Sulphur-crested White Cockatoo

Cacatua galerita

Ngamarriny

There is a dreamtime story about how **ngamarriny** travelled to Gooniyandi country, while the corella, **ngayilanji**, decided to stay in Kija country.

The flesh can be eaten after roasting.

Little Corella

Cacatua sanguinea

Ngayilanji

Lapany

The flesh can be eaten after roasting.

Cockatiel

Nymphicus hollandicus

Werrangk

Wirrangkurnel

Galah

Cacatua roseicapilla

Kerlinykerlinyel

Kelinykeliny

This bird has the **nyaajarri** skin.

Rainbow Lorikeet

Trichoglossus haematodus

Wirrilijkel

Red-winged Parrot

Aprosmictus erythropterus

Kinykinyel

The Kija name is also the name of a women's sacred site; the name cannot be spoken by young boys and men until they have been through initiation.

Northern Rosella

Platycercus venustus

Kultanykultanyel

This rosella is often referred to as the white-cheeked rosella or parrot.

Green Parrot

Check identification

Wirrirri

Water-birds

Pelican

Pelecanus conspicillatus

Walakiny

Taparuny

These birds were eaten in the past, but have not been eaten in recent times. In the dry season of 2002 there were a lot of deaths of pelicans either from lack of food or the water being too cold.

Darter and Cormorants

Phalacrocorax spp., *Anhinga melanogaster*

Karrangkarranginy

Karrangkarrangji

Kurlungarnany

Mawururiny

These birds are recognised as being good hunters who dive and swim under water to catch fish. Their Kija name is based on the sound of their call.

Brolga

Grus rubicunda

Kurrarntal

This bird has the nampin, nangala, nyaajarri skins. Check Joe's recording for story. There is a big dreamtime story about the brolga and the frog.

Jabiru

Ephippiorhynchus asiaticus

Warrkawarrkaliny (Worla)

Yalarrngarnany

Karlpakarlpany

Green Pygmy Goose

Nettapus pulchellus

Jipilyuwuny

Jipilyukul

The flesh can be eaten after roasting; it is very tasty. They can be caught by throwing stones at them and tiring them out, or by swimming underneath and pulling them under.

Magpie Goose

Anseranas semipalmata

Ngarlakangarriny

Ngerlekangarril

Ngarlakangarre

Ngarlakangarril

The flesh is cooked and eaten, it is very tasty. The eggs can also be collected and eaten. Ngarlakangarriny is only found on Kija country during the wet season. The Kija name is based on the sound of the call, they also make a honking noise.

Grey Teal Duck

Anas gracilis

Jipulyul

The flesh can be roasted and eaten. In the past men who swam underwater and pulled them under by their legs caught them. In recent times they have been shot with shotguns.

Pigeons and Doves

Spinifex Pigeon

Geophaps plumifera

Marrawayil

The flesh can be roasted and eaten. Check the name and uses.

Crested Pigeon

Ocyphaps lophotes

Kerlarukul

Palarayil

Peaceful Dove

Geopelia striata

Kurluturtukjil

The Kija name of this small pigeon is based on the sound of the call.

Bar-shouldered Dove

Geopelia humeralis

Kurlurtuk

The Kija name for this pigeon is based on the sound of the call. In the past they were eaten, the flesh is tasty when roasted.

Brown Quail

Coturnix ypsilophora

Jipikel

This small bird spends most of the time walking around looking for food, it only flies for short periods.

Finches

Fringillidae, Ploceidae

Honeyeaters

Blue-faced Honeyeater

Entomyzon cyanotis

Kangkangel

Kangkangel is a noisy, cheeky bird that often chases away other birds. They like to eat fruit and are often seen around gardens looking for fruit like bananas and pawpaws.

White-lined Honeyeater, Taaluny-bird**Teriitteriit**

Meliphaga albineata

Teriitteriit calls out during **werrkalen**, the hot weather period, it sings out to make the taaluny fruit fat and ripe. When you hear this bird calling you know that **taaluny**, the green plum (*Buchanania obovata*) will be ready to collect.

The Kija name is based on the sound of the call.

Yellow-faced Miner

Jiyikjiyikkel

Manorina flavigula

Jiyikjiyikji

This bird is placed on the tongue of small babies who are slow to talk, it makes them learn to talk quickly and well. **Jiyikjiyikji** is a small bird who sings a lot and hunts for flowers in trees and bushes.

Owls

Tawny Frogmouth
Podargus strigoides

Kurrrkurrrji

Kurrrkurrrji hides in trees and doesn't move so that it cannot be seen. It also changes colour to suit the back ground so that it is hard to see.

Spotted and Owlet-Nightjar
Caprimulgus argus, Aegotheles cristatus

Parnangkany

There is a powerful dreamtime story for this bird, it has the jakarra skin.

Barking Owl and Southern Boobook
Ninox connivens, Ninox novaeseelandiae

Tumpuny

These birds stare at you. At night they can change into different animals. It has the **jungurra** skin.

Raptors, hunting birds

Wedge-tailed Eagle
Aquila audax

Warranany
Kirliwirringiny
Kerliwirringiny

In the dreamtime the kangaroo fat dripped from meat that **warranany** was carrying, these are now the white rocks called **manjalji**. Patrick Mung Mung painting story.

These birds are extremely good hunters and often get quite large, when they fly close to you they sound like a plane.

Young boys can't touch or play with these eagles. If they do they will end up with crooked legs.

It has the **jaangari** skin.

Whistling Kite, Black Kite
Haliastur sphenurus, Milvus migrans

Kanjalji
Kanjal

These birds are good hunters for lizards, small animals and insects. They are very active around fires when all the animals are moving away from the fire.

Brown Goshawk
Accipiter fasciatus

Kirrkanyji

This bird is usually found hunting around black soil areas. It has the **jampin** skin.

Grey (or White) Goshawk
Accipiter novaehollandiae

Marrkmarrkji

This bird can hover in the air to look for game when hunting. When it is seen hovering it indicates that the cold weather will begin soon.

Australian Kestrel
Falco cenchroides

Warliny
Warliperawuny

This bird is not a good hunter and can only catch insects, worms and frogs, it has poor eye sight. Young boys should not look at this bird or they won't be able to have any beef to eat.

Unknown Raptor
Check identification

Pulukul

This bird is white or grey in colour and is the brother in law of **kangalji**.

Chicken Hawk, Kite
Check identification

Marrmukji

When you are out hunting and **marrmukji** sings out his call, you will not catch anything because he is warning the game that you are coming. Patrick Mung Mung painting story.

REPTILES

Crocodiles

Saltwater Crocodile, Alligator
Crocodylus porosus

Jangpawurruny

There are no saltwater crocodiles on Kija country, though they are well known from northern, saltwater areas and are treated with the utmost respect when people are visiting saltwater country. The Kija name literally means 'the one who has not eaten'.

Freshwater Crocodile
Crocodylus johnstonii

Lalangkarrany (male)
Walangkural (female)
Ngamparnji (juvenile)

This crocodile is very common in waterholes and rivers and is often seen sunning itself on the bank or on rocks, or floating on the surface. They eat fish and other small animals but are not dangerous to humans, though they can bite and are quite strong.

The flesh can be eaten after roasting in a ground oven; it is very tasty meat. The tail is the best meat and contains a lot of fat. The eggs can also be eaten and are dug out of the nests in sand when the nests can be located. The egg is quite watery and even after cooking remains watery; some people don't like the taste of the eggs.

In the past they were caught by men who swam into the water and wrestled them ashore, then hit them on the top of the head with a hitting stick or stone to kill them. Bubbles in the water indicated where the crocodile was hiding in the water and men would swim down and grab them. It was best to tie the jaws shut with bush string, so that they could not bite. They are also caught on fishing lines and speared from the bank. In recent times they have been shot, though this is not common.

The other Kija name for freshwater crocodiles is **yilakkarnany**, which means bottom dweller because he often sits at the bottom of waterholes and rivers. When pulled to the surface they get very cranky.

It has the **juwurru** skin.

Turtles

Long-necked Turtle
Chelodina rugosa

Lawarrpam
Weluwumurany
Welumeraal

The flesh is eaten after roasting. The name of this species is restricted in use, and can not be spoken in the presence of women.

Northern Short-necked (or Snapping) Turtle
Elseya dentata

Tarntal

The flesh can be eaten after roasting in hot coals; it is very tasty. They can be caught on fishing lines or by feeling around with your hands and feet in rivers and waterholes. You can also swim around under water and hunt for them. Sometimes they can be caught in large numbers if waterholes have not been hunted in for some time. When they are caught in large numbers the hunter will hang them by their necks off a belt around the waist.

Tarntal has the nangala skin. They can give you a nasty bite if you are not careful. The eggs can also be eaten. In the past you had to kiss the backside before you ate them.

Yellow-faced Turtle
Emydura victoriae

Tarntal

This turtle has a yellow or orange stripe on its face but is considered the same as the short-necked turtle described above.

Lizards

Northern Blue-tongue Lizard
Tiliqua scincoides

Lumukul
Ngawulanyji

The flesh can be cooked in hot coals and ashes and eaten, it is tasty like goanna meat. **Lumukul** is easy to catch as it cannot run fast and cannot hide very well.

Lumukul often fights with king brown snakes, and though he gets bitten he can still win the fight. **Lumukul** has the **nakarra** skin.

Centralian Blue-tongue Lizard
Tiliqua multifasciata

Parntel

The flesh can be cooked in hot coals and ashes and eaten, it is tasty like goanna meat. **Parntel** is easy to catch as it cannot run fast and cannot hide very well.

Parntel and **lumukul** are closely related and very similar, **parntel** has a stripe on its face, while **lumukul** has dark stripes on its back. The flesh tastes the same and they behave in the same way.

It has the **nangala** skin.

Frill-necked or Blanket Lizard
Chlamydosaurus kingii

Kertanji
Wawuleny
Wawuliny

The flesh is very tasty after roasting in hot coals and ashes. After roasting the body for eating, the burnt blanket (flap of skin around the neck) can be crushed up and rubbed through the hair. This makes the hair strong, healthy and dark.

Kertanji often live in holes in ant-beds. They are cheeky and will often chase people with their blanket up and their mouth wide open. When hunting them you must hit them quick and hard.

In the dreamtime **Kertanji** was a good dancer and he could dance up the rain.

Knob-tailed Gecko
Nephrurus asper

Puyurtpuyurtjil

In the dreamtime, this lizard was a troublemaker for young boys. If a spirit comes to you at night and says **puyurtpuyurt**, then someone from your family has passed away. This gecko is related to the Death Adder.

Northern Dtella, Gecko
Gehyra australis

Mentuweny
Nyikany

This small gecko is only seen at night, when it comes out to eat insects and mosquitoes. The Kija name refers to night. **Mentuweny** must not be killed by people; if he is the night will be pitch black without any moonlight.

Ring-tailed Dragon
Ctenophorus caudicinctus

Petarril

The flesh from this lizard is not eaten.

Ta-ta Dragon
Lophognathus temporalis,
Diporiphora lalliae, *D. magna*

Mankerrekerriny
Mankerrikerriny

There are powerful dreamtime stories for **mankerrekerriny**, and a special site at Greenvale relates to it. There are several types of **mankerrekerriny**, and they are quite common.

It has the **jungurra** or **jampin** skin.

Chameleon
Chelosania brunnea

Pawutany
Petarril

This lizard can change the colour of its skin; it is not eaten. When threatened **pawutany** blows itself up with air, and then flattens its body.

Bearded Dragon
Pogona sp.

Pawutany

This lizard has a prickly skin and is quite cranky, when it is angry it flattens and spreads its body out.

Pawutany has the jangala skin.

Skink, Slippery Lizard

Jampurral

In the dreamtime this lizard created problems by going out with everyone and not following the law, its Kija name literally means 'good looking one'.

Slender Skinks
Carlia spp., *Notoscincus ornatus*

Kamul

When the tail comes off a liquid like milk comes out of the stump, the Kija name refers to this milk.

Slender snake-eyed skink
Proablepharus tenuis

Milmilel

This small lizard lives on trees, it has no specific use but is often chased by children. It has the **nangala** skin.

Goannas

Rough-tailed Goanna
Varanus acanthurus, V. storri

Kilpany

The flesh is eaten after roasting the whole body in a bed of hot coals. This goanna has a very rough tail and it lives in rocky country.

There is a dreaming story about this goanna playing up with other people and there is a special site at Bedford Downs. It has the **jawalyi** skin.

Sand Goanna
Varanus panoptes (female)
Varanus gouldii (male)

Thukel (female)
Lawupertijel (female)
Jarrampayiny (male)
Karntuwurlany (male)

This goanna can get very large and quite cheeky; it has very tasty meat. The meat is considered good for your general health and it tends to make you healthy and strong.

The sand goanna is often tracked to burrows or trees and is chased if seen walking in the bush. Dogs are also trained to sniff out goannas.

If tracked to a hole in the ground they are dug out and killed. If they go up a tree; they are knocked out with stones and sticks or the tree is chopped down.

Little birds follow large goannas as they walk through the bush, if you listen for groups of small birds singing out in the bush you will often find a goanna there.

It has the **juwurru** or **jangala** skin. They tend to eat frogs and grasshoppers a lot.

Check the name kanyarrany (jangala) (Mona R).

Rock Goanna
Varanus glauerti

Punungkuny
Purnungkuny

The flesh from this rock goanna is not eaten, it may have been eaten in the past by old people. It has the **jampin** skin.

Merten's and Mitchell's Water Monitor **Wikamany**
Varanus mertensi, V. mitchelli

Kurlungarnany

The flesh from these water goannas is good to eat, the whole body is roasted in a bed of hot coals and ashes. They are generally seen near water bodies such as creeks, rivers and billabongs, however they can also climb trees and are often caught in the bush.

If you eat or touch a young **wikamany**, your hips and backside will disappear and become flattened. It has the **janama / jawan** skin.

Tree Monitor
Varanus tristis

Pijil

These goannas get aggressive when you are cutting down trees. If you eat lots of the meat you become aggressive and cheeky, and want to fight all the time. It has the **naminji** skin.

Snakes

The general Kija term for snakes is **ngamarrany**.

Poisonous snakes (Elapids)

Ringed-Brown Snake, Emu Killer
Pseudonaja modesta

Jalungurruparritekji

This snake lays in wait for its game by pretending to be dead and camouflaging itself. It often kills large animals like emus and kangaroos. Its Kija name refers to the fact that it often lays in wait in the sun.

Northern Death Adder
Acanthophis praelongus

Tamperriji

This snake is very poisonous and can kill within five minutes of biting someone. The body swells up just before they attack. There is a sharp nail-like point on the end of the tail, and they can change colour depending on the background so that they are very difficult to see.

Desert Death Adder
Acanthophis pyrrhus

Tamperriji

This snake is very poisonous and can kill within five minutes of biting someone. The body swells up just before they attack. There is a sharp nail-like point on the end of the tail, and they can change colour depending on the background so that they are very difficult to see.

Whipsnake, Spinifex snake
Demansia psammophila

Kutawutany

This fast moving snake is often found in spinifex areas.

King Brown or Mulga Snake
Pseudechis australis

**Lunpurruny
Ngatarriji
Pulurriji**

This snake is very dangerous, it can get very large and it is highly poisonous and aggressive. The skin can have various colours depending upon where it lives; they are often seen near water or wetter areas.

Western Brown and Whip Snake
Pseudonaja nuchalis, *Demansia sp.*

Jatiwiriny

These snakes are often long and skinny.

Taipan
Check scientific name

Wijkel

The bite from this snake causes pain and swelling but is not deadly.

Curl Snake, Little Spotted Snake
Suta suta, *Suta punctata*

Jilingkuwiny

This small snake occurs in spinifex areas and can attack by throwing itself at you or jumping through the air. It is a poisonous and cheeky snake.

Non-poisonous snakes

Blind snake, worm
Ramphotyphlops spp.

**Wunthuny
Wenthul**

This worm-like snake comes out at night and it likes to move on wet ground like a big worm. They have a very bad smell.

Emu-killer
Delma borea

Juwarriparntekj

This small snake has special powers and can kill emus and bullocks, it has spiritual connections to the death adder. It lives in spinifex country.

Emu-killer
Brachyurops roperi

Kutawatiny

This small snake mainly eats termites and ants.

Burton's Legless Lizard, Moon-snake, Pencil Snake
Lialis burtonis

Paljawurrul

If you touch or stand on this snake, it causes lumps to form in the groin similar to those caused by infection.

Black-headed Python, Carpet Python

Thuwerntemmanpel

Aspidites melanocephalus

Tawul

The meat can be eaten, it is very good food and tastes similar to chicken. The body of the snake is sliced down both sides of the back-bone, then curled into a ground oven and allowed to cook. The soft pale flesh is then eaten.

This snake has a strong law; the meat can be eaten during sorry time for close relatives of a deceased person when red meat cannot be eaten. Some Kija people don't like the taste of the meat.

It has the **nampin** skin. In the dreamtime it was the prettiest girl.

Children's python
Liasis childreni

Pimppinginy

This small snake can whisper its own name, it cannot be eaten.

Olive Python
Liasis olivaceus

Walangkernany

This snake gets very large and the flesh is good to eat. It has the jungurra skin.

Water Python, Rainbow snake
Liasis fuscus

Walangkernany
Kurlapal
Karluruny
Turlurtpuny

This snake has beautiful colours in its skin; it has powerful mythical associations with the creation period and is possesses magical powers. It is often called the Rainmaker or Rainbow Snake and has the ability to pull you into the water and drown you.

If you are a stranger to the area you must be introduced to country before you swim in the water, if this is not done the rainbow snake may drown you.

It is the cousin of the King Brown, and has the **jungurra** skin.

Green-tree Snake
Dendrelaphis punctulata

Warntawarntal

This slender green snake is often seen in trees and bushes near rivers and springs. It not really poisonous but often gives you a fright as it is difficult to see.

It is considered 'naughty' as there is a dreamtime story about how it plays up with people. It tries to jump on people and cuddle up and it has no proper skin and doesn't follow law.

Brown-tree Snake
Boiga irregularis

Warntawarntal

FISH

The general Kija term for all fish is **kurntarril** or **kurntarriny**.

Freshwater Eel
Ophisternon gutturale

Lanyiny

The flesh can be eaten after roasting on hot coals and ashes, it tastes like fish. This fish looks like a snake and can give you a fright if you catch it on a handline.

Barramundi
Lates calcarifer

Tayiwul
Wawurtjil
Tawukjil
Palkal

The flesh is very tasty after roasting the fish in hot coals and ashes; they can also be cooked in a ground oven. It has the **nampin** skin. The Kija name **wawuwutjil** refers to the way the tail swings from side to side when they are swimming.

Pregnant mothers cannot eat **tayiwul** or their children will get babies sores. Children cannot eat this fish until they **mantha** (undertake the introduction ceremony).

Part of the creation story for **tayiwul** relates the area of Argyle Diamond Mine where the fish tried to jump the mountains and scraped off scales, which become the diamonds, **nyilipal** or **linkirrel**, that are now being mined.

Black Bream or Western Sooty Grunter **Karriyiny**
Hephaestus jenkinsi

Jampinparuny

The flesh is eaten after roasting the entire fish in hot coals and ashes, in recent times they have been fried in oil. The meat is very tasty and much sought after, it is considered by many Kija people to be the most tasty fish.

They are common in most waterholes and can get to a good size, about 30 cm in length. It has the **jampin** skin, and is considered to be the brother of **tayiwul**, barramundi.

Long-nose or Butler's Grunter
Syncomistes butleri

Karriyiny
Jampinparuny

This fish is similar to the Black Bream and has the same Kija names, however it is not as common and has a longer nose and red eyes.

Barred Grunter

Ngenterrngenterrel

Amniataba percoides

The flesh can be eaten after lightly roasting in hot coals, it is tasty but not sweet.

Bony Bream
Nematalosa erebi

Lilinyil

The flesh of this fish is very bony, it can be cooked and eaten with care. In the past the flesh was cooked, sundried, ground up and then wrapped in paperbark, it could be kept like this for up to a month.

In the past they were caught mostly with spinifex rolls pushed through the water like a net, they often will not take bait on a fishing line and tend to swim past in large schools. When they are swimming they are seen by the flash they make as they change direction. When fish poisons are added to billabongs and waterholes this is the first fish that floats to the surface.

Oxeye Herring
Megalops cyprinoides

Lirlinyil

This fish is very similar to the Bony Bream but is not so common. It can also be eaten after cooking.

Fork-tailed Catfish
Arius graeffei, *A. midgleyi*

Talinyji
Pinyjiwinyjiny
Pinyjuwinyjiny
Pinyjuwunyjiny

The flesh can be eaten after roasting or boiling. It is very nice meat. These fish can get very large and have a lot of meat on them. The meat can be cooked, sundried, and wrapped in paperbark for later use. This fish can get very large and they can be difficult to pull into the bank.

The needles or prickles in the fins are very dangerous, they must be avoided because if they prick you it will bleed all day and be very painful.

Hyrtl's Eel-tailed Catfish
Neosilurus hyrtlii

Ngerntany
Ngirntany

The flesh can be eaten after roasting in hot coals. The meat can also be cooked, sundried, ground up and stored in paperbark for later use.

The barbed spines on the fins are very painful if they poke into you, they are broken off as soon as the fish is caught.

This eel-tail catfish is generally yellow in colour.

Rendahl's Catfish
Porochilus rendahli

Werlangerriny
Kirlinyiny
Welengerriny

The flesh can be eaten after roasting in hot coals. The meat can also be cooked, sundried, ground up and stored in paperbark for later use.

The barbed spines on the fins are very painful if they poke into you, they are broken off as soon as the fish is caught.

Freshwater Longtom
Strongylura krefftii

Payirrany
Jalkirrikirrinny

The flesh can be eaten after a light roasting in hot coals, it has a lot of bones. In the past when large numbers were caught they were cooked, dried in the sun and then ground up and wrapped in paperbark cylinders. This allowed the meat to be kept for about one month and crushed up the bones to make it easier to eat.

They can be caught in large amounts by using fish poisons or rolls of spinifex to trap them in billabongs. When these fish are around they tend to chase away the black bream. The small ones often steal the bait from the fishing line and you need to throw stones at them to get them out of the way.

This fish has a mouth like a crocodile, check the dreamtime story.

Sawfish
Pristis microdon

Payirrany

These large fish occasionally come up large rivers, like the Ord, in the heavy rain time. They can be caught on fishing lines and the meat cooked and eaten. They are not common and have the same Kija name as the freshwater longtom that also has a long nose.

Rainbow Fish
Melanotaenia spp.

Kawil

This small fish is very pretty; it can be used as bait to catch larger fish. It is known to be kept in fish tanks by some people, and can be bought from aquarium shops.

Kawil sometimes occur in large schools and can be scooped out of the water. They are then boiled in water to make soup that can be eaten and is very tasty if salt is added.

Riflefish, Archerfish
Toxotes chatareus

Karrkuwal
Luwarriil

These small fish can be used as bait fish to catch bigger fish. They shoot water out of their mouths to knock small insects into the water so they can eat them

Larger fish can be eaten after roasting the flesh in hot ashes and sand; the flesh is tasty.

Sleepy Cod, Flathead Goby, Mudfish
Oxyeleotris lineolata, *Glossogobius giurus*

Werlangerriny

The flesh can be eaten after roasting; it has very few bones. This fish tends to sit quietly on the bottom of the water. In the past, they were caught with rolls of spinifex that were pushed through the water like a net, as were many other types of fish.

Giant Gudgeon, Rock Cod
Oxyeleotris selheimi

Nyakunany

This fish is closely related to **werlangerriny**, but it is larger and can get to about 50 cm long and be quite heavy.

Golden perch, Spangled Grunter
Leiopotherapon unicolor

Murnmurtel
Murnmurtul
Muwalangel

This fish is common in springs and waterholes, it is good to eat after lightly roasting in hot ashes and sand. Small ones can be used as live bait to catch bigger fish.

Northwest Glassfish
Ambassis spp.

Thirntil

This fish can be eaten but it is quite small, generally it is used as bait to catch bigger fish. It is the mother of **tayiwul**, the barramundi, and has the **naminji** skin. When waterholes are treated with fish poison this is the first fish to come to the surface.

Small Glassfish
Ambassis spp.

Jirrkilji
Jirrkerlji

These small fish sometimes occur in large schools and can be scooped out of the water. They are then boiled in water to make a soup that can be eaten and is very tasty if salt is added.

Diamond Fish
Ambassis sp.

Kutapal
Rerrekjil

This fish has the **nyaajarri** skin, and it is mother of **kayirriny** (Peggy Patrick).

MAMMALS

Little Red Flying-fox
Pteropus scapulatus

Walimalil
Walimaliny

The flesh is good meat. The fur and smell is burnt off over flames and then the body is roasted in hot coals and ashes. Some Kija people don't like the taste and the smell of the meat.

Walimalil are often seen in large colonies in trees. They are hunted by hitting them with long sticks or throwing sticks into the colony. When the wing membranes are damaged they cannot fly any more and they can be collected from the ground.

Black Flying-fox
Pteropus alecto

Jarringkel

This flying-fox is used in the same way as the little red flying-fox, above, however it is not as common on Kija country and is more common in northern areas.

Inland Broad-nosed Bat
Scotorepens balstoni

Pinyjirrminy

This small bat flies around at dusk looking for insects to eat; it is often seen flying around lights at night.

It has the **jampin** skin. In the dreamtime he used to run around stealing all the girls and he was a terrible liar. There is a big dreamtime story about **pinyjirrminy** and the crocodile.

Yellow-bellied Sheathtail Bat
Saccolaimus flaviventris

Pankalji

This bat lives in hollow logs in the bush. For some Kija people it is a dreaming animal and has special significance.

Ghost Bat
Macroderma gigas

Purrumpiny

This bat has large ears; it generally lives in caves and is quite pale.

Water-rat
Hydromys chrysogaster

Nyurrungul
Nyurrungel

The flesh was roasted and eaten in the past, but has not been eaten in recent times. This rat is a good swimmer both on top of the water and underwater; it mainly eats fish, but also eats mussels, crabs and insects. It is often seen drying itself on the bank and in the cold weather sunning itself to get warm. They often live in burrows near the waterline.

Quoll, Native Cat
Dasyurus hallucatus

Pawukuny
Yinamuny

This small, cheeky, cat-like animal lives in stony country but is not commonly seen now. It was seen in areas like Bedford Downs in the past, where it lived in caves and rocky areas and is a very good hunter.

Stripe-faced Dunnart
Sminthopsis macroura

Warluwitpujkel
Warluwutpujjet

This small mouse-like animal lives in hilly country and 'makes smoke in the rain time'. It has the **jangala** skin (check).

Western Chestnut Mouse, Desert Mouse
Pseudomys nanus, *Pseudomys desertor***Nyirlimpil**

Jaranel

These small mice live in the bush and the Kija names refer to any small rodents, though different types are recognised. The same Kija names can also be used for the introduced house mouse and black rat.

Common Rock-rat
Zyzomys argurus

Yiriwunji

This a rat-like animal with a fat tail, it only occurs in rocky areas.

Brushtail Possum
Trichosurus vulpecula

Nangkuny

Nangkuny lives in hollow logs in the bush; there were lots around in various places, but not so many many now. Old people used to eat them after roasting the body in hot coals; the fur was singed off and the guts removed first. Leaves from **pirliirnji**, River red gum, and **thalngarrji**, snappy gum, can be added to keep the meat moist and improve the flavour. They have been eaten a lot less in recent times.

Their tracks can often be seen on the trunks of the tree they live in because they rub the trunk smooth by running up and down. When the tree is found the hole can be blocked off with a rock and then the tree chopped down, or a smoky fire can be lit to make the possum run out of the hole. If the tree is too big to cut down you have to climb the tree and poke a stick or wire down to get the possum to run out.

It has the **jungurra** skin.

Rock Ringtail Possum
Petropseudes dahli

Wunyjurruny

This possum is similar to **Nangkuny** but lives in caves and amongst rocks. It is quite common in some areas, especially around Wyndham and Lake Argyle. It can also be eaten after roasting the flesh in hot coals.

It has the **juwurru** skin.

Scaly-tailed Possum
Wyulda squamicaudata

Wyulda ?

Type specimen from Violet Valley, though location is doubted, more likely from Mitchell Plateau and Theda area. This possum is not recognised by traditional owners of the Violet Valley area.

Golden Bandicoot
Isodon auratus

Nyarlkul

This large rat-like animal used to be in Kija country but has not been seen for a long time, it is thought they have all gone south to Jaru country. Some old people

remember eating it and the flesh was very tender and tasty. It was a fast runner and difficult to catch.

Porcupine, Echidna
Tachyglossus aculeatus

Kernanyjel
Pakapal
Kernanyjil

The flesh is eaten after roasting in hot coals and ashes; the body is singed in flames first to remove the hairs and spines. The meat is very tasty and different to any other kind of bush meat, it has a taste a bit like pork, though there is not much on each animal.

There are lots around in the rain time, and they are best hunted at dusk or in the evening, especially during a full moon. They are more common in rocky areas. When they hear something coming they roll up into a tight ball, but they are easy to catch. They are good to hunt with a dog to sniff them out and locate them. They mainly eat ants and termites, with their long sticky tongue.

It has the **nampin** skin.

Dingo
Canis familiaris

Marranyji
Merlarrji
Merlarril

In the past the flesh was cooked and eaten when other meat was not available and food resources were low. It tastes like goat and is quite tender. The puppies had the most tender meat and were cooked in a ground oven.

Dingos were used for hunting in the past and were trained to locate various animals and even hunt them down and bring them back to camp. They are very good at sniffing out any type of meat, especially goannas, porcupine, possum.

Peggy Patrick can remember riding dingos like a horse when she was a baby. Her family had a paperbark house for their pet dingos to stay warm in during the cold weather.

During the cold weather dingos often sing out and howl at night because they are very cold.

Dingos are totemic for some Kija people and has special cultural significance; it is considered an important animal by Kija people. It has the **jawalyi** skin.

Placing poisoned baits to kill dingos is considered cruel and wrong. The dingos occasionally kill small calves but this is the fault of the mother not looking after the calf rather than the dingo. Poisoning dingos also reminds people of times when countrymen were poisoned in a similar way.

Kangaroos and wallabies

In the past kangaroos were hunted with dogs or trained dingos, they would be driven into gorges where it was easier to spear them. There is a gorge near Texas Downs homestead where this used to be done when Winnie was a young girl. In the past kangaroo fur was used to make a cockrag for men and skirt for girls.

The word **jiyirriny** can be used to describe any kangaroo or wallaby (macropod).

Red Kangaroo
Macropus rufus

Jarlangarnany
Wawurri
Wawirriny

This is a tall, strongly built kangaroo with large ears and strong arms. It is common in drier areas, especially around Gordon Downs. It has a large amount of excellent tasting meat and is recognised for its size and strength; the fur is generally a red colour.

Jarlangarnany has the marks from ochre under his armpits from the dreamtime when he was a hunter who used to hide his smell by rubbing himself with ochre, especially in the armpit area. It has the **jakarra** skin.

Hill Kangaroo, Common Wallaroo, Euro
Macropus robustus

Parawul

These kangaroos are very common and they have brown coloured fur. There are a lot around Norton Bore and Chinaman's Gardens. The flesh is excellent food; it is generally cooked in a ground oven.

This is the mother of **jirrkany**. It has the **nyawurru** skin.

White Hill Kangaroo
Macropus robustus

Kawurrngarntil

This hill kangaroo has pale fur and is quite common. The meat is excellent food and is often cooked in a ground oven.

It has the **nyawana** skin.

Hill Kangaroo, Antilopine Wallaroo
Macropus antilopinus

Jirrkany
Murtany

The meat can be eaten after roasting, it is one of the best bush meats. There are many these kangaroos around and they are the most commonly seen. This is the mother of **Jarlangarnany**, the Common Wallaroo and was married to the moon, **karnkiny**, in the dreamtime.

There is a sacred site for this kangaroo near Norton Bore on Violet Valley Station (17°13'07S/128°03'21"E). It is an area where increase ceremonies are undertaken so that there will be more kangaroos in the next season.

This has the **jangari** skin.

River Country or Agile Wallaby
Macropus agilis

Warlpawuny

This small kangaroo is generally found around river country, it is a good swimmer. The meat is excellent food; it is quite tender. There are a lot around Lake Argyle and the ADM mine area, they are good swimmers and have a pale stripe on their face.

It has the **jampin** skin.

Nail-tail Wallaby or Left-hand Kangaroo
Onychogalea unguifera

Kururrungkuny
Wurtuwurturrji
Wurturrwurturrji
Wurturtu
Kumpurnany
Kuruwurrungku

This wallaby holds its left arm in a strange way when it hops around. It has a sharp nail in the end of its tail. Often when it is hopping it makes a 'ool...ool...ool' sound and some of the Kija names are based on this sound.

The flesh can be eaten after roasting on hot coals or cooking in a ground oven.

This kangaroo is special for kids. If a little baby is slow to move around or walk, it is placed in the nest of this wallaby for a little while and the baby will then start to move around and walk quickly.

It has the **juwurru** and **janama / jawan** skins.

Short-eared Rock Wallaby
Petrogale brachyotis

Marluwal

This small wallaby lives in rocky country; it moves very quickly over rocky areas and is quite shy. The meat can be eaten after roasting; it is very tasty. In the past they were common around Rukuny, Crocodile Hole, but there are less there now.

It has the **nakarra** skin.

Spectacled Hare-wallaby
Lagorchestes conspicillatus

Murlukurnturllkurnturllji

This small wallaby used to be around but is no longer seen. The flesh was tender and tasty. It has the **janama / jawan** skin and the Kija name refers to the yellow or orange colour around the eyes.

FROGS

All frogs can be used as bait when fishing. In the past several species were eaten but they are not eaten now, though it is well known that desert people still eat them.

Tadpoles are called **Kiljirringkiny** or **Nyawapany**, which refers to the tail during this phase of their life cycle.

There is a sacred site for frogs near Purnululu, check for more detail with Shirley Drill.

Sand Frog, Burrowing Frog
Limnodastes ornatus

Nangalanangala
Jilangarnal

In the past these small frogs were dug up and eaten, but they have not been eaten in recent times. The meat is tasty. People from language groups in desert areas eat them. These frogs can also be used as bait when fishing with a hand line.

Green Tree Frog
Litoria caerulea

Laarnngarnany

This large frog lives in wet areas and eats insects and spiders; it has a slimey, unpleasant skin. They are commonly found in toilets and laundries in houses nowadays.

Rocket Frog, Sharp-nosed Frog
Litoria nasuta

Jirrakinny
Jirrakeny

There is a strong dreamtime story for this frog. It is a fast moving small frog. It might have the jangala skin. It is good for bait when fishing with a handline.

Brown Frog
Neobatrachus aquilonius

Wukiny
Wukeny

This frog was eaten in the past and is still eaten by some desert people. It makes a noise like 'wuk...wuk...wuk' and the Kija name is based on the call.

INSECTS

Red Dragonfly
Odonata, Anisoptera

Pirrinyuwulji
Pirrinyulji

These insects look like helicopters and have the ability to hover in the air like **marrkmarrkji** (Grey Goshawk). They are often seen around water. There are many different types with different colours and shapes.

There is an important creation legend about **pirrinyuwulji**, **kurrantal** (the brolga) and the green tree frog.

Bush Cockroach

Kumpulangil

Blattodea

Kumpulanginy

Kumpulangil is often found under leaves and in rotten logs. It runs around with its backside pointed up and squirts juice at you; this juice can cause temporary blindness. It has the **nyaajarri** skin.

Praying mantids
Mantodea

Warrernji

Children must not play with **warrernji**, if they hurt or kill one, the chid will be sickly and unwell for the rest of its life.

Earwig
Dermaptera

These are often seen on the ground after heavy rains. They are like white ants, but have the pinchers on the other end. Check whether they occur in the Kimberley.

Small Grasshopper
Orthoptera, Caelifera, *Macrotona* sp.

Kirntirlji

There are many types of **kirntirlji**; they are all good to use as bait when fishing if no meat is available. It has the juwurru skin. **Wartu** for **malnginji**.

Grasshopper
Orthoptera, Caelifera

Pirlpilji
Pirlpirilji

This large grasshopper often occurs in large numbers. They can be caught by digging a deep hole and chasing **pirlpilji** towards it, when they jump in, they cannot get out. They are then collected and lightly roasted in hot ashes and the crunchy bodies eaten. They can also be used as bait for fishing with a handline.

Big Grasshopper
Orthoptera, Caelifera

Kerlampawuny
Kelampawuny

These large grasshoppers can also be used as bait when fishing.

Big Locust
Orthoptera, Caelifera, ?

Malnginji

This insect often occurs in large numbers and cleans up (eats) all the leaves. They are sometimes big enough to break windows in cars and block up the radiator with their bodies. In the past old people used to cook them in a pile of spinifex and eat them, it was good meat.

Red Grasshopper
Orthoptera, Caelifera

Murrkuny

These smaller, solid grasshoppers can be used as bait when fishing if no meat is available. It has the **jungurra** skin and stays on red ground country.

Green Katydid

Kirinyil

Orthoptera, *Caedicia* sp.

Kerinyil

Kirinyil sings out loud in the cold weather of the mid dry season. This insect is not touched or harmed as it plays an important role in the cold weather time. The Kija name is based on the sound of the call.

Stick Insect
Phasmatodea, Phylliidae

Purnarrany
Purnarra

These insects are difficult to see as they look like sticks, they move in a jerking manner. Madigan Thomas has **purnarrany** for a dreaming.

Lice
Phthiraptera, *Pediculus humanus*

Yiwiny
Yarlarliny

These small insects cause bad itching and discolouration of the skin. There is another type of yellow louse called **yarlarliny**.

Cicada
Hemiptera, Cicadidae

Lirrinil
Nirrinel
Lirrinel
Lirrintel

This insect makes the most noise in the build up weather when it is very hot, in some areas it makes a very loud noise. The skins or skeletons are often seen on tree trunks.

These insects are eaten, or boiled in water and the liquid drunk, by didgeridu players to improve their ability to play.

Water scorpion, Toe-cutter
Hemiptera, Nepidae, *Ranatra* sp.

Pintirijkel

These large insects have strong front legs like pinchers, they have a very nasty bite and must be avoided. In the past they were eaten but have not been eaten in recent times.

Lady-Bugs
Coleoptera, Coccinellidae

Linkirrpal
Linkirrji
Linkirril

There are many types of **linkirrpal**; all have hard shells and the Kija name means hard skeleton or shell.

Beetles
Coleoptera, Lucanidae, *Lamprima* sp. **Larntiny**

Lantiny

These large beetles are often seen flying around at night near bright lights. If they land on you they grip very tightly and are hard to pull off. They often fly into campfires, but can fly out again before getting cooked.

Witchetty grub
Larvae stage of many taxa

Parnganyil
Lakarnel
Larkarnpu
Parnganyel

These fat white grubs are often found in rotting wood and trunks of live trees. They can be lightly roasted and eaten, or eaten raw; they are very tasty.

The meat can be eaten by people who in mourning and cannot eat red meat. In the past the fat was rubbed into the necks of people in mourning to produce a smell of 'mourning'.

Young men can not eat them until they have been through initiation ceremony, it is a test by rainbow serpents for young men to see if they can follow law and not eat the tasty meat.

House fly
Diptera, Muscidae

Purnul

These small black flies are very common, especially in areas with a lot of cattle; they can be very annoying when occurring in large numbers.

March fly
Diptera, Tabanidae

Kurrjarlji
Kurrjal

These large flies are relatively slow flying and give a painful 'bite'; they most often attack the lower legs and ankles around dusk. They bite the most around the **minyjiwarra**, black plum, fruiting time.

Blow fly
Diptera, Calliphoridae

Werreralr
Werreral
Werreral
Werreral
Werreralji

These large flies are attracted to meat where they lay eggs that become maggots, **wanyi** or **wanyiny**.

Fireflies
Check identification

Ngurrwangarnal

Ngurrwangarnal is often seen around **ngurrwany**, the white currant, and when fireflies are plentiful it indicates that the **ngurrwany** tree has fruit.

Mosquitoes
Diptera, Culicidae

Nyiwin
Nyiwinji

Often found in areas where there is surface water, they cause itchy sores and are very annoying especially at dusk and dawn. They can be kept away by burning cypress pine or conkerberry wood on the fire.

Moths and Butterflies
Lepidoptera

Warlimarrkul

There are many types of **warlimarrkul**, the Kija name can not be spoken by young men until they have been through initiation.

Caterpillar
Larva stage of many taxa

Jumpayil
Pupukarral

These names can be used for any caterpillar that has no hair.

Hairy Caterpillar
Larva stage of ?

Nyingkiny

The hairs from these caterpillars cause severe itching, rashes and swelling. The caterpillar often occurs in **malawany** or **mangunyji** (*Barringtonia acutangula*) trees.

Ants

Any ant can be called **rakiny** or **rakil**, though several species have their own names and are well known.

Green tree ant
Hymenoptera, *Oecophylla smaragdina* **Wawalel**

Wawalji

Wawal
Wawale

These ants occur in spring jungles and thick bush; they build a nest, **wawarrel** of leaves in the tree. They have a sharp painful sting, but it only hurts for a short time. The nests and eggs can be squeezed and the juice collected, it is drunk to treat sickness, especially colds and influenza.

When the juice is drunk it improves the voice of singers in ceremonies. In the past it was squeezed into the shell of the boab fruit, as there were no other containers.

Red meat ant
Hymenoptera, *Iridomyrmex* spp.

Jangalanganany

These ants form large nests under the ground, they are attracted to meat and all meat scraps are burnt around campsites so that these ants don't come into camp. These ants move quickly. They have the **jangala** skin.

Bull ant
Hymenoptera, *Myrmecia* spp.

Thengawul
Kurnkany
Pinyinyiny

**Tengawiny
Tingawiny**

These large black ants are cheeky and have a very bad bite; it causes a large lump to form and is painful for a long time. It has the **jampin** skin.

Ginger ant
Hymenoptera,

**Tingawuniny
Thewngawininy**

These small orange ants often occur in large numbers. They give a painful, stinging bite. This ant has the jampin skin.

Strong smelling ant
Hymenoptera,

Kunyurrji

Check identification, a strong smelling ant.

Black sugar ant
Hymenoptera, *Ochetellus* spp., *Tapinoma* spp.

Kija name restricted

This small black ant likes to eat sweet things like sugar and biscuits. Its name can not spoken aloud in the presence of women according to Kija law.

Ant-beds, termites, white-ants
Isoptera, Termitidae

**Jamentel
Lawaral
Ngawakul**

The soft white ants can be eaten.

Sugarbag, native bee-hives, are often found in the large rounded ant hills near Camel Creek and March Fly Creek on the Great Northern Highway. The dry grass from inside ant-beds can be used to light fires in the wet season when there is nothing dry around to light a fire.

Ant-bed can be mixed with water and used to treat burns, broken bones and babies when they have 'hotness'. It is also used to close the top of babies' heads, when they are very young. You can also eat it to treat stomach pain.

Young boys can't eat the ants or look at them, if they do there will be biggest rain and floods.

There are different types of ant-beds in different types of country. Check the name **lajkili**, Peggy Patrick.

Paper wasp
Hymenoptera, Vespidae

Merrempernel

These small wasps build large papery nests where they lay eggs. When disturbed they give a very painful sting, the nests must be avoided when walking in the bush.

Nests are often found under rock overhangs, in caves and hanging under leaves, especially pandanus leaves.

Hornet wasp
Hymenoptera,

Purrngunngunji

This large yellow and black wasp is often seen heading towards waterholes and springs to get more material to build its mud nest. If you are lost and don't know where water is you can follow **purrngunngunji** and it will lead you to water.

Sugarbag, native bee-hives

There are three types of sugarbag in Kija country.

Kayarriny or **purrwurriji**, is found in the ground or at the roots of trees, it has dark, strong tasting honey and dark bees. The brood from **kayirriny** is bitter if eaten, but it can be diluted in water and drunk to treat stomach pain. The wax is **jurnukpany**. It has the **juwurru** skin.

Nawiny, **ngariny** or **kerrayiny** occurs in trees, it has a large bee called **muwal** that is pale in colour. It has the **jungurra** skin.

Perangkul or **ngarel**, is also found in trees but it has a smaller bee that is light black in colour. The brood from **perangkul** can be eaten 'straight away' to treat constipation caused by eating too much meat. It has the **nakarra** skin. The honey from this sugarbag is very sweet.

Honey from any sugarbag is called **kirranga** or **kirrangum**, and hard sticky honey (crystallised) is called **kimerem**.

Wax from sugarbag is called kangkerre, ngaaniny or ngarnim. **In the past it was used to fix heads to spears and to form the mouthpiece of a didgeridu.**

The pollen is called **lernjim**, **lernjil**, **larnel** or **larnany**.

The shit found in the bottom of the beehive is called **jarum** if it is light in colour, or **kurla** if it is darker.

The wax is called **jurnukpany**, **kangkarre** or **jurnukji**.

The entrance or door is called **murlji**.

The bees are called **ngawuram** (check which type they belong to).

Sugarbag is an important food resource and a great deal of time in the bush is spent hunting for sugarbag. Genrally trees and anthills are inspected for places where bees are going in and out of an entrance hole. Occasionally the trunks of trees are leaned against to try to hear the bees working inside.

Once the nest has been located in a tree, the area is chopped open to reveal the hive and the honey, wax and pollen are taken out and placed in billycans. If the area cannot be chopped open due the hardness of the wood or it is impossible to get an axe at it, then a brush can be pushed in and the honey sucked off.

If a nest is located in the ground or in an ant nest it is dug out with crow bars and digging sticks. Often the nests in anthills require a large hole to be dug into the nest.

Sugarleaf or Lerp scale
Hemiptera; Psyllidae

Pinkany
Warrayayiny

Lerp scale, **pinkany**, is found on the leaves of various trees. The branches are pulled off and the scale allowed to dry out, then knocked off the leaves and eaten.

When found on **mawurru**, *Eucalyptus dichromophloia*, it is called **pinkany**, and when found on **pilirnji**, *Eucalyptus camaldulensis* it is called **warrayayiny**.

OTHER ANIMALS

Spiders
Arachnida

Parnji

Any kind of spider is called **parnji**; there are many different types.

The Red-backed spider is dangerous and has a poisonous bite; it can cause severe swelling and lumps to form in the armpits and groin areas. There is another large spider that lives in a burrow, it also has a painful bite. If there are burrows in the area you should not camp there.

Scorpion
Arachnida, Scorpiones

Kalarrwurany
Kalarrurany

The sting is very painful and often makes you feel sick in the stomach.
Kalarrwurany lives in burrows in the ground, they can get very large and aggressive.

Small Kangaroo Tick
Arachnida,

Pirlinyil
Pirliny

These small ticks are found on kangaroos, they also get onto people. In some areas they are very common, especially where there are lots of cattle. They are hard to pull off and cause a swollen red itchy lump that takes a week or two to heal.

They also live in dense grass and on the bauhinia tree. In areas where the grass has been burnt, they are far less common.

Big Blue Tick
Arachnida,

Werlkalel
Wekerlel

These large blue ticks are most commonly seen on dogs. The longer they are on a dog the bigger they become, when they are full of blood they tend to fall off.

Centipede
Chilopoda

Pirrkulany

The sting from **pirrkulany** is very painful and remains sore for several days. Large ones are often seen around houses, where they sneak around when it is dark. They are common under logs, rocks and leaves in the bush. They often crawl into swags and calico to hide and are most common after rain.

Snail
Gastropoda

Parlilmal
Palilmal

Small snails are found in the bush during the wet season and their shells are found all year round. The large Baler shell from saltwater areas has the same name and in the past it was used to carry water when walking long distances.

Earth Worm
Check identification

Wunthul
Wunthuny
Wuntul

This animal is blind and has no use.

Water walking bug
Check identification

Linkirrel

This small insect is seen skimming across the top of slow moving water in springs and waterholes.

Water Leech
Check identification

Jirlanyil
Jirlany
Jirlanype

Jirlanyil is found in water in swamps and waterholes, it sucks the blood from animals and people. Magpie Geese eat them.

Freshwater Mussel
Velesunio wilsonii

Kurruwul
Kerrewul
Kurlungarnal

The flesh is eaten after roasting in hot coals or boiling water. They are found around the edges of waterholes and rivers, by feeling around with your feet and your hands. Sometimes they are plentiful and can found at all times of year.

The shell has a pretty lustrous sheen and is sometimes called pearl-shell.

Young boys can not speak the Kija name, as it is a little rude. You can eat this food when you are in mourning.

Small bivalve
Check scientific name

Kerrewul
Kurruul

These are considered to be baby mussels. Many birds eat them. Young boys can not speak the Kija name, as it is a little rude.

Freshwater Prawn
Macrobrachium spp., *Caridina* spp.

Jalijkil
Jalijkel

The flesh can be eaten after roasting in hot ashes. They can be caught on small fishing lines, in the past they were caught using rolls of spinifex pushed through the water, or by using **malawany** (*Barringtonia acutangula*) as a fish poison to make them float to the surface.

Jalijkil can also be used as bait when fishing, however most people think they are too tasty to be used for bait.

Check whether they were hunted with torches in the past.

Freshwater Crab
Check identification

Murlikurruul

The meat can be eaten to treat colds and congestion. They can be eaten raw or lightly roasted.

FERAL and INTRODUCED ANIMALS

Cat
Felis catus

Ngirrngiluwiny
Pujipujil
Pujikatji
Ngirrngiliny

Some people eat the roasted meat from wild cats. It was eaten by Kija people in the past but has not been eaten in recent times. In the past they were occasionally used when hunting to catch ducks and goannas, which they killed and then dragged back to the camp.

It is uncertain whether this animal was brought in by **kartiya** or if it was here before white settlement.

It has the **janama / jawan** skin.

Black rat
Rattus rattus

Jaranel
Nyirлимпil

This introduced rat has the same Kija name as native mice, because it is quite similar.

House mouse
Mus musculus

Jaranel
Nyirлимпil

This introduced rat has the same Kija name as native mice, because it is quite similar.

Camp dogs
Canis familiaris

Ngarriyanyji
Julany

These dogs are quieter than dingos, which are considered wild dogs. Some people say they have the **jawalyi** skin other people say they get their skin from their owners, becoming their son's or daughter's skin.

Sheep
Ovis aries

Kukunjal

The meat is excellent food. In the past there sheep on many pastoral leases, including Bow River, there have not been any in recent times.

Goats
Caprus hircus

Miyingkajil (any goat)
Nanikul (nanny goat)
Pilikutji (billy goat)

Goats where commonly used for meat and milk by pastoral properties, missions and settlements in the past. The meat from billy goats has a strong unpleasant smell, while the meat from castrated males was very tasty.

The Kija name, **Miyingkajil**, mimics the sound made by goats.

Horse
Equus caballus

Timanany
Yawartany

Horses where used a lot by older people in station work, and are still preferred by many people as they do not stir up cattle when mustering like helicopters.

Donkey
Equus asinus

Yartemmerewany
Tangkiny

There are large numbers of wild donkeys in the east Kimberley. The first Kija name refers to the distinctive long ears.

Pig
Sus scrofa

Ngurrkngurrkjil
Pikipikil

There are a few feral pigs in the east Kimberley, but not large numbers. The meat can be eaten and is very tasty. The first Kija name refers to the car-like sound that pigs make sometimes.

One-humped Camel
Camelus dromedarius

Kamulel
Yupyupkajil

In the past, especially during the shooting times, there were many camels around; they were mainly used to carry heavy loads especially into places like Greenvale and

Bedford Downs. There are still some feral ones but they are mainly further south. The Kija name, **Yupyupkijal**, refers to the way that camels bob their heads up and down when they walk.

Cattle or bullock
Bos taurus, *B. indicus*

Pulumanel (cow)
Pulumanji (small bull or steer)
Purrunany (big bull)
Kurtajikurtaji
Pulngayirri (big bull)
Ngalil (cow)

The meat is excellent food; there are many bullocks in the east Kimberley and in some areas there are too many cattle and they are damaging country.

5. JARU PLANTS AND ANIMALS

Aboriginal flora and fauna knowledge from the south east Kimberley, north Australia.

This manuscript was developed during the '*Plants and Animals of Kija, Jaru country: Aboriginal knowledge conservation and ethnobiological research in the upper Ord catchment*' project.

The project is funded by the **Ord-Bonaparte Program** and the **ATSIC Wunan Regional Council**.

The project is being managed by the **Kimberley Land Council** and **Kimberley Language Resource Centre**.

The data was recorded by **Glenn Wightman** and **Joe Blythe**.

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Previous ethnobotanical research

Tas Tsunoda has been working on the Jaru language since the early 1970's, he has recorded names of plants and animals and this data has been incorporated into the draft Jaru dictionary (KLRC 1992).

FIELDWORK

Meetings were held at Warmun and Halls Creek in March 2002 to plan fieldwork and discuss the aims and methods of the project. These meetings were attended by traditional owners, Kimberley Land Council and Ord-Bonaparte Program staff members.

Fieldwork was undertaken between May 2002 and June 2003 with a variety of Jaru people over a various parts of Jaru land. Details of fieldwork are outlined in Chapter 2 of this report.

JARU SEASONS

Jaru people divide the annual cycle of weather patterns into five major seasons. The timing of these seasons can vary a lot from year to year as the onset and duration of seasons can be significantly different each year. We have provided a guide to the approximate timing of these seasons in relation to the Gregorian calendar months, but it must be recognised that this is only a guide.

It should also be noted that the seasons outlined here are only the major annual seasons, within these seasons there are other weather patterns and climatic events recognised by Jaru people.

Malirri this is the time of cold weather, when the temperature gets very low at night. Day time temperatures are also lower and the air is very dry. Approximately May to July.

This is time for lighting grass fires to clean up country and promote fresh growth of grasses and other plants. The period after grass fires is called **nunjarl**, and it is the best time to hunt for goannas, **jarrambayi**, as they are fat and slow to move.

It is also a good time to hunt for blue-tongue lizards, **luma**, kangaroos, **jaji** and porcupines, **girnanyji** as they are fat and tasty at this time of year. Bush turkeys, **jandura**, are also fat and tasty at this time of year, and it is the best time to hunt for them.

This is also the best time to hunt for yams as they are large and moist at this time. The yams from the desert bush potato, **buwura** or **bigurda**, can be dug up as they are now full sized, and have often caused the ground to crack above where they are growing. The small yams of the bush onion, **jurnda**, are also dug up and eaten at this time of year. This is also the best time of year to collect gum, **mardiwa**, from various trees, that can be eaten.

Barrangga this is the build-up time, when temperatures get higher and the humidity builds up and it begins to feel sticky. The Jaru term literally means the time of the sun, and the creeks and rivers have dried up and only big waterholes and springs contain water. Approximately August to November.

The small black fruit of conkerberry, **burnungarna**, are ripe and ready to be collected. The fruit of the bush orange, **jugurru** and the smaller variety of bush orange, **yumali** can be collected and eaten. Bush passionfruit, **yidiringgi**, also has ripe fruit that are very sweet and tasty. The black plum, **giyindi**, is forming fruit, and in areas north of Jaru country the green plum will be fruiting.

The Blue-tongue Lizard, **luma**, can be caught, cooked and eaten at this time as they are often seen moving to find a cooler place to rest. Emus, **wanyayaru**, are good to eat at this time of year and porcupines, **girnanyji**, are also good to eat.

Ngababura the wet season, it is the time of monsoonal weather, with rainstorms, thunder and lightning, rivers and creeks are flowing strongly and often flood. The grasses get green and grow tall and yams put up shoots and begin to fatten up. Approximately December to March.

The sweet black fruit of the black plum, **giyindi** get ripe and are collected and eaten. In the past these fruit were sundried and stored for later use. The conkerberry, **burnungarna**, the bush cucumber, **ngawuraga**, and the white currant, **runggu** produce all produce their tasty fruit.

Large sand goannas, **jarrambayi** are hunted at this time of year as they are full of fat at this time of year. Grasshoppers, **bilbilji** are common towards the end of **ngababu**. This is the best time of year to catch fish, **yawu** or **yagu** as they are all full grown and fat, and there is a lot of food in the creeks and rivers for the fish to eat.

Wurrgal this is the time of green grass after the rain has stopped, but before the ground dries out and the rivers and creeks stop flowing. Approximately the month of April.

Grasshoppers, **bilbilji** are very common at this time of year and often can be seen in large groups eating the grass and shrubs. Bush turkeys, **jandura** and emus, **wanyayaru**, are seen chasing and eating the grasshoppers. Prawns, **jali**, and fish, **yawu**, are good to catch as the waters slow and then begin to dry out. Sugarbag, **ngarlu**, is full of honey at this time of year, though they can be harvested at anytime.

JARU HABITATS

BIRLIYIN; BINDIRRI; BALN.GANA = flat country, open spaces

Source: Birliyin (Barbara Sturt)

Bindirri (Stan Brumby)

Baln.gana (Lily Banks)

GAWARRI; BAMARR = stone country, rocky places, high cliffs

Source: Gawarri (Barbara Sturt and Maggie Long)

Bamarr (Barbara Sturt and Maggie Long)

minyjurr black rocky hill / limestone

manyjarl quartz rock

gawarri red rock of Flora Valley Gorge, Sawpit Gorge, etc.

Source: Lily Banks and Barbara Sturt, Old Flora Valley

BIN.GA = river country

Source: Barbara Sturt

WARLA (WARLU?) = desert, sand country

Source: Stan Brumby

used to describe the area around Ringer Soak, Gordon Downs, Sturt Creek and Billiluna

WIRRIDI, red sand country, open treeless areas, often has red dust storms (from Bonnie E and Janelle).

JARU LANGUAGE

Jaru is an Aboriginal language spoken in the east Kimberley area of north Australia.

A draft Jaru Dictionary has been produced by the Kimberley Language Resource Centre (KLRC 1992). A list of names from this dictionary that relate to plants is found at the end of this document.

Spelling Jaru words

The orthography used here is recommended by the Kimberley Language Resource Centre (KLRC 1999). It has been in use since 1990 and prior to that Jaru was written using the south Kimberley orthography.

Consonants

	Bilabial Velar	Dental	Alveolar	Retroflex	Palatal
Stops	b		d	rd	j g
Nasals	m		n	rn	ny ng
Laterals			l	rl	ly
Rhotics			rr	r	
Glides	w				y

Vowels

	Front	Central	Back
High short	i		u
Long	iyi		uwu
Mid short			
Long			
Low short		a	
Long		aa	

Pronunciation of Jaru sounds

The list below provides approximate English equivalents of the letters used in the Jaru spelling system.

- a like the **u** in **but**
- aa like the **a** in **father**
- b like the **b** in **boat** and **big**, but also like the **p** in **spin**
- d like the **d** in **dog**; sometimes like the **t** in **stun**
- rd like the **rt** sound when an American says **card** or **cart**, but the tongue curls back a little more
- g like the **g** in **goat**, but also like the **k** in **skite**

i	like the i in pit , but also like the ee in feet
iyi	like the ea in easily
j	like the j in jam
l	like the l in lock
rl	like the rl when an American says girl or curl
ly	like the lli in million . Not like the ly in happily
m	like the m in meat
n	like the n in nut
rn	like the rn when an American says barn
ng	like the ng in singing and bring
ny	like the ni in onion . Not like the ny sound in many
r	like the r in red and orange
rr	like the Scottish 'r' or the tt in butter when spoken very fast
u	like the u in put
uwu	like the oo in pool
w	like the w in wait
y	like the y in yellow

NOTE: There are two spelling conventions used when certain sounds come together. These are necessary to distinguish the sequence of sounds from the single sound **ng** as in **bring**. The sequences of sounds are:

n.g	like the two sounds n plus g when they come together as in engorge .
ngg	like the two sounds ng plus g when they come together as in English finger .

In this document, we are recording two types or dialects of Jaru, a western dialect called **Wawarl** and an eastern dialect called **Nyininy**. Where plants have different dialect names, we have indicated this by putting the dialect name after the names.

Plant names followed by an asterix have been recorded by Glenn Wightman and need to be checked by a linguist.

JARU PLANT NAMES AND USES

The general Jaru terms for trees are **garndi** and **burnu**.

Seeds are called **ganji** or **jurrulunggu**.

The Jaru term for grass in general is **yuga**.

Food from plants (vegetable food) is called **mangarri**.

Abelmoschus ficulneus
MALVACEAE

GMW 7490

gunuga

The soft white pith inside the stem can be eaten after lightly roasting the stems on a fire. The stringy yams can also be eaten after lightly roasting; they are very fibrous. They are available during the monsoonal wet season and for a short time after the rains have finished.

Abrus precatorius
FABACEAE

jirrindi

The hard, red and black seeds have been used in the past for abortions. This plant only occurs in northern Jaru areas, it is not common.

Acacia acradenia
MIMOSACEAE

‘Wattle’
GMW 8069

binbali

The gum found on the stems and branches can be eaten. This plant is considered the brother of **barrabi** or **barrawi**, *Acacia holosericea*. This association refers to the visual similarity of the two plants.

Acacia ampliceps
MIMOSACEAE

‘Wattle’
GMW 7464, 8078

mardiwa
mardiya
marduwa

The gum, *marduwa*, from the trunk and branches can be eaten; it is also eaten by bush turkeys, **bin.girrjaru**, **garubgaji** or **jandura**. The gum can be boiled and added to ochre, bush paint, to glue the ochre to the canvas and to keep the colour strong.

Acacia bivenosa
MIMOSACEAE

GMW 7482

burlmany

The leaves are eaten by camels and goats. The timber is good firewood. Witchetty grubs, **lagan** or **laju** are often found in the roots and stem bases. This small tree has yellow flowers.

The red gum on the stems is eaten by bush turkeys, **bin.girrjaru**, **garubgaji** or **jandura**. Mistletoes, **yunggurlmari**, with edible fruit are often found on this tree.

Acacia coleii
MIMOSACEAE

‘Silver Wattle’
GMW 7481 & TT

barrabi (W)
barrawi (N)

The leaves and pods can be used to make soap; they are rubbed in the hands with water and make a strong soapy lather. This can be used to clean sores or simply to wash with.

The wood from straight stems and branches can be used to make spears with flattened heads called **jalbiny**.

The leafy branches are also used like a plate to place food on and as a cover over food to keep flies off the food.

Acacia coriacea
MIMOSACEAE

‘Wattle’
GMW 8015

jirrindi

The long beans or pods can be eaten. They are heated on the fire and then eaten. The bark is black with a red-orange colour underneath. The wood is used to make boomerangs, **gurrubardu** (N) or **garli** (W), as it is hard and strong.

Acacia cowleana
MIMOSACEAE

GMW 7470 & TT

barrabi

The small black seeds, **ngulu**, are collected and ground up into flour. This flour is made into small dampers, cooked in ashes and hot sand, and then eaten.

Acacia farnesiana 'Thorn Bush'
CAESALPINIACEAE GMW 7484

murrulumbu * (N)
gulumarra* (W)
bagawaga

This bush has many sharp prickles, **baga**. The bark is boiled in water and the liquid used as a wash to treat skin sores, it dries them out and makes them heal quickly.

The branches can be used to sweep around a bush camp, the prickles need to be cleaned off first.

This plant is very similar to *Dichrostachys spicata*, which has the same Jaru names.

Acacia gonoclada
MIMOSACEAE

burrurn
GMW **gurndarri**

Witchetty grubs are found in the stems and roots of this tree. The flowers are visited by bees that collect pollen to take back to the hive. The flowers look just like the pollen stored in the hives.

Acacia hemignosta
MIMOSACEAE

'Wattle'
GMW & TT

warrayayi

The gum from this tree can be eaten. The flowers on this tree can be yellow or whitish in colour.

Acacia holosericea
MIMOSACEAE

barrabi

The straight stems and branches can be used to make spear shafts.

The leafy branches are also used like a plate to place food on and as a cover over food to keep flies off the food.

Acacia laccata
MIMOSACEAE

guwarr

The seeds are collected and ground into flour to make johnny cakes.

Acacia lysiphloia
MIMOSACEAE

'Turpentine'
GMW 7468 & TT

burrurn(N)
burrirn(W)

The roots of this small tree often contain witchetty grubs, **lagan** or **laju**, which are excellent food. The hole of the grub can be found by looking for the small wood shavings that occur at the entrance to the burrow.

The hard wood from the branches that form a vee shape is used by children to make slingshots, known locally as *shanghais*.

<i>Acacia orthocarpa</i>		binyinyi* (W)
MIMOSACEAE	GMW 7476	biirdbiny* (N)

The branches are placed on a fire and the smoke used to heal people who have sore stomachs, or stomach disorders such as diarrhoea. This plant grows on hillsides, **bamarr**, and was found by the informants at Old Town.

<i>Acacia plectocarpa</i>	'Wattle'
MIMOSACEAE	GMW 7491

The smoke from branches placed on a fire is used to heal people with colds or sore stomachs including diarrhoea.

This plant is closely related to **binyinyi** or **biirdbiny** (*Acacia orthocarpa*).

<i>Acacia pyrifolia</i>	'Wattle'	largarrbarra*
MIMOSACEAE		GMW 8021

This plant has no specific use; it has grey leaves and prickles on the leaves and stems.

<i>Acacia stenophylla</i>	'Wattle'	burlwirri
MIMOSACEAE		bugurlbirri

The gum can be eaten; it is soft and has a salty taste. This tree grows in creek-lines and areas that are swampy in the rainy season.

<i>Acacia</i> sp. tall one		bundalyji (N)
MIMOSACEAE GMW		burruny (W)

Witchetty grubs, **laju** or **lagu**, are found in the stems and roots of this tree. Check the scientific name.

<i>Adansonia gregorii</i>	'Boab, Bottle Tree'	larrgardi
BOMBACACEAE	GMW & TT	

The soft pith inside the fruit can be eaten. Ripe fruit are collected and broken open to expose the soft yellowish pith. This is crushed up with water and sugar, and then eaten; it is very tasty. Young or unripe fruit can be buried in warm ground to make them ripe and ready to eat. (This was the more traditional way of eating them). The seeds found inside the pith can also be dried and eaten like peanuts. The fruits are also often carved and / or painted and sold to tourists.

There is an old story about a giant bottle tree being pulled out of the ground at Nyunga Lake in the dreamtime. The creeks now running in to the lake follow the line of the roots as they were pulled out of the ground.

Check **nambiyin** and **nyawurru** skin.

Aeschynomene indica
FABACEAE

gilirn

This plant grows in the water in spring areas; it has very light wood and no specific use.

Allocasuarina decaisneana
CASUARINACEAE

‘Desert Oak’
GMW

yarnandi

This tree occurs in drier parts of Jaru country, around Ringers Soak and Bililuna, it does not occur in northern Jaru areas. The seed pods are called **yinindi**.

Alstonia actinophylla
APOCYNACEAE

‘Corkwood, Milkwood’

This tree is only found in a few places in northern Jaru areas, such as Purnululu. There are less plants around now than in the past possibly due to hotter fires in recent times.

Amyema bifurcate ‘Mistletoe’
LORANTHACEAE GMW 8018

yun.gurrmari
yun.gurmari

The fruit can be eaten when ripe, they are sweet and very sticky inside like chewing gum. This small plant grows on other trees and is eaten by many birds.

Antidesma ghesaembila
EUPHORBIACEAE

‘Black currant’
GMW

nguji

The sweet and tasty fruit are eaten when they are ripe, black. They are produced in the wet season. **Nguji** is found growing along the banks of rivers and creeks.

Atalaya hemiglauca
SAPINDACEAE

GMW

gurrwarang
barmbira

This tree often grows in black soil country; it is a good shade tree. The leafy twigs can be used as bush plates to keep food clean out bush. It has small white flowers.

Check the name **gurlu** as Maggie Long used this word at Caroline Pool.

Azadirachta indica
MELIACEAE

‘Neem tree, Monkey fruit’

no Jaru name

This tree is grown in gardens and the fruit are eaten by birds. The plant is occasionally seen growing in the bush where the seeds have been dropped by birds. The plant is used as medicine in India and other countries.

<i>Bauhinia cunninghamii</i>	'Bauhinia, Bohemia'	gunji
CAESALPINIACEAE	GMW & TT	

The red flowers can be sucked to obtain the sweet nectar.

Ashes from the burnt bark can be added to chewing tobacco to improve the flavour and make it stronger. The ash can also be used for cleaning teeth and making them whiter.

The **ngarlu** or sugarbag (native beehives) that is found in this tree is often very sweet, because the bees get the sweet pollen and nectar from the **gunji** flowers.

<i>Brachychiton diversifolius</i>	'Kurrajong'	wirlal
STERCULIACEAE	GMW & TT	

The seeds from this tree can be eaten; they are very tasty. The seeds are surrounded by short hairs that are cheeky (ie. make you itch); they are removed by rubbing the seeds in sand before eating them. The seeds can also be ground into a flour and then used to make dampers or johnny cakes.

<i>Brachychiton multicaulis</i> 'Red-flowered Kurrajong'	mararljaru
STERCULIACEAE	GMW

This small tree only grows in southern Jaru areas such as Bililuna and Christmas Creek. It has hairy yellow coloured fruit and the seeds can be eaten after lightly roasting. The seeds are a curry-like colour and are sweet to taste.

<i>Brachychiton viscidulus</i>	'Red-flowered Kurrajong'	miyaga
STERCULIACEAE	GMW & TT	

The seeds from this small tree can be eaten. The seeds are surrounded by short hairs that are cheeky; they are removed by rubbing the seeds in sand before eating them.

If the hairs are rubbed in the eyes, it can cause blindness.

<i>Brachystelma glabriflorum</i>	'Bush Potato'	banari
ASCLEPIADACEAE		

The yams can be eaten raw or lightly roasted on hot coals; they are one of the best bush foods. The stems come up during the rain time and the yams can be dug up in the late wet and early dry season. There are lots around the Lamboo area.

<i>Calotropis procera</i>	'Rubber Bush'	no Jaru name
ASCLEPIADACEAE	GMW	

This is an introduced weed and it has no Jaru name. It is a very bad weed in some areas, like at Warn.gu on the Elvire River. Cattle eat it when grass is scarce near the end of the dry season.

It is considered poisonous and is not even used as firewood. The fruit contain fluffy seeds like the seeds of bush banana, and the stems and leaves have white milky sap.

Calytrix brownii
MYRTACEAE

wunggun

The leaves have a strong smell when crushed; they are used to treat colds and congestion. This tree has tiny white flowers and sugarbag, **ngarlu**, is sometimes found in this shrub.

Calytrix exstipulata
MYRTACEAE

'Pink turkey bush'

wunggun

The flowers can be used by women as decoration, this plant only occurs in northern Jaru areas.

Canavalia papuana
FABACEAE

'Bush Bean'
GMW

digul

The beans or pods can be eaten after lightly roasting on hot coals and ashes. The beans are quite large and are picked when still green and soft.

Capparis lasiantha
CAPPARACEAE

'Wild Passionfruit'
GMW 7492

bambilyi (N)
yiringgi
yidiringgi

This plant is a creeper with thorns and it is usually found climbing the stems of trees. The fruit and seeds are like the commercial passionfruit that people grow in gardens.

The fruit can be eaten when they turn yellow then purple; they are very sweet and tasty. The fruit are ready in the early wet season.

Check the name **ngarlwanggurr**. (not known by Barbara Sturt, Bonnie Deegan and May Butcher). The term **yiringgi** may be used to refer to the small fruit.

Capparis umbonata
CAPPARACEAE

'Bush Orange'
GMW 7474

yuwunar (W)
yumali (N)
jugurru (N and W)

The fruit can be eaten when they turn yellow-brown in the early wet season, around December and January. Emus, **wanyayaru**, also like to eat the ripe fruit. If the fruit is not ripe, it can be buried in the ground for a while to make it ripen quicker.

The smoke from branches placed on a fire is used to heal people who have any type of sickness, but especially cold sickness.

The smoke is also used in funeral ceremonies to cleanse areas where the deceased lived and to keep away bad spirits in the future.

Check the word *yirdirringi* (referred to as “big one” cf. **yumali** “small one” by Maggie Long, 02.10.02)

Carissa lanceolata ‘Conkerberry’
APOCYNACEAE

GMW & TT

**burnungarna
mabura**

The fruit are eaten when they are ripe, black. They are very sweet and tasty and are sometimes found in large amounts. The branches can be used as a bush broom to sweep around a camp.

Dried branches are placed on a fire and the smoke is allowed to waft around small babies to make them strong and develop quickly. If a baby is slow to learn to walk, the smoke is wafted around the legs to make them stronger. It is also used to smoke people who feel unwell to make them feel healthy again.

The dried wood from branches and stems is also collected to burn as ‘bush incense’, to keep mosquitos and flies away. It works like an insect repellent.

The prickles are pushed into the base of warts to make them fall off.

Check the meaning of the name: burnu means tree / branch / twig and ngarna means denizen.

Cassytha filiformis
LAURACEAE

‘Dodder’
GMW & TT

**jilili
dalunggurra
mirdimirdi
yinyjarlarra**

The small white fruit can be eaten when they are ripe; they are sweet. The stems can be burnt and the smoke keeps mosquitoes away.

The stems are boiled in water for a long period, until they almost fall apart, and the liquid used as a wash to make hair become thick, healthy and dark.

Celtis philippensis
ULMACEAE

yimarl

This small plant grows in protected gorge areas, such as those in Purnululu, it is considered to be a smooth leaved version of the sandpaper fig. The fruit can be eaten but are not very tasty.

Chrysopogon fallax
POACEAE

‘Kangaroo grass’

**jajil
janjal**

The yellow, fleshy underground stems are dug up and eaten by kangaroos, especially when other food is scarce in the later dry season.

<i>Citrullus lanatus</i>	'Paddy melon'	girdban
CUCURBITACEAE	GMW	

The fruit of this creeper look like watermelons or round cucumbers; they are eaten by kangaroos, **jaji**, bush turkeys, **jandirra** and emus, but not by people. They are said to be sour and poisonous. They grow along rivers and in black soil country.

Girdban is recognised as being a countryman for the native cucumber.

<i>Citrullus lanatus</i>	'Water melon'	abinan
CUCURBITACEAE	GMW	

The fruit flesh can be eaten when it is red in colour. This is an introduced plant that grows wild in some areas that are wet for a long time.

The name **abinan** may have been adapted from another Aboriginal language.

<i>Citrullus sp.</i>	'Pie melon'	ngagurru
CUCURBITACEAE	GMW	

The oval shaped fruit stay green inside when they are ripe. The flesh can be eaten and often sugar is added to make it sweeter.

Check whether this is an introduced or native plant. It is considered to be native by Jaru people.

<i>Cleome viscosa</i>		no Jaru name
CAPPARACEAE	GMW 8002	

The leaves are rubbed around the inside of the eye socket to treat sore, infected eyes caused by flies. This has the effect of reducing the infection and pain. It has yellow flowers.

<i>Clerodendrum floribundum</i>	'Firestick Tree'	gunggala
VERBENACEAE	GMW 8010	

The dry straight stems are used as firesticks to make fire using the traditional drilling and friction method. The word **gunggala** refers to this plant and *Premna acuminata*; and can also be used to refer to fire-sticks, the wooden implements used to create fire.

The red and black fruit are eaten by birds.

<i>Cochlospermum fraseri</i>	'Yellow Kapok'	wayina
BIXACEAE	GMW & TT	gunyjali
		juwa

The swollen taproots of young plants are like a yam; they are dug up, lightly roasted and then eaten. The small roots can be chewed like a liquorice or sweet.

The thin branches are used as brushes to dip honey out of sugarbags that cannot be chopped open or occur in rocky areas and cannot be dug up. The ends are frayed with an axe or a rock to form a brush, this is then poked into the honey and pulled out and the end sucked to get the honey. These long brushes are called **wira**.

The fruit contain fibres that look like cotton wool or kapok, in the past women used this cotton wool when menstruating, it can also be used to stuff pillows. The bark can be used as a strong bush string to tie things up.

Cucumis melo 'Little Cucumber'

CUCURBITACEAE

GMW

ngawuraga

ngawurdaga

ngawiraga

The fruit look like small cucumbers and they are eaten when ripe. They are green when they're unripe or raw, **gurn.ga**, and white when they're ripe or cooked, **bunyjurr**.

They have a strong sweet smell when they are ripe at the end of the wet season and the beginning of the dry season. Bush Turkeys and Blue-tongue Lizards also eat the fruit.

Cycas pruinosa

'Black-boy, Cycad-palm'

CYCADACEAE

The seeds can be eaten after extensive preparation that includes soaking in running water and cooking for long periods. It was also used in the past to treat urinary tract infections. It is only found in the most northern Jaru areas near the Bungles.

Cymbidium canaliculatum 'Tree Orchid'

ORCHIDACEAE

mirrinymirrin

This orchid grows in bloodwood trees and some other trees, it is considered dangerous and should not be touched. Sugarbag in trees that have this plant on it are considered to be poisonous and must not be eaten. If it is eaten it can kill you and your children.

Cymbopogon bombycinus

POACEAE

'Lemon Grass'

GMW

giwiri

guwuru

This grass has a lemon-like smell when crushed; it is a little like Vicks. The leaves and stems are used as a medicine to treat colds, congestion and skin sores. The leaves and stems are boiled in water and the liquid used as washing and drinking medicine.

The leaves and stems can also be burnt on a fire to keep mosquitoes away, as long as there is smoke there will be no mosquitoes.

This grass can also be placed on hot coals, along with **manyanyi** and **marlan**, and then a little water poured on to make steam. This is used as a smoking medicine for small children who have congestion. It also has the effect of making the children grow up strong and healthy.

Check the name **guwuru**, it could refer to a different plant used for fish poison. Barbara Sturt reports that the same name is given to “little spinifex” and that this is the plant used for fish poison, 16.09.02.

<i>Cymbopogon procerus</i>	'Lemon Grass'	giwiri
POACEAE	GMW & TT	guwuru

This grass has a lemon-like smell when crushed; it is a little like Vicks. The leaves and stems are used as a medicine to treat colds, congestion and skin sores. The leaves and stems are boiled in water and the liquid used as washing and drinking medicine. It is also used to treat sore eyes. (SOURCE: Peter Ryder)

Check the name **guwuru**, it could refer to a different plant used for fish poison.

<i>Cynodon dactylon</i>	'Couch grass'	yuga
POACEAE		

This soft grass grows in spring areas and areas that stay wet for most of the year. It is also used to grow lawns by people in town.

<i>Cyperus bulbosus</i>	'Bush Onion'	jurnda
CYPERACEAE	GMW	yalga

The small yams are dug up and lightly roasted in hot ashes and sand. The dark skin is rubbed off and the small white yams are eaten. **Jurnda** can also be eaten without cooking, but the outer dark skin must be rubbed off first.

This plant often grows in sandy areas near rivers and on flood plains. It can sometimes be found in large numbers.

<i>Cyperus</i> sp.	'Sedge'	binjilgi (W)
CYPERACEAE	GMW	dilyji (N)

The soft, fibrous stems are used to clean the inner ear when it is itchy or full of wax.

<i>Dentella asperata</i>	ngabangarnungarnu
RUBIACEAE	

The Jaru name literally means water drinker and refers to this plant living in wetter areas near springs and old wells.

<i>Dichrostachys spicata</i> 'Thorn Bush'		murrulumbu (N)
CAESALPINIACEAE	GMW	gulumarra (W)

This bush has many sharp prickles, *baga*. The bark is boiled in water and the liquid used as a wash to treat skin sores, it dries them out and makes them heal quickly.

The branches can be used as a bush broom, in the same way as *Terminalia arostrata*.

Dolichandrone heterophylla
BIGNONIACEAE

GMW 7487

**gara
lawa**

The leaves and twigs are boiled in water and the liquid used as a wash to treat skin sores, colds and cancers. It is a powerful medicine.

The timber can be used to make the shaft of a woomera

Drypetes deplanchei
EUPHORBIACEAE

GMW

**wijilgi (W)
ngilimirri (N)**

The fruit can be eaten when they turn red. This small tree usually grows on rocky hills and ridges. The stems and branches are a white, smoky colour and can be seen from a long way away.

Check for use on skin.

Enneapogon polyphyllus
POACEAE

‘Grass’

ngirrili
GMW 8066

The dry stems and leaves of this grass are burnt, and the black soot-like ash rubbed onto the sore gums of babies. This stops the pain and helps it heal.

Eremophila maculata
MYOPORACEAE

‘Fuschia bush’
GMW

wagila (N)

The leaves and twigs are placed over hot coals in a hole in the ground, a person with diarrhoea puts their stomach over the foliage and the steam relieves the symptoms and the pain.

The smoke from the burning dry wood repels mosquitoes, **ginarli** or **giwirli**, and it burns for a long time.

This plant is common around the Sturt River area, but it may not grow around Wawarl country.

Erythrina vespertilio
FABACEAE

‘Red Bean Tree, Corkwood’
GMW & TT

**ranyi
yinindi**

This tree has bright red flowers and the pods contain red seeds. These seeds can be collected and a hole drilled into them, they are then threaded onto string or fishing line to make necklaces. There are a lot of large trees planted in the community of Ringers Soak.

The pale, light wood is used to make coolamons and the shafts of woomeras.

Ranyi refers to plants without prickles and **yinindi** are plants with prickles. **Ranyi** grow near large rivers and in rocky areas, known as **bamarr**.

Check the name **yinindi** also refers to the fruit of desert oak.

Eucalyptus aspera
MYRTACEAE

'Hill Gum'
GMW 8004

mawurru
garndirri

Check uses. This smooth barked gum tree grows on ridges and rocky areas, **bamarr**; it has small leaves and flowers. It has red gum on it that is boiled to make a drink for helping relieve cold and flu symptoms. The nuts are also used to make necklaces. The bark is also burnt to ash when it is dry and the ash mixed with chewing tobacco. This improves the flavour of the tobacco and makes it stronger. (SOURCE: Barbara Sturt, 09.10.02, Old Flora Valley).

Eucalyptus (Corymbia) bella
MYRTACEAE

'Ghost Gum'
GMW & TT

warlarri

The white smooth bark is burnt to ash when it is dry and the ash mixed with chewing tobacco. This improves the flavour of the tobacco and makes it stronger.

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree. The wood is good firewood and its coals last for a long time.

The red sap from this tree can be boiled in water to make a medicine to treat colds and skin problems such as sores and scabies. When the sap is boiled it makes the water go a dark colour like Condie's Crystals.

Check juwurru and nyawurru skin.

Eucalyptus bigalerita
MYRTACEAE

'Salmon gum'
GMW

warlarri

The white smooth bark is burnt to ash when it is dry and the ash mixed with chewing tobacco. This improves the flavour of the tobacco and makes it stronger.

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree. The wood is good firewood and its coals last for a long time.

Eucalyptus brevifolia
MYRTACEAE

'Snappy Gum'
GMW & TT

lunja
wumbard

The wood from this tree is the best firewood as it burns evenly and the coals remain hot for a very long time.

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree.

Clap sticks, **garnbag**, can be made from the wood of young stems. The new leaves can be sucked to obtain moisture and to keep the lips and tongue moist if no water is available.

There is a story about one **lunyja** tree at old Lamboo Station that has lightning coming out of it, flicking on and off like a torch. This lightning is an indication of bad things about to happen.

Check janama and nyamana or junbarra and nyanyjili skins.

Eucalyptus camaldulensis
MYRTACEAE

'River Red Gum
GMW & TT

malarn (N)
dimalarn (W)

The wood from this tree is good firewood; it can also be used to make **guduru**, fighting sticks, and hollow stems and branches can be made into **bambu**, didgeridus.

Witchetty grubs, **lagan** or **laju**, can be found in the wood sometimes, they are a very tasty food.

The leaves are put inside the gut cavity of **jaji**, kangaroos and **gurrungga**, wallabies when cooking in a ground oven; this keeps the meat moist and improves the flavour. The leafy twigs can be used as plates and covers to keep food clean when cooking.

The leaves can also be used as fish poison. The leaves are thrown in the water of billabongs and small creeks; it makes the fish float to the surface where they can be collected, cooked and eaten.

Medicine is also made from the bark, it is boiled in water and the liquid used as a wash and a drink to treat colds and congestion. The branches and twigs are warmed over a fire and rubbed around the head and shoulders to treat headaches.

The community near Paraku (Lake Gregory) called Mulan gets its name from this tree, though the correct spelling is **malarn**.

Check jawalyi and nyawajarri skin.

Eucalyptus collina
MYRTACEAE

'Grey Bloodwood'

wawulinggi

The fruit can be used as whistles, by cleaning them out and blowing across the top. The seeds can also be used to make necklaces. The ash from the burnt wood can be mixed with chewing tobacco. The wood is excellent firewood.

Sugarbag can often be found in this tree. It is very common in some areas of Purnululu.

Eucalyptus confertiflora
MYRTACEAE

'Gum Tree'
GMW 7471

warlarri

This tree often contains **ngarlu**, sugarbag (native bee-hives). The timber is good firewood.

Eucalyptus coolabah
MYRTACEAE

'Coolibah'
GMW 8076

waran

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree. The wood is good firewood.

The bark is called **barnda**, check whether this refers to any bark.

<i>Eucalyptus cupularis</i> 'Halls Creek white gum'	wawulinggi
MYRTACEAE	GMW 8075

This tree often contains **ngarlu**, sugarbag (native bee-hives). The bark can be burnt to ash to add to tobacco.

<i>Eucalyptus foelscheana</i>	'Bloodwood'	bunba
MYRTACEAE		

Sugarbag, **ngarlu** is often found in this tree. Honey, pollen and wax can be obtained from sugarbag. The timber is good firewood.

<i>Eucalyptus grandifolia</i>	'White gum'	warlarri
MYRTACEAE	GMW 8077	

The white smooth bark is burnt to ash when it is dry and the ash mixed with chewing tobacco. This improves the flavour of the tobacco and makes it stronger.

<i>Eucalyptus ? microtheca</i>	'Coolabah'	dinyjil
MYRTACEAE	GMW 7472	

The outer bark can be chopped off to form a coolamon. The bark can be burnt to ash and mixed with chewing tobacco.

Sugarbag, **ngarlu** and witchetty grubs, **lagan** or **laju** are often found in this tree.

<i>Eucalyptus pruinosa</i>	'Smoke Tree, Grey Box'	waran
MYRTACEAE	GMW & TT	wumbard

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree. The wood is good firewood and hollow stems can be used to make didgeridus.

Sugarleaf, **bin.ga** or **barlinang** (SOURCE: Barbara Sturt, 19.09.02) is commonly found on this tree. **Warrayayi** is another name for sugarleaf. Check **gurruwung** (Lily Banks).

<i>Eucalyptus setosa</i>	'Roughleaf Bloodwood'	mawurru
MYRTACEAE	GMW 8063	yilanggi
		warlamarn

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree. The wood is good firewood. The leaves are rough and feel a bit like sandpaper.

Eucalyptus terminalis
MYRTACEAE

'Bloodwood'
GMW & TT, GMW 8019

garndirri

Sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree.

The red sap that is commonly found on this tree is called **duni**. It can be used as medicine by boiling it in water and using the liquid as a wash to treat skin sores, colds and congestion.

Insect galls called **barlabi** or **barlibi** are often found on this tree. They can be eaten and the small grub in the middle is very sweet.

The charcoal can be eaten to clean out the digestive system, it is especially good for the bowel.

It has the **nangala** and **jangala** skin, check **jawalyi** (Doris).

Eucalyptus victrix
MYRTACEAE

'Coolabah'

gurndad

Check uses and scientific name. The alternative name for Ringers Soak Community is gurndad jaru, and this literally means the place of this tree, as this species is very common around the community.

Eucalyptus sp.
MYRTACEAE

'Gum Tree'
GMW ? 8020

lunja
wumbard

Sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree.

The red sap that is commonly found on this tree is called **duni**. It can be used as medicine by boiling it in water and using the liquid as a wash to treat skin sores, colds and congestion.

The timber is good firewood. Hollow stems and branches can be used to make didgeridus.

Ficus coronulata
MORACEAE

'River Fig'
GMW 7477

jabayi (W)
ngurlurr (N)

The fruit can be eaten when they turn brown or purple in the early wet season. They are also considered to be excellent medicine to clean out the arteries and to improve blood flow and general health. Fish that eat the fruit also have medicinal qualities, and are eaten as health improvers.

Fish and turtles also eat the fruit when they fall into the creeks and rivers. Birds also eat the fruit.

The fruit, even when green, can be used as bait when fishing with a handline, if no beef is available.

<i>Ficus opposita</i>	'Sandpaper Fig'	yimarl
MORACEAE	GMW 7466 & TT	

The fruit are eaten when ripe, purple to black; they are sweet. If too much fruit is eaten, it can make you lips feel sore because the fruit have short hairs on them. Birds also eat the fruit.

The leaves are rough like sandpaper; in the past they were used to smooth implements like a rasp or sandpaper.

<i>Ficus platypoda</i>	'Rock Fig'	ngirlimiri
MORACEAE	GMW 8005	

The fruit are eaten when red or brown in colour. This fig tree always grows on rocky areas.

<i>Ficus racemosa</i>	'Cluster Fig'	jamaraj
MORACEAE GMW & TT, GMW 8006		jamarndaj
		jalywarr

This large tree grows near rivers and springs; the fruit grow in clusters near the trunk. The fruit are eaten when ripe, red to brown. It fruits during **ngababura**, the wet season. Fish also eat the fruit.

Coolamons can be made from the soft, light outer wood.

<i>Fimbristylis</i> sp.	'Sedge'	binjilgi
CYPERACEAE	GMW 8013	dilyji

This plant grows along the edge of creeks and springs it has no specific use, but often indicates that underground water is close to the surface. The smooth stem bases can be used to clean wax or dirt out of the ears by gently twirling them in the ear.

<i>Flueggea virosa</i>	'White Currant'	runggu
EUPHORBIACEAE	GMW 7465 & TT	

The small fruit can be eaten when they turn white. The fruit are produced in the wet season.

Dry straight stems and branched can be used as fire sticks, **gunggala**, to make fire using the traditional drilling method.

<i>Gomphrena canescens</i>		marduguru*
POACEAE	GMW	

The fluffy seeds have traditional ceremonial importance for Jaru people.

<i>Gossypium australe</i> 'Hibiscus flower'		bardilbardil*
MALVACEAE	GMW	

This plant has pretty pink flowers but no specific use.

<i>Grevillea dimidiata</i>	'Grevillea'	wardarn
PROTEACEAE	GMW 8072	

This plant has pale yellow flowers; they are visited by many birds.

<i>Grevillea mimosoides</i>	'Grevillea'	wardarn
PROTEACEAE	GMW	

This plant has pretty pale yellow flowers; they are visited by many birds.

<i>Grevillea pteridifolia</i>	'Fern-leaved Grevillea'	check name
PROTEACEAE		

The sweet nectar is sucked from the yellow-orange flowers during **malirri**, the cold weather of the dry season. This plant only occurs in northern Jaru country near the Bungles.

<i>Grevillea pyramidalis</i>	'Caustic Bush'	wiliriny
PROTEACEAE	GMW & TT	

This small bush is dangerous and children should not play with it. The fruit have a shiny, sticky juice on them that cause scaring and blisters if it touches the skin. Young people use this juice to 'write on their skin', in the past it was used by old people to create ceremonial scars on the arms, chest and back.

Check whether this plant has the jangari/nangari skin.

<i>Grevillea striata</i>	'Beefwood, Boomerang Tree'	jirrirndi
PROTEACEAE	GMW 7479& TT	jalwilyi

The hard, heavy inner wood is used to make any type of boomerang and for fighting sticks. The timber is used as firewood. The seeds can be used to make necklaces.

<i>Grevillea wickhamii</i>	'Grevillea'	lagarrmari
PROTEACEAE	GMW 8022	jawandi

This small tree has bright red flowers and spiny leaves but no specific use.

Check the name **yalburu**, it may also refer to prickly-leaved plant with red flowers.

Grevillea sp.
PROTEACEAE

GMW 8071

The ashes from burnt wood and bark can be added to tobacco.

Grewia retusifolia
TILIACEAE

'Emu Tucker'
GMW

The fruit can be eaten when they turn brown; they are quite tasty. The fruit are often eaten by emus.

Gymnema stenophyllum
ASCLEPIADACEAE

GMW 8064

diyinbul

This plant has fruit like the bush banana, **gulibi** or **bindi**, however these fruit are poisonous and cannot be eaten.

Gyrocarpus americanus
HERNANDIACEAE

'Shitwood, Helicopter tree'
GMW

jardalu
jadalu

The soft, light wood is used to make coolamons, **labi** or **luwanja**. The swellings on the trunks can be cut off and carved to make plates, cups and bowls. The common name 'shitwood' was used by settlers as they thought the wood was too soft to be useful.

The fruit have two wings and twirl to the ground like helicopters; these are often used as toys by children.

Hakea arborescens
PROTEACEAE

GMW 8024

jirrirndi
wadaruru
jawilyi

The hard wood is used to make boomerangs and nulla nullas. The fruit are used to make decorative necklaces.

The ash from burnt bark and wood is rubbed on small babies to make them strong and healthy in later life. The ashes from burnt bark can be added to chewing tobacco.

Hakea chordophylla
PROTEACEAE

GMW 7469 & TT

jani (W)
janbij (N)
jarni
jaani

The flowers can be sucked to obtain sweet nectar; they can also be soaked in water to make sweet drink. The leaves can be curled into a circle and placed on the head to make it easier to carry heavy coolamons, a little soft grass can be placed in the middle to protect the top of the head. The wood can be used to make coolamons.

The leaves can also be soaked in **ngarlu**, bush honey, and then sucked to get more flavour from the honey.

Hakea sp
PROTEACEAE
GMW
janbid*

The yellow flowers can be sucked to get the sweet nectar.

Hibiscus sabdariffa
MALVACEAE
'Rosella'
no Jaru name

The fruit can be eaten when they turn red; they have a sharp tangy taste. This plant only occurs in a few house gardens in Ringers Soak and other communities. It is known to be used for making jams and sauces in some areas.

Imperata cylindrica
POACEAE
'Grass'
GMW 8028
yuga*

The thick leaves of this grass can be cut and collected and used to make a soft bed or as a mattress. It is also placed over bush tucker to keep it clean from dust and flies.

Ipomoea aquatica
CONVOLVULACEAE
'Black soil potato'
garndi

The yams can be dug up and roasted on hot coals and ashes, they can then be cleaned and eaten. This yam only grows on black soil plains. The long stems lay along the ground and are produced in the wet season. After the rains stop the stems die off.

Ipomoea costata
CONVOLVULACEAE
'Hillside Bush Potato'
GMW 7494
ngawiya*

The yams can be eaten after lightly roasting them. This yam grows in rocky country and the yams are not very deep in the ground.

Ipomoea costata
CONVOLVULACEAE
'Desert Bush Potato'
GMW
buwura (W)
biyura
bigurda (Nora)

The yams can be eaten after a light roasting; it can also be boiled. This yam grows in sandy country; often the yams are quite deep in the ground and larger than the rock country yam.

The yams are best in the dry season from May to July. When the yams are biggest they cause the ground to crack, and the ground has a hollow sound when you hit it with a stick.

Ipomoea pes-caprae
CONVOLVULACEAE
'Beach morning glory'
no Jaru name

This coastal plant does not normally occur on Jaru country but is grown in gardens in some places. The vines and leaves can be heated on a fire and tied around the head to stop headaches. This is how it is used by some coastal Aboriginal groups.

Jatropha gossypifolia 'Bellyache Bush' no Jaru name
EUPHORBIACEAE

This is an introduced plant, the sap is considered poisonous and the plant is treated with caution. In some areas, especially near riverbanks, it forms dense low thickets that are very difficult to walk through.

Leucaena leucocephala 'Coffee Bush' no Jaru name
CAESALPINIACEAE GMW

This is an introduced plant that bullocks eat. It can be a bad weed around towns and outstations.

Livistona victoriae 'Cabbage Palm' ngururn (cabbage)
ARECACEAE GMW

The cabbage can be eaten raw or roasted; it is tasty and has a crisp texture. The cabbage is the white flesh growing in the leaf bases and the leaves have to be chopped off or peeled off to reveal the pale cabbage. The cabbage can also be cooked in a ground oven wrapped in paperbark to make it more tender.

This palm is only found at a few places on Jaru country, such as Mistake Creek, Sawpit Gorge, though it is common in some areas of Purnululu National Park. In the past it was also found in areas such as Sturt Creek and Flora Valley, however it is not found in these areas now; the palms were possibly cut out by previous station managers to build sheds and yards (Willey 1971; cited in Rodd 1988).

Lobelia quadrangularis 'Bush tobacco' bin.guny
CAMPANULACEAE GMW 8000 biyin.gun
runuwayi

The leaves are dried and used as tobacco, it can be chewed or smoked. This was used a lot in the past but is not used now, as commercial tobacco is preferred. This small plant only grows in areas that remain moist all year round, near springs, in caves and under rock overhangs.

The term **ngunyju** is often used to refer to chewing tobacco and is sometimes used for this plant also.

Lophostemon grandiflorus jinggul
MYRTACEAE GMW & TT

This large tree grows along rivers and creeks. The bark and wood can be burnt to ashes and the ashes mixed with chewing tobacco, **ngunyju**, to improve the flavour and make the tobacco stronger.

Ngarlu or sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree.

Lysiana spathulata 'Mistletoe, Bush Chewing-gum'
LORANTHACEAE GMW 7483

yun.gurrmali
yun.gurrmari

The fruit can be eaten when they turn yellow or orange; the flesh is sweet and very sticky, like chewing gum. The fruit are also eaten by birds, which deposit the seeds on branches of other trees.

The yellow flowers are placed on the eyelids by young girls to make themselves look like they have eye colour on.

Marsdenia viridiflora
ASCLEPIADACEAE

'Bush Banana'
GMW & TT

gulibi (W)
bindi (N)

This plant is a climbing vine and it has white sap, the fruit are often seen hanging on the vine in trees. The fruit are eaten; the younger fruit taste better and are softer. Older fruit can be softened by heating in hot sand and ashes for a short time. The fruit is plentiful in the early wet season from December to March.

Melaleuca bracteata
MYRTACEAE

'Paperbark'
GMW 7495

wungun*

This small leaved paperbark grows in low country near creeks. Check the uses.

Melaleuca leucadendra
MYRTACEAE

'Paperbark'
GMW & TT, GMW 8025

lambu

This tree grows along rivers and creek and it has papery bark that can be peeled off in large sheets. These bark sheets are used to wrap up meat to cook in ground ovens and this mode of cooking is known as **gung.gun**. These days, sheets of corrugated iron are often used instead of the bark.

In the past, large sheets of the bark were also used to build humpies and to wrap bones from deceased people.

Sugarbag (native beehives) that contain honey, pollen and wax are often found in this tree. Swollen lumps on the stem can be chopped open and water comes out, this is drinkable but often tastes stale.

Lamboos Station probably gets its name from this tree, as it is very common in the area. The word **gurrumba** appears to be confined to western Jaru dialect.

Melaleuca lasiantha
MYRTACEAE

'Paperbark'
GMW 7475

gurrumba

The twigs and branches are placed above and below meat when cooking in the ground oven; this keeps the meat clean and improves the flavour of the meat. The paperbark from this tree is quite small and thin.

Melaleuca minutifolia
MYRTACEAE

'Small Paperbark'
GMW 7475

gurrumba

The twigs and branches are placed above and below meat when cooking in the ground oven; this keeps the meat clean and improves the flavour of the meat. The paperbark from this tree is quite small and thin.

Melaleuca nervosa
MYRTACEAE

'Paperbark'

lambu

This smaller version of lambu is common around Ringers Soak, it does not grow big and the bark cannot be used like the large version of lambu that grows near rivers.

Muehlenbeckia florulenta
Check name

'Lignum'

**guriyiny
gurinyguriny**

This cane-like plant grows around the edges of waterholes and in swampy areas. It has no specific use but often ducks hide in the stems.

Nauclea orientalis
RUBIACEAE

'Leichhardt Tree'

ngimili

The fruit can be eaten when they turn brown; if they are not fully ripe they can be lightly roasted in hot ashes. The light wood can be used to make coolamons.

This species is planted in Halls Creek and Red Hill community and also occurs in northern Jaru country near Yirriyarri (Blue Hole).

Neptunia monosperma
MIMOSACEAE

'Sleepy leaf'

no Jaru name

The leaves of this plant close up or go to sleep when they are touched. The seeds may have been ground up and made into johnny cakes in the past. This plant grows on black soil areas.

Newcastelia cladotricha 'Lambstail'
VERBENACEAE

GMW

lamba lambarr

The white cotton-like flowers and fruit may be used to stuff pillows or a mattress. This plant is sometimes called 'kapok bush'.

Nitella sp
CHARACEAE

'Green Slime'
GMW 8014

marlirn

This green, hair-like plant grows in water in springs and billabongs; it is eaten by turtles and fish.

Nymphaea violacea
NYMPHAEACEAE

'Waterlily'
GMW

binanyi (N)
garrja (W)

The roots, fruit and flower stems can be eaten. The root is called **garringarri**. Check uses and names for different parts. Also check white flowers and yellow flowered forms have same names.

Owenia reticulata
MELIACEAE

'Desert Walnut'

girla
jurlurru
yirlanggi

The hard round fruit are cracked open and the seed can be eaten; it is similar to a peanut. The fruit are like the fruit of **bardigi**, *Terminalia arostrata*, but are bigger.

The gum can be eaten during the hot weather time of **barrangga**, if it is hard you can soften it on the fire. This tree often grows in open areas where it is the only tree amongst the grass, it is a good shade tree.

Operculina sp.
CONVOLVULACEAE

GMW

ngarlanggirr

The stems and leaves can be used as fish poison.

Pandanus aquaticus
PANDANACEAE

'River Pandanus'

The fruit look like a pineapple and break into small segments, these can be lightly roasted and the soft ends nibbled. They are also eaten by fish and turtles. The leaves can be pulled out and stripped and used to make fibre crafts.

This plant only occurs in northern Jaru areas on large rivers and waterholes.

Pandanus spiralis 'Spring Pandanus'
PANDANACEAE

GMW

jangarra* (N)
wirnbu

The leaves can be used to make baskets and mats. In the past the seeds were chopped out of the fruit and eaten like a peanut.

This plant grows on springs; it is not very common in Jaru country but is commonly found in northern areas near the Bungles.

Parkinsonia aculeata
MIMOSACEAE

'Parkinsonia'
GMW

bagawaga

This is an introduced plant to Jaru country; it is a bad weed in some areas though it is quite an attractive plant when in flower. The Jaru name refers to the prickles on the stems and branches.

Passiflora foetida

'Wild Passionfruit'

no Jaru name

PASSIFLORACEAE

GMW & TT

The inside of the fruit can be eaten when they turn orange; it is sweet. This is an introduced plant and it has no Jaru name.

Persoonia falcata

'Milky plum'

gilayi

PROTEACEAE

The fruit can be eaten when they are ripe, yellowish but soft to touch in **ngababurra**, the early wet season. They have a citrus-like taste; the large seeds and the skin are generally spat out.

The leaves can be crushed and boiled in water and the liquid drunk to treat sore throat, chest infections and diarrhoea. The new leaves can also be chewed for the same symptoms. The juice from chewed leaves can be placed on the breasts of mothers feeding babies to treat babies with sore mouths.

This plant is only found in northern Jaru areas near the Bungles.

Check the Jaru name spelling, this name is used for *Buchanania* in Wunambal.

Petalostigma pubescens

'Emu fruit'

mundurru

EUPHORBIACEAE

The round, orange fruit are eaten by emus, people cannot it eat.

Phoenix dactylifera

'Date Palm'

no Jaru name

ARECACEAE

GMW

This palm is thought to be introduced by Afghan camel drivers. It is naturalised in some areas such as Palm Springs on the Duncan Highway.

Phragmites karka 'Little Bamboo'

GMW 8009

gamanggirr*

POACEAE

garna

The light but strong and flexible stems are used to make small spears, **girlimiliny**. A wire point may be added to these spears and they are used for hunting fish, turtles **balarn** and freshwater crocodiles **dirmird**. It is commonly found along creeks and springs.

Check the name **garna**.

Philydrum lanuginosum

no Jaru name

PHILYDRACEAE

This fleshy plant has yellow flowers and only grows in spring areas that remain wet for most of the year; it is not very common.

Physalis minima

'Gooseberry'

gujbirri

SOLANACEAE

GMW

The fruit can be eaten when they are ripe and yellow; they are sweet. The small round fruit are enclosed in a papery dry skin that is taken off before the fruit are eaten. This is an introduced plant found in old gardens; it looks like a tomato plant. The fruit are yellow when ripe, **bunjurr**, which is usually just before rainy season, **ngababu**.

Pisolithus tinctorius 'Puffball' **janbirra***
SCLERODERMATACEAE

These small mushroom-like puffballs come up out of the ground in the rain times, they are often seen near the base of trees and shrubs. They can be lightly cooked and eaten, however only southern Jaru people from the desert areas eat them, Jaru people from northerly areas do not eat them.

Podaxis pistillaris 'Stalked Puffball' **jamina**
TULOSTOMATACEAE GMW

This black toadstool fungus grows in the ground. Children use the black spores to paint beards and moustaches on their faces.

Polycarpaea violacea 'Pink everlasting flowers' **barda**
CARYOPHYLLACEAE **jurlgaja**

The dried flowers can be used as decoration, **mardaguru**, on people participating in ceremonies. The flowers can be glued on using the blood from kangaroos.

Portulaca filifolia **luwarrara**
PORTULACACEAE **bagarla**
lugarrara

The fine black seeds, **jirrjibungga**, are ground into a flour and then made into johnny cakes and lightly roasted in hot coals and ashes. It tastes like damper after it has been cooked. The plants grow in the wet season and the yellow flowers are produced just after the rains finish. The seeds are ready about one month after the rains have finished.

Portulaca ? pilosa **wagirdirri**
PORTULACACEAE

The fine black seeds, **ngurlu**, are ground into a flour and then made into johnny cakes and lightly roasted in hot coals and ashes. It tastes like damper after it has been cooked. The plants grow in the wet season in black soil areas. The purple flowers are produced just after the rains finish. The seeds are ready about one month after the rains have finished.

Ants also collect the seeds and take them back to their holes.

Premna acuminata 'Firestick Tree' **gunggala**
VERBENACEAE GMW 7493

The dry straight stems are used as firesticks to make fire using the traditional drilling and friction method. The word **gunggala** refers to this plant and is also used to refer to firesticks, the wooden implements used to create fire.

Pseudoraphis spinescens
POACEAE

ngarlbarla

This grass has long runners that grow in water, they can be collected and used to make a bush shade or humpy.

Pterocaulon sphacelatum
ASTERACEAE

GMW 8016

ngurnungurnu

The leaves and stems of this plant have a pleasant smell when crushed. The stems can be heated on a fire and then crushed in the palms, and the pleasant smell inhaled to treat coughs and colds. The dried leaves and stems are also used as potpourri.

This plant has the same Jaru name as *Pterocaulon serrulatum*, but is recognised as being a different plant though it has similar uses.

Pterocaulon serrulatum
ASTERACEAE

GMW 7488

ngurnungurnu

The leaves and stems of this plant have a strong, pleasant apple-like smell when crushed. In the past the leaves were sun dried and used as chewing tobacco.

This plant has the same Jaru name as *Pterocaulon sphacelatum*, but is recognised as being a different plant though it has similar uses.

Salsola kali
CHENOPODIACEAE

‘Roly-poly’
GMW

jijil

This small bush dries out when the rain stops, when the winds get stronger later in the dry season it blows around like a ball.

Santalum lanceolatum
SANTALACEAE GMW 7496 & TT

‘Sandalwood’

miyarn* (W)
nguman* (N)

The fruit can be eaten when they are ripe, red to dark purple. They are sweet and tasty. The fruits are peeled and the white fruit eaten inside. They are also eaten by corellas, white and black cockatoos.

Emus also eat the fruit, and this plant is often called ‘emu tucker’.

Sarcostemma australe ‘Milk vine’
ASCLEPIADACEAE GMW 7486 & TT

ngabulungabulu
ngabuluyaru

The white milk-like juice that comes from the stems of this plant can be dabbed onto sores to help them heal, as it helps dry them out.

Some Jaru people consider this medicine to be very powerful and capable of curing any skin disorder including skin cancers.

Senna magnifolia
CAESALPINIACEAE GMW 8026 **ganbirrganbirr
yijarda**

This plant is used as medicine. The leaves and stems are boiled and cooled liquid used as a wash for skin sores.

Senna notabilis
CAESALPINIACEAE GMW 8074 **girriliny***

This plant has no specific use.

Senna venusta
CAESALPINIACEAE GMW **ganbirrganbirr
yijarda**

This plant is used as medicine. It is boiled and used as a wash for skin sores. Emus eat the fruit.

Sesbania cannabina
FABACEAE **gilirn**

The stems are used as toy spears by young boys. They can be used as small hunting spears for light game such as fish and birds.

Sesbania formosa
FABACEAE 'River Tree'
GMW 8003 **marriwa*
wirrwirr**

The flowers may be used to make perfume, they have a sweet smell. The wood is used to make woomera hooks and shafts. This tree has the **jangala** skin.

Solanum chippendalei
SOLANACEAE **rambaramba**

The small fruit are eaten when they are ripe, they are especially favoured by children and some adults think they are too sweet. The fruit are enclosed in a prickly covering and the stems and leaves are also prickly.

Solanum ? echinatum 'Bush Tomato'
SOLANACEAE GMW 8017 **jabagarragarra
jalbarr
gumbubaja (Maggie L)
nganjarli**

The fruit can be eaten when they turn white, the whole fruit is eaten but the seeds are spat out. The fruit can also be lightly roasted before eating. It is available in the late dry season and build up time.

Solanum ? **jabargarra (W)**

SOLANACEAE

GMW 8027

jalwarr (N)
nganjarli (W)

The fruit are eaten by kangaroos, **jaji**, but not by people. There are thorns, **baga**, all over this plant. It looks similar to the bush tomato with small yellow fruits.

Solanum beaugleholei
SOLANACEAE

‘Bush Tomato’

galngi
ngarnjarli

The fruit can be eaten when they are ripe, pale green to white. The fruit contain black seeds have a prickly skin at the base.

Solanum diversifolium
SOLANACEAE

‘Bush Tomato’

galngi
ngarnjarli

The fruit can be eaten when they are ripe, pale green to white. The fruit contain black seeds have a prickly skin at the base.

Sorghum intrans
POACEAE

‘Spear grass’

wurrgal

The long stems are wrapped around the head during some ceremonies.

Sporobolus australasicus
POACEAE

GMW & TT

luwararra
lugarrarra
lugarra

The small seeds from this grass, **wilarr**, are often collected by ants and placed in heaps outside their nests. These seeds are collected and then ground into flour, made into small dampers and cooked in ashes and hot sand, then eaten. This grass only occurs in southern Jaru areas.

You can also mix water with this grass to make a sweet drink.

Stemodia lythrifolia
SCROPHULARIACEAE

GMW & TT

birlbabirlbany
birlbany
birlbabirlinyi

The leaves and stems of this plant have a strong, pleasant smell when crushed. In the past the leaves were sun dried and used as chewing tobacco.

The leaves and stems are also used as medicine, they are boiled in water and the liquid used as a washing medicine around the neck to treat colds and congestion. A small amount may also be drunk; the drink has a good smell.

The leaves can also be dried and crushed up, then mixed with water and rubbed on to the skin to treat colds and congestion. It has a smell like Vicks medicine.

Streptoglossa bubakii
ASTERACEAE

GMW 7467 & TT

manyanyi

This small plant has a strong medicinal smell. The leaves are boiled in water and the liquid used as a washing medicine to treat colds and congestion and skin disorders such as sores and scabies.

The leaves can be crushed and the smell inhaled to clear congestion in the head. The leaves can also be placed in the pillow overnight to help clear the head.

Streptoglossa odora
ASTERACEAE

GMW 8011

manyanyi

This small plant has a strong medicinal smell. The leaves are boiled in water and the liquid used as a washing medicine to treat colds and congestion and skin disorders such as sores and scabies.

The leaves can be crushed and the smell inhaled to clear congestion in the head. The leaves can also be placed in the pillow overnight to help clear the head.

Syzygium eucalyptoides
MYRTACEAE

'River Apple'

jinandarri*
jinandari*

The fruit can be eaten when they are ripe, white with a bit of pink. They are tasty and much sought after. They occur along rivers and creek areas but only in northern Jaru areas.

Terminalia arostrata
COMBRETACEAE

'Nutwood, Peanut'
GMW 8023

bardigi
miyany

The seed inside the hard brown fruit can be eaten. The fruit need to be cracked open to get the seeds out. The fruit can often be found in large numbers under the trees.

Sugarbag or **ngarlu**, native bee-hives, can be found in this tree. The wood is quite soft and of no use.

The branches can be used as a bush broom to sweep around camping areas.

Terminalia bursarina
COMBRETACEAE

yirriyarri

The gum can be eaten; it is tasty like a toffee and is much sought after. The gum is soft when it first forms on the braches and stems, as it gets older it gets hard. When the gum is hard it can be softened by warming on the fire to make it easier to eat. If you eat too much it causes you to pass wind a lot. When you eat it you should not lick your lips as it will make your lips very dry.

The gum from the trees at yirriyarri (Blue Hole) near Purnululu is considered by some Jaru people to be the sweetest and tastiest of all yirriyarri trees.

This gum is also excellent medicine, it cleans all the toxins out of your body and is considered to be good to treat cancer.

Terminalia canescens
COMBRETACEAE

biriwiri
biyiwiri

The gum from the stems and branches can be eaten; if the gum is too hard it can be softened on hot ashes. This plant is similar to **yirriyarri** (*Terminalia bursarina*) and is considered to be closely related.

Terminalia grandiflora
COMBRETACEAE

bardigi
miyany

The seed inside the hard brown fruit can be eaten. The fruit need to be cracked open to get the seeds out. The fruit can often be found in large numbers under the trees.

Terminalia platyphylla
COMBRETACEAE

‘River Gum’
GMW & TT

marduwa

The gum from this large tree can be eaten. It is good for treating stomach upsets and constipation. Four trees produce edible gum like **marduwa** (check these).

The fruit can be eaten when they are ripe, purple. They are are also eaten by birds.

The area called Mardiwah Loop in Halls Creek gets its name from this tree, though it is spelt as Mardiwah.

Tinospora smilacina ‘Snake Vine’
MENISPERMACEAE

GMW 7473

waramburr* (N)
manjanu (W)

The stems are used as medicine. They are wrapped around the legs to treat cramp or the head to treat headaches; they can also be rubbed on skin sores. The green fruit can be used as a treatment for snake bite, they are put on as an antivenom.

The fruit cannot be eaten and are considered poisonous. Some Jaru people consider the red fruit to have special powers and that if you brush past them in the bush they stop your heart from beating.

Tribulus terrestris
ZYGOPHYLLACEAE

‘Bindi-eye’
GMW

baga

This plant grows along the ground and has sharp hard prickly fruit. They are very bad to walk on and can go through thongs and some shoes. The word **baga** can be used to refer to any prickle or plant with prickles.

Trichodesma zeylanica
BORAGINACEAE

‘Camel bush’

no Jaru name

The hairs from the leaves can make your skin itchy; this plant has pretty blue flowers.

Triodia sp
POACEAE

'Black Spinifex'
GMW

warrwa

The wax, **wajarn** can be used as a glue to attach spearheads to spear shafts. The hard leaves can also be used to make fish traps. In the past the leaves were also used to make the walls and roofs of humpies.

When the wax is best collected after a fire has burnt the grass, you pull out the roots and shake off the resin. Then heat it on a fire and roll it into balls.

Bees collect the wax to make the nose of their nests and hive inside the tree. Sometimes the beehives in trees can be smelt because of the strong smell of the spinifex wax.

Triodia sp.
POACEAE

'Yellow Spinifex'
GMW

wulaarru
wulawudu

The wax, **wajarn** can be used as a glue to attach spearheads to spear shafts. The hard leaves can also be used to make fish traps. In the past the leaves were also used to make the walls and roofs of humpies.

Bees collect the wax to make the nose of their nests and hive inside the tree. Sometimes the beehives in trees can be smelt because of the strong smell of the spinifex wax. Check contraceptive use?

Typha domingensis
TYPHACEAE

'Bulrush'
GMW 8029

no Jaru name

This bulrush is now common around springs and permanent creeks, but in the past, it was not around. It is considered to be introduced by **kartiya** (whitefellas).

Ventilago viminalis
RHAMNACEAE

'Supplejack'

walagarri*
GMW 7478

The timber is excellent firewood, as the coals remain hot all night. When it burns it makes a blue flame as the wood contains a gas that burns blue. The wood can also be used to make number seven boomerangs.

Vigna lanceolata
FABACEAE

'Long Yam'
GMW

juwa*

The long yam is dug and eaten, it can be lightly roasted. The yam is long and narrow similar to a carrot. It is dug up in the early dry season when the yams are largest and fresh after the wet season.

There is a male and female version of this plant,

Vigna ? vexillata
FABACEAE

'Bush Carrot'
GMW 8007

bungga*

The small round yam is dug up and eaten, it can be lightly roasted before eating. The yams are best dug up during the early dry season when the yam has finished growing.

Vitex glabrata
VERBENACEAE

'Black plum'
GMW 7480

girndi*
girndiyi
minyjaarra
minyjiwarra

The fruit can be eaten when they turn black in the early wet season. They are very sweet and tasty. This tree is often found on ridges and in rocky country.

In the past during seasons when there were many fruit, they were sun dried, crushed with a stick or rock and wrapped in paperbark. The food could then be carried on long walks or eaten when going hunting or changing campsites.

The dry straight stems can be used as fire-sticks, to create fire using the traditional drilling method.

Sugarbag or **ngarlu** (native beehives) can be found in the hollows in this tree.

Wrightia saligna
APOCYNACEAE

garlibirlibi

The cotton from the long fruit can be used as body decoration during certain ceremonies. It can be glued to the body using kangaroo blood or the person blood.

Xerochloa lanata
POACEAE

'Grass'
GMW 7497

marduguru*

The fluffy seeds have traditional ceremonial importance for Jaru people.

Ziziphus quadrilocularis
RHAMNACEAE

'Plum'

no Jaru name
GMW & TT

The fruit can be eaten when ripe, brown or black. This seems to be an introduced plant to Jaru country; a single tree grows in Halls Creek near the pensioners village.

Plant names from 'Draft Jaru Dictionary' (KLRC 1992) and Jaru Plants manuscript from KLRC files.

Burnu bururru, tree, could be *Hakea arborescens*.

Gulyu, tree

Gunandaru, a tree used to make boomerangs and shields, it has hard wood like steel and thin leaves.

Gundalyji, given in response to binbali

Gurrgul, shrub

Jabali tree

JARU ANIMAL NAMES AND USES

BIRDS

The Jaru words for birds in general are **jiyiga** and **durru**. The general terms for eggs are **gidba** or **gambiny**.

Emu
Dromaius novaehollandiae

Wanyayaru
Garnanyja
Yuwarraaru

The flesh can be eaten after roasting, one bird often contains a large amount of meat and the carcass is often cut into sections prior to roasting in a ground oven. In the past they were hunted with spears, often around waterholes and springs when they came in to drink at dusk. When hunting emus the hunter needs to be careful as they have a fast and powerful kick.

The eggs are also eaten and are called **gambiny** or **gidba** (Turner river). A baby emu is called **wirnirni**, a group of babies is called **wirnirniwirnirni**; the babies are known for their striped feathers.

Emus eat a lot of bush fruits including **bardigi** (*Terminalia arostrata*), conkerberry (*Carissa lanceolata*), **garnbirrgarnbirr** (*Senna venusta*) and gum from various trees.

They have the **jambiyin** or **jangala** skin. One of the Jaru name refers to the feathers, which have special significance for Jaru people. The dark shape of the emu can be seen outlined in the milky way at night, if the shape is very dark it indicates a good time to hunt emus, if the shape is light and not well defined it indicates it would be better to hunt something else.

Brown Quail
Coturnix ypsilophora

Banaga
Banangga
Barnangga
Bundaaru

Some Jaru think that the flesh can not be eaten, and if you touch this bird, you will have many children.

However, some Jaru people think the flesh can be eaten and is very tasty. This bird hides in the grass and flies off with a loud noise when you get close to it. It is closely linked to finches, and in the dreamtime they were family members.

Pelican
Pelecanus conspicillatus

Walany (Sturt Creek)
Dabarunga

This large bird is an excellent fisherman; it has the **jungurra** skin. The flesh can be eaten after roasting but there is not much meat and it is quite dry to taste.

Darters, Cormorants

Garranggarrang

Anhinga melanogaster, *Phalacrocorax* spp.

These birds are always seen near creeks, waterholes and rivers, they are excellent fishers and often swim under water when hunting fish. The Jaru name comes from the sound of the call, 'karrang...karrang...karrang...'.

Australasian Grebe

Nyiman

Tachybaptus novaehollandiae

The flesh can be eaten after roasting. There is a special men's story associated with this bird.

Magpie Goose

Wulujurnjurn

Anseranas semipalmata

The flesh can be eaten after roasting, it is very tasty. Generally found in swampy areas, and more common in areas to the north. The eggs can also be eaten, though the nests are not commonly found on Jaru country.

Black Swan

Burriwiyi*

Cygnus atratus

The meat is not eaten, though it is known to taste good and is eaten by other Aboriginal groups. They are common in the areas around Lake Gregory and Sturt River.

Radjah Shelduck, Burdekin Duck

Girrbilyu

Tadorna radjah

Jibilyugu

The flesh can be eaten after roasting. In the past they were hunted with throwing sticks and light spears, in recent times they have been shot with guns. It is only found in northern Jaru areas.

Ducks, in general

Girrbilyu

Dendrocygna spp., *Anas* spp., and others **Jibilyugu**

The flesh of all ducks can be eaten after roasting. Many ducks occur seasonally on Jaru country and they are hunted when available. Differences between species are recognised but are not considered important, though some species are recognised as being quite different even though they have the same Jaru names.

Green Pygmy-goose

Jibilyugu

Nettapus pulchellus

Girrbilyu

The flesh can be eaten after roasting. In the past they were hunted with throwing sticks and light spears, in recent times they have been shot with guns.

Eurasian Coot

Guluyu

Fulica atra

This small dark bird lives in swampy areas and is a fast runner, it is not seen often.

Black-tailed Native-hen
Gallinula ventralis

Guluyu

Generally seen in areas near water and often hiding under small bushes, this bird is the cousin of the Eurasian Coot, which has the same Jaru name.

Egrets in general
Ardea spp.

Murrngundungundu

Often seen in shallow waters near creeks, rivers and wetland areas.

Little Egret
Check name

Jalga

Jalga catches fish by spearing them with its sharp beak, it is a good hunter. In the dreamtime his neck was broken by an old man with a boomerang, it still has a bent or slack neck.

It has the **jangala** skin.

Rufous Night Heron
Nycticorax caledonicus

This bird is often seen running along creek and river edges looking for food.

Ibis
Threskiornis spp.

Warlaburra

The flesh can be eaten after roasting on hot coals and ashes, in recent times they have not been eaten much.

Royal Spoonbill
Platalea regia

Amarabi
Amaragi
Ngamaragi

Always seen around wetlands and river edges. This bird is known for its wide spoon-like bill, which it moves back and forth through the water looking for food. It has the **Jawalyi** skin.

Jabiru, Black-necked Stork
Ephippiorhynchus asiaticus

Garlbagarlba
Gambirri

This large bird has long red legs and is good hunter for fish; it is generally seen around creeks, swamps and springs. It can kill dogs and eat them.

Sometimes this bird is also called **gunyarrngarnuwaji**, which means dog eater.

Brolga
Grus rubicunda

Gurrkali

This bird has an important creation period story, which relates to dancing and ceremony. This bird still has the ability to dance.

It has the **nambijin**, **nyawurru** or **juwurru** skin.

Bush Turkey, Australian Bustard
Ardeotis australis

Bin.girrjaru
Garubgaji
Jandura

The flesh can be eaten after roasting, it is generally cooked in a ground oven, though the meat can also be lightly roasted on hot coals and ashes. The meat is very tasty and is considered one of the best bush meats.

In the past they were hunted with throwing sticks, boomerangs and light spears. The hunter would cover his smell with fat from another animal, and wait in a place where **bin.girrjaru** often goes, like a waterhole. They are fattest at the end of the build up, and during the green grass period in the late wet season. They eat caterpillars, grasshoppers and gum from various trees. They also eat some of the bush fruits.

There are still plenty of turkeys around, especially in areas where people don't go and there are no roads. They prefer to live in open grassy areas.

They have the **Jangala** skin. Check the name **garrbari** or **garrwari** (throat).

Bush-thick Knee, Bush Stone-curlew
Burhinus grallarius

Wirnduwu
Wiyumaniwaji

This bird has a loud mournful call at night, it calls out 'weeyu...weeyu....weeyu.'. If this bird calls out near your house or camp, it signals that bad news is coming and that something bad has happened, for example, someone has passed away.

When this bird is calling out mothers hide their babies and cover their ears as it makes babies upset, this bird can take away the spirit of children. This bird is **yurrungarna**, a type of bad spirit.

Sometimes this bird is called the 'bad luck bird'.

Plover, Masked Lapwing
Vanellus miles

Dirndirrgbari
Dirndilgbari
Dirndilbari
Girndirr

This bird can get very cheeky when it is looking after eggs or chicks; the adults swoop and attack people and other animals that approach. The Jaru name refers to the call, 'dirndirrg...dirndirrg...dirndirrg...'.

Red-kneed Dotterel
Erythronyx cinctus

Birndiny

This small bird runs around the edges of wet areas looking for food; it is often seen standing on one leg.

There is a secret song and story for this bird based on the Sturt River.

Black-winged Stilt
Himantopus himantopus

Nininini

This long legged bird is always seen in swamp and wetland areas. It has its own song and corroboree, but it is secret.

Caspian and Gull-billed Tern
Sterna caspia, S. nilotica

Rarely seen on Jaru country this bird is far more common in northern areas, the eggs are known to be excellent food.

Raptors, hunting birds

Black-shouldered Kite
Elanus axillaris

Garrgany

A mainly white bird that is a good hunter, it often hovers looking for prey.

Black-breasted Buzzard
Hamirostra melanosternon

Galbun

Often seen gliding high in the air, this bird is known as a good hunter.

Black Kite, Fork-tailed Kite
Milvus migrans

Galbun

Most commonly seen around fire fronts hunting the lizards and insects that are trying to escape the flames.

Little Eagle
Check name

Barawara

This small eagle is often seen circling high in the sky looking for prey or dead animals.

Wedge-tailed Eagle
Aquila audax

Warlawurru
Gan.guliyinnyunga
Gundurrungarna

This eagle can get very large and attack bush turkeys, kangaroos, small calves, baby emus. It is much admired for its hunting ability. The Jaru name **Gan.guliyinnyunga** refers to the fact that this bird often flies high in the sky looking for prey.

It has the **janama** skin.

Peregrine Falcon
Falco peregrinus

Garrgany

This hunting bird is a very fast flier and often drops out of the sky at great speed to catch prey.

Grey and Brown Falcon
Falco hypoleucos, F. berigora

Garrgany

Often quite pale in colour this bird is recognised as a good hunter.

Kestrel
Falco cenchroides

Garrgany

This bird is often seen hovering in the same place looking for prey, it is sometimes likened to a helicopter due to its ability to stay in one place high above the ground.

Pigeons, Doves

Crested Pigeon
Geophaps lophotes

Jarrarlalbarlbarl (Barbara Sturt)
Yarrawarlwarl (Danba Banks)
Jarrarlabarlbarl (Maggie Long)
Yarrabarlbarl (Gracie Long, Phyllis Thomas)
Balura (Bonnie Deegan)
Balarayi (Stan and Doris)

The flesh can be roasted and eaten, it tastes like chicken. This bird mainly eats grass seeds and it is usually seen walking around looking for food.

Spinifex Pigeon
Geophaps plumifera

Garlawarr
Garlawarl
Galawirri

The flesh can be eaten after lightly roasting. This pigeon gets quite big and is very common on Jaru country. They are often seen performing courtship dances and are attracted to houses and camps to find water.

Peaceful Dove, Diamond Dove
Geopelia striata, G. cuneata

Guluyugu
Gurluyugu

These small pigeons are often seen around water, near creeks and springs. The flesh can be eaten after roasting, but they are fairly small. The Jaru name is based on the sound of the call.

Bar-shouldered Dove
Geopelia humeralis

Gurlurdurdug

The flesh can be eaten after lightly roasting, it is tasty. The Jaru name is based on the sound of the call.

Cockatoos, Parrots, Lorikeets

Budgerigar
Melopsittacus undulatus

**Gulyulyu
Ngardijirri
Gumuyurru**

There is a big law and creation period story for this bird; there is also a special ceremony and sacred site. They are often seen in large flocks, especially in drier areas.

In the Bungles area large flocks are often seen.

Red-tailed Black-cockatoo
Calyptorhynchus banksii

**Dirran
Diyirran**

This large bird eats the flowers and fruit of many trees, the fruit are often seen scattered over the ground under the tree. When a large group is seen it indicates to Jaru people that rains are coming.

It has the **jabalyi** skin.

Sulphur-crested Cockatoo
Cacatua galerita

**Gaalyalya
Bangarra**

This larger white cockatoo lives in river country; it is sometimes called black mouth cockatoo. They are kept as pets by some people and can be taught to speak like a person.

Corella
Cacatua sanguinea

Laba

Laba often occurs in large groups and they look around on the ground for grass seeds to eat. They have the **Jangala** skin.

Cockatiel, Weero
Nymphicus hollandicus

**Wirringurn
Jarulajarula***

This small pretty bird is often kept in cages and can be trained to speak. Many **gardiya** call this bird 'weero', though not all.

Galah
Cacatua roseicapilla

**Girlinygirliny
Gilinygiliny**

This bird is often kept in cages and can be taught to speak English; he tends to dance around when kept in a cage. The Jaru name is based on the sound of the call.

Pink Cockatoo, Major Mitchell Cockatoo
Cacatua leadbeateri

Gagalyalya
Gagalyayaga

Mainly found in southern areas of Jaru country, especially on the desert areas. It is not common in the Halls Creek area. This bird is often kept as a pet also.

Rainbow Lorikeet
Trichoglossus haematodus

Ginyginy

This small pretty bird is commonly seen near creeks and rivers, especially when paperbarks are flowering. They like to eat **ngulurr** and **jamaraj**.

Red-winged Parrot
Aprosmictus erythropterus

Ginyginy
Gin.gin

This larger green parrot has the same Jaru names as the Rainbow Lorikeet, but is as recognised as being different. This bird often eats the fruit of *Ficus racemosa* and *Ficus coronulata*.

Hooded Parrot
Psephotus dissimilis

Gulyuyu*
Ngarrijirri*

This pretty parrot mainly lays its eggs in holes in ant nests, though sometimes it will use a hollow log. Check this, it is a long way from known distribution, sighting by GMW at spring near Mt Brophy, 02 April 2003.

Pallid Cuckoo
Cuculus pallidus

Check name and uses.

Pheasant Coucal
Centropus phasianinus

Budbud
Burrajburraj

This bird often runs along the ground and flies close to the ground, it has a long tail and runs with a 'hunched back'. The Jaru name is based on the sound of the call, 'bud...bud...bud...'.

Common Koel, Stormbird, Devilbird
Eudynamys scolopacea

Juwag
Birlirrmanuwaji
Duwagduwag

This bird has special powers and can take away a person's spirit; it is sometimes called the 'Devil Bird'. Children are not allowed to play with it, as it can take away the spirit and the child gets sick and bony. When it calls out it is best to cover up a baby.

The **juwag** name is based on the sound of its call, 'juwag.....juwag.....juwag...', which gets higher and louder in note as it continues. When this bird sings out it indicates that rains will begin soon.

Frogmouth, Nightjars, Owls

Tawny Frogmouth
Podargus strigoides

Wirmanuwaji
Wirrmanaji
Diliyigi

This bird hides in trees often on the trunk and looks like a stick or branch, they are often very hard to see. They make a 'wir' sound at night and this is where two of the Jaru names comes from.

Owlet Nightjar
Aegotheles cristatus

Gurrurr

This bird is active at night and is often not seen much, the Jaru name is based on the sound of the call.

Southern Boobook
Ninox novaeseelandiae

Gurrurr

Check name and knowledge.

Barn Owl
Tyto alba

Mugmug
Dumbu

Often seen sitting in hollow logs and on stumps at night looking for food, one of the Jaru names is based on the sound of the call, 'mug.mug..mug.mug'.

Kingfishers

Blue-winged Kookaburra
Dacelo leachii

Jagawurru
Jagawurr (Turner)

Jagawurru is good hunter often killing lizards and small snakes. The Jaru names are based on the sound of the call.

Sacred Kingfisher, and
Todiramphus sanctus

Luwurn
Luwan

This small bird is a good hunter, often seen near creeks and waterholes. **Luwurn** is a dreaming totem for some Jaru people; it has a powerful creation period story for Jaru people.

It has the **jampin** or **jangala** skin.

Red-backed Kingfisher
Todiramphus pyrrhopygia

Digirrja

Digirrja makes a small burrow in the banks of creeks and rivers.

Rainbow Bee-eater
Merops ornatus

Jiyirr

This small colourful birds makes a hole in a bank to lays its eggs, it eats insects and is often seen flying around hunting for food. If you hurt this bird a big wind and rain storm will occur.

The Jaru name is based on the sound of the call.

Red-backed Fairy-wren
Malurus melanocephalus

Wirdirdiwirdirdi

This bird calls out when a stranger is visiting country, once he has sung out you will not be able to find food.

Pardalotes
Pardalotus spp.

Binbbinbinini
Binbbinbininij

These small birds dig out a burrow to lay eggs in; the burrows are often seen in creek banks or roadside cuttings.

Little Friarbird
Philemon citreogularis

Darlajguna

It is often seen in noisy groups in paperbarks and other flowering trees.

Yellow-throated Miner
Manorina flavigula

Biyirnbijirn

Biyirnbijirn eats nectar and pollen from various trees. The Jaru name is based on the sound of the call.

Honeyeater, Black-chinned, and others
Melithreptus gularis

Murunggurr
Wurdidiwurdidi

This bird eats the nectar and pollen from any flowers.

It has the **Jangala** and **Nangala** skins. This bird has special powers and can change into a man. It does not like grey horses or people wearing white shirts.

Grey-crowned Babbler
Pomatostomus temporalis

Ganggang
Gangganginy
Ganggangi

Generally seen in large groups jumping around on the ground and in low branches, these birds often give away the presence of a hunter by making lots of noise. They 'speak in language' and Jaru people can hear Jaru words in the chatter when these birds are around.

Willie Wagtail
Rhipidura leucophrys

**Jigirriji, jigirrij
Jindibirrij
Jigirrijig
Jindiwirrij
Gurnduwirrinj**

Some of the Jaru names are based on the sound of the call.

This small active bird warns you when family members pass away, he follows you around calling out to let you know something bad has happened. If this bird is hurt there will be a big strong wind and heavy storm.

In the dreamtime it danced in area of burnt spinifex and wagged its small tail back and forth, it still has the black ash on its body.

Peewee, Magpie-lark
Grallina cyanoleuca

**Gurlurrid
Diyadiya
Gurdid
Gurlirrij**

Some of the Jaru names of this bird is based on the sound of the call; it has the **janama** skin.

Weebill
Check name

Durru

This small yellow bird visits many flowers to get pollen and nectar.

Bowerbird, Stealing Bird
Chlamydera nuchalis

**Juwayurru
Juwigurna**

Juwayurru likes to collect any brightly coloured object to place around its bower, it especially likes coins, glass, bottle tops, screws and other small metallic objects. The bower is built from sticks and grass and is used to attract a partner and as place to perform his dance and song.

This bird makes a jiwij..jiwij..jiwij noise.

This bird is active and noisy and some people think the noise he makes sounds like swearing.

White-winged Triller
Lalage sueurii

Jiriga

This bird has a beautiful but varied song.

White-breasted Woodswallow
Artamus leucorhynchus

**Jirrinngali
Binbbinbilayirri**

These birds often sit together on power lines and fence lines, in the cold weather they sit close together to stay warm. They like to sit on high perches and fly high in the air to look for insects to eat.

Pied Butcherbird, Magpie

Cracticus nigrogularis, Gymnorhina tibicen

Gumurlawurru

Gumulawurru is a good hunter for small lizards, insects and mice, it is often seen around camps looking for meat scraps.

It has the **juburrula** skin.

Crow, Torresian and Little

Corvus orru, Corvus bennetti

Wan.gura

Waagwaag

There is special dreaming site for wan.gurra near Ringers Soak; this bird has a powerful creation period story and it used to be a man. The **waagwaag** name is based on the sound of the call. In the Bungles area they have a more blue coloured eye.

It has the **janama** skin.

Finches, Crimson, Double-barred and Zebra**Nyinyi**

Neochmia phaeton, Taeniopygia bichenovii, T. guttata

Nyilnyil*

These small birds are often seen near creeks and springs. If you are lost in the bush you can follow them and they will often lead you to water.

Mistletoe Bird

Dicaeum hirundinaceum

Wirdirdiwirdirdi

This small bird mainly eats the fruit from mistletoe plants. It makes a nest like a small bag.

Unkown bird

Gunyarrgajayi

Danba Banks used this word for a bird like the Black-winged Stilt.

FISH

The Jaru term for fish in general is **yawu** or **yagu**. The name **murnmurd** is often used for any small fish that is suitable for bait to catch bigger fish.

Bony Bream

Nematalosa erebi

Wirnbirri

Luwarr

This fish is very common in waterholes and slow moving rivers, they are often seen in large schools, however they do not take bait from fishing lines and are very difficult to catch.

In the past they were commonly caught using rolls of spinifex pushed through the water like a net and the fish were caught in the grass and thrown onto the bank. In recent times they have been caught with small nets. The sweet tasty flesh contains many small bones, the meat is often eaten after cooking and then sun drying.

They are good to use as bait to catch larger fish.

Blue Salmon Catfish
Arius graeffei

Binyjawunyja
Binyjawinyja
Binyjiwinyji

The flesh from this catfish is very tasty, and it is quite common in waterholes and slow moving rivers. This smaller catfish takes the bait well and is easy to catch. They are often cooked in small ground ovens with other fish and grass placed over the fish to keep it moist while cooking.

The spines that occur on the fins can cause a lot of pain if they prick the skin. They are usually broken off and thrown into the fire or placed in a safe place like the fork of a tree high above the ground. If the spine enters the skin the area is treated with the excretion from the catfish to stop the pain.

Fork-tailed Catfish, Shovel-nosed Catfish
Arius ? midgleyi

Binyjawinyja
Binyjiwinyji
Binyjawunyja

A common catfish in waterholes, it always takes bait well and is easy to catch; though they can get quite large and difficult to pull out of the water. The flesh is eaten after roasting on hot coals or cooking in a ground oven.

The spines that occur on the fins can cause a lot of pain if they prick the skin. They are usually broken off and thrown into the fire or placed in a safe place like the fork of a tree high above the ground. If the spine enters the skin the area is treated with the excretion from the catfish to stop the pain.

Pale Eel-tail Catfish
Neosilurus hyrtlui

Ngirnda

The flesh can be eaten after lightly roasting on hot coals and ashes. This smaller catfish does not take bait as well as the fork-tailed catfish and is more difficult to catch using a line and bait.

Black Eel-tail Catfish
Neosilurus ater

Girlinyi

The flesh can be eaten after lightly roasting on hot coals and ashes. This smaller catfish does not take bait as well as the fork-tailed catfish and is more difficult to catch using a line and bait.

Freshwater Longtom

Jalgirrigirri

Strongylura krefftii

Langgariny

This long narrow fish swims like a bullet, and catches smaller slower fish to eat. The meat is eaten after lightly roasting on hot coals and ashes; it is quite tasty but has lots of bones. They have many small sharp teeth and can get quite large when mature.

Western Rainbowfish
Melanotaenia australis

Burnda

This small colourful fish is too small to eat, but can be used as bait to catch larger fish.

Northwest Glassfish
Ambassis spp.

**Wilirribunga
Wilirri**

This small fish can be used as bait to catch larger fish; it is too small to eat. It is considered to be the younger relative of Bony Bream, which has the same Jaru name.

Eel
Ophisternon gutturale

**Yilginy
Laanyi
Lanyi
Yilgany
Jawilyi**

The flesh can be eaten after lightly roasting, it is good meat and it has very few bones. This snake-like fish occurs in large rivers and on the Margaret River side.

Check the name **laanyi**.

Barramundi
Lates calcarifer

**Balga
Nyiliyaru
Barlga**

The flesh can be eaten after roasting on hot coals and ashes, it is very tasty. Larger fish are cooked in ground ovens after covering with leaves and bark from paperbark trees.

There is an important creation period story for this fish, and a dreaming site on the Elvire River on what is now Turner River Station. This fish only occurs in some areas of Jaru country, there is none around Halls Creek area, and some Jaru people don't recognise it.

The Jaru name **nyiliyaru** literally means 'thing with scales'. It has the **jagarra** skin.

Black Bream, Western Sooty Grunter
Hephaestus jenkinsi

**Gambard
Gambardgu
Muruguayid
Murruwayin**

The flesh is eaten after roasting lightly on hot coals and ashes, it is very tasty and is one of the most sought after fish on Jaru country. It is very common in waterholes, springs and slow moving rivers, and always takes bait quickly.

They can get quite large, up to about 35 cm long, but are generally smaller and about 20 cm long. The smaller fish have sweeter and tastier flesh.

Butler's Grunter
Syngnastes butleri

Gambard
Gambardgu

This fish is very similar to the Black Bream and has the same Jaru names, it can be eaten in the same way. It has a longer, pointy nose and red around its eye.

Spangled Perch, Golden Perch
Leiopotherapon unicolor

Murnmurd
Muwalanga

These small fish are common and are easy to catch as they always take bait quickly. The flesh can be eaten after boiling in water or cooking in ashes and coals, it has quite a lot of bones. If a lot of small fish are caught, they can be cooked and the flesh sun dried and kept for eating later. They are often used as live bait or cut up and used as bait to try and catch larger fish.

The Jaru name **murnmurd** can sometimes be used to refer any small fish seen swimming around in waterholes and springs.

Mouth Almighty
Glossamia aprion

Riflefish, Seven-spot Archerfish
Toxotes chatareus

Nalawarr

Generally a small fish to about 15 cm, but occasionally to 30 cm, the flesh can be eaten after roasting in hot coals and ashes. They catch insects by spitting water at them and knocking them into the water.

Mullet
Mugil sp.

Wan.guya

This slow moving fish can be eaten, after roasting in hot coals and ashes. The meat is tasty and has very few bones.

Check with rock cod, **nyaguna**.

Flathead Goby
Glossogobius giurus

Gurnu

This small fish can be used as bait to catch larger fish; it is too small itself to be eaten.

Sleepy Rock Cod

Nyaguna

Oxyeleotris lineolata

The flesh can be eaten after roasting in hot coals and ashes. This fish often sits quietly on the bottom of creeks and waterholes.

Check the name **wan.guya**, for mullet might be rock cod too.

Giant Gudgeon
Oxyeleotris selheimi

Nyaguna

The flesh can be eaten after roasting in hot coals and ashes. This fish often sits quietly on the bottom of creeks and waterholes. This type of **nyaguna** gets much bigger than the sleepy rock cod, above.

Sawfish
Pristis microdon

Jalgirrigirri

This large saltwater ray-like fish with a distinctive 'saw-nose' is rarely seen on Jaru country in the large rivers a long way from saltwater areas. The flesh can be eaten after roasting in hot coals and ashes.

It has the same Jaru name as the Freshwater Longtom, which also has a long nose.

FROGS

The Jaru terms for frogs in general are **ngagbarn***, **wugu** and **ngalja**. Tadpoles are called **giljirri***. Many Jaru people believe that the slime and excretion from frogs causes warts if touches your skin.

Green Tree Frog
Litoria caerulea

Laarnngarnany
Laarnngarna
Wurgawurgal

This large green frog is often seen in toilets and laundries, it has a loud call, which is often heard at night in the wet season. These frogs are common during and after heavy rains but are otherwise not seen much.

Rain Frog
Neobatrachus aquilonius

Nangalanangala
Nangala

This frog sings out at the beginning of the rain season and is very noisy after heavy rains, he sings up the rain.

It has the **nangala** skin, and has an important creation period story.

Sand Frog
Notaden nicholli

Ngirlaburnda

This frog buries itself in sand during the dry season. They can be dug up and eaten after cooking in hot sand and ashes. Often they are very deep in the sand and a large hole needs to be dug to get to them, however quite few can be collected in one area and sometimes a billy-can full can be collected from one hole. It has sticky milk on its back.

It has the **nangala** skin.

Check the name **gajamarra**, Amy Nobbler with Tas at RS.

Rocket Frog

Check identification

Lirrajuwal

The Jaru name means long mouth. This small frog moves very quickly.

Black-soil Frog

Check identification

Narlja*

These frogs live in cracks in the ground in black soil country; they are good bait for fishing with a handline. Check the Jaru name.

SNAKES

The Jaru term for snakes in general is **lingga**, **warna** or **guljany**.

Blind-snake, worm

Ramphotyphlops sp.

Munjuwu

Minyjuwu

This small harmless snake has special powers, it causes toothache if you see it or it passes by you in the bush.

Ringed-brown Snake

Pseudonaja modesta

Warndawarnda

This snake has a special creation period story, it tends to get sweet with people and tries to grab them by the leg, it does not follow the law about marrying the right way and will chase anyone.

Western Brown, Whip Snake

Pseudonaja nuchalis

Dambul

This snake is very cheeky and poisonous; it can throw itself into the air to attack people, horses and bullocks. It needs to be avoided when in the bush or working cattle

Death Adder

Acanthophis praelongus

Lingga

This snake is cheeky and very poisonous; it can change colour depending on the colour of the surroundings. It has a sharp point on the tip of its tail. There is a lot of this snake near the Bungles.

Taipan

no Jaru name

Oxyuranus scutellatus

This snake does not occur in Jaru country, but is known from further north and is regarded as being very poisonous.

King Brown, Mulga Snake

Gun.gu

Pseudechis australis

This snake gets quite large and is very poisonous and aggressive, when angry it 'stands up' and the head and neck swell like a cobra.

It is eaten in southern Jaru areas in the same way as pythons are eaten; though you must be very careful when trying to kill it.

Moon Snake, Burton's Legless Lizard

Lilid

Lialis burtonis

Lidlid

This small harmless snake makes a soft sound like 'lilid....lilid....lilid...', this signals that the yams are fat and ready to be dug up and eaten. This snake has a special dreaming story and it likes to eat the yams.

Water Python, Rainbow Snake

Jungurra

Liasis fuscus

The flesh can be eaten after roasting in a ground oven; the body of the snake is coiled down into the hole. The skin of this snake is sleek and colourful and reflects light in all different colours like a rainbow. This snake does not bite but tries to squeeze anyone who picks it up.

This snake has a powerful creation period story and is strongly linked to the powerful rainbow serpent. It has the **jungurra** skin.

The rainbow snake lives in shallow water areas, while the rainbow serpent, **galuru**, **gurraj**, **wanayarra** and **galburda**, lives in deep water areas.

Check the name **walikurniny** (Phyllis Thomas).

Woma

Murnduj

Aspidites ramsayi

Murnduny

This snake lives in southern Jaru areas and is commonly seen in desert areas, it gets very large. The flesh can be eaten after roasting in a ground oven.

Black-headed Python

Murnduj

Aspidites melanocephalus

Murnduny

This snake has a powerful creation period story; it is a quiet snake. There is dreaming site near Rijarr at Turner River. The flesh can be eaten after roasting in a ground oven.

Check the name **Walurul**.

Carpet Python
Morelia spilota

Janjangarnuwaji

This python eats beetles, ants and bugs in sandy areas, its Jaru name means 'sand eater'.

Green Tree Snake
Dendrelaphis punctulata

Warndawarnda

This small yellow-green snake lives near rivers and creeks, it is often seen in paperbarks and pandanus. It is not poisonous but is often cheeky and can give you a fright.

LIZARDS

Northern Blue-tongue Lizard
Tiliqua scincoides

Luma
Giringgaji
Lunggura*

The flesh is eaten after roasting in hot coals and ashes, it is very tasty. Hitting on the back of the head with a stick or rock easily kills them. Though they have a nasty bite, they are slow moving and generally just sit with their mouths open when found.

They are common and are found in all habitats all over Jaru country.

Centralian Blue-tongue Lizard
Tiliqua multifasciata

Jiwilyi*

The flesh is eaten after roasting in hot coals and ashes; it is very tasty. Hitting on the back of the head with a stick or rock easily kills them. Though they have a nasty bite, they are slow moving and generally just sit with their mouths open when found.

Jiwilyi is closely related to **luma** or **giringgaji**, the Northern Blue-tongue Lizard, above.

Blanket Lizard, Frill-necked Lizard
Chlamydosaurus kingii

Ngarranginy

The flesh is eaten after lightly roasting on hot coals and ashes; it is a very tasty and highly sought after meat. The blanket or frill around the neck can be heated in the fire and then rubbed through the hair to make your hair healthy, shiny and dark.

These lizards are often seen after rain running around looking for insects and ants to eat.

Gecko **Burnurr**
Various taxa

This small lizard is common around houses and sheds, especially near lights looking for insects to eat.

Knob-tailed Gecko **Burnurr***
Nephrurus asper

This little gecko has a knob on its tail and will sometimes chase you like a dog.

Ring-tailed Dragon **Bawurda**
Bawuda
Ctenophorus caudicinctus

Jaru people do not eat the flesh of this lizard, however it is eaten in desert areas further south in central Australia.

Slippery Lizard, Skink **Ngamay***
Buyurlu*
Any skink with shiny skin

These small lizards like to sit on trees and look around for food.

Check the term **ngamayi** (Barbara Sturt).

Ta-ta Dragon, Shaky-paw Lizard **Manggirrigirri**
Diporiphora spp.

This small lizard often sits on tree stumps and rocks and waves his front leg gently in the air, there are several different types.

Thorny Devil **Yadaliyarri**
Yadalayarri
Yarralayarri
Moloch horridus

People in desert areas further south of Jaru country eat the flesh of this small spiny lizard. Jaru people do not eat it.

GOANNAS

The word **jarrambayi** can be used to refer to any large goanna. Check the name **bardangana**.

Rough-tailed Goanna **Jarany**
Varanus check species.

This goanna does not occur on Jaru country but is known from areas further north, it is well known as being a very fast runner.

Tree Goanna
Varanus tristis

Warnburru

Many Jaru people do not eat this goanna as it is thought that it makes you go 'silly in the head'. It is known that other groups eat the meat.

CROCODILE and TURTLES

Freshwater Crocodile
Crocodylus johnstoni

Dirrmird
Walwarrangga
Warlwarrangga

The flesh can be eaten after roasting or cooking on hot coals and ashes. The meat is very good to eat and is highly valued. Young children cannot eat the meat.

In the past they were caught with spears or wrestled in the water, the jaws were held shut and tied up as soon as possible. Smaller crocodiles were caught as they were easier to handle than large ones. They are often caught on fishing lines now, but are generally let go.

When they are killed the anus area is 'kissed', as a traditional custom. It has the **jawilyi** skin.

Check the names **nyumbirriwu** and **warrabi** (alligator)

Short-neck Turtle, Red-faced Turtle
Elseya dentata, *Emydura victoriae*

Balarn
Barlarn

The flesh is eaten after roasting. The turtle is cooked on hot coals on its back, and the juices are caught in the shell. These turtles are generally caught on hand lines when fishing, but can also be caught by hand near the banks of waterholes and springs.

These turtles have a hard bite and they must be handled with care. As they get older the face changes colour and becomes darker.

Long-neck Turtle
Chelodina rugosa

Wirruwurna
Wirrijwit*

The flesh is eaten after roasting. The turtle is cooked on hot coals on its back, and the juices are caught in the shell. These turtles are generally caught on hand lines when fishing, but can also be caught by hand near the banks of waterholes and springs.

Green Turtle, Saltwater turtle

Wiyiwarr*

Chelonia mydas

These turtles do not occur on Jaru country but are known from saltwater areas to the north. They are known to be excellent food though the meat and fat are thought to be too rich.

MAMMALS

Black Flying-fox, fruit bat
Pteropus alecto

Walimali*

The flesh can be eaten after roasting on hot coals and ashes; it is not eaten by all Jaru people. **Walamali** has a strong sweet, fruity smell and after you eat the meat your sweat has the same smell. They are usually seen hanging upside down in shady trees, especially paperbark trees near rivers and creeks. They fly out at dusk looking for food and return at dawn to roost in the trees all day. They eat flowers and fruits from any tree.

They were hunted in the past with stones and throwing sticks that were thrown into the roosting colonies or as the bats flew overhead at dusk. In recent times they have been shot with shotguns.

Little Bat
Check name

Ban.gal*
Barn.gal

These small bats fly around at night looking for small insects to eat. They make a soft clicking noise. During the day they roost in caves, old houses or in culverts.

The Jaru term **junguny** can be used to refer to any small mouse-like animal.

Kimberley mouse
Pseudomys laborifex

Nyilyimbu*

Nyilyimbu is the cousin of **mingajurru**, the delicate mouse. They are both small mice that cannot be eaten but live in the bush and are often eaten by hawks and snakes.

Delicate mouse
Pseudomys delicatulus

Mingajurru*

This small bush mouse is eaten by snakes and hunting birds, it lives in small burrows.

Rat
Check for tree rat

Lilgurn*
Wunybuny

The meat was lightly roasted and eaten in the past, it has not been eaten in recent times. The meat has good taste similar to bandicoot meat.

Stripe-faced Dunnart

Baguru

Sminthopsis macroura

This small mammal often has a fat, swollen tail and it has a distinct stripe on the forehead. It is too small to be eaten.

Kangaroos and Wallabies

Female kangaroos or wallabies are called **jiya (check)**. Any kangaroo and wallaby can be called **jaji**.

Short-eared Rock-wallaby
Petrogale brachyotis

**Ganyarla
Ganyala**

The flesh can be eaten after roasting in a ground oven. This small wallaby is only seen in rocky areas, they move quickly and are difficult to catch. In the past they were hunted with spears but in recent times guns have been used. The end of the tail is very hairy, and sometimes they have a slight blue-grey colour.

Spectacled Hare Wallaby
Lagorchestes conspicillatus

**Milbardiri*
Manggawan**

The flesh can be eaten after roasting, it is very tasty and tender. These small wallabies were eaten in the past but have not been eaten recently because the numbers are now far fewer and they are rarely seen.

It has the **jambiyin** skin. Check the name **jangan**.

Mala, Rufous Hare Wallaby
Lagorchestes hirsutus

**Wijari
Mala**

These small wallabies used to be seen in Jaru country, but have not been seen in recent times. The meat can be eaten after roasting; it is tasty and tender. It has not been eaten for a long time. They were found near the NT border and around the Tanami area.

Nail-tail Wallaby, Left-hand Wallaby
Onychogalea unguifera

Gururrunggu*

The flesh can be eaten after roasting in a ground oven; the fur is burnt off on flames first. This kangaroo lives on plains country and has a distinctive nail or prickle at the end of its tail.

When hunted it makes and 'ool..ool..ool' sound. The Jaru name is based on the sound of this call. The left hand or paw is held close to the chest and swung in small circles when it hops, this is why it is called the left hand wallaby. In the past they were hunted with spears but in recent times guns have been used.

It has the **nyawurru** and **jawurru** skin.

Red Kangaroo
Macropus rufus

Barndarrngarna*
Burrardi
Marligarna

This is the biggest kangaroo and they are admired for their size and strength. A large male has a lot of meat on it and can feed many people when they are killed. They are very common all around Jaru country and are often hunted in hilly areas. They are cooked in a ground oven after the fur has been burnt off over flames.

There is a powerful creation period story for this kangaroo. It has the nyawurru skin.

Plains Kangaroo, Common Wallaroo
Macropus robustus

Bandarrngarna*

This kangaroo is very common and is most often hunted on plains country. It can get fairly large and the meat is very good to eat. It is cooked in a ground oven after the long dark grey fur has been burnt off.

Burrowing Bettong
Bettongia lesueur

Burdaya
Walkaru

The Jaru names come from recordings made by zoologists in the 1980's. During our research there were no recollections of this species.

Brushtail Possum
Trichosurus vulpecula

Jangarn*
Jambiyindi
Jambiyid
Jambiyin

The flesh can be eaten after roasting on hot coals or cooking in a ground oven. They are often found in hollow trees where they hide during the day. The tracks can be seen going up the trunk of a tree where a possum lives, the tree is then chopped open to get the possum out or a small fire is built to smoke the possum out. They make a hissing noise and carry the babies on their backs like a monkey.

They used to be more common and are only known from the east side of Jaru country.

They have the **jambiyin** skin.

Golden Bandicoot
Isodon auratus

Lilgurn
Junguny

This small animal used to be all around Jaru country, but now there are none. Old people can remember eating the flesh, which is very tender and tasty. They live in hollow logs and grassy areas where they make a little nest. In the past they would hang around stock camps looking for food scraps and were common in some areas; they look like a large rat.

Rock Ring-tail Possum

Lunggarr

Petropseudes dahli

This possum is found in rocky areas and is seen at night near caves and crevices looking around for food. The tail has no hair on it. The flesh can be eaten after roasting, it is very tasty.

Bilby, native Rabbit
Macrotis lagotis

Nyarlgu*
Birndirdiri
Yawiri

This small animal has large ears and sharp teeth; it lives in large burrows in the ground. **Nyarlgu** mainly occurs in southern Jaru areas in desert country, it is common around Ringer's Soak, Bililuna, Sturt River, Ruby Plains, Gariny and the Canning Stock Route.

The meat is eaten after roasting in a ground oven, it tastes like wallaby meat. **Nyarlgu** can be caught by digging up the burrows after blocking off the entrances, this can take a lot of work as they have extensive burrow systems.

They are active during the night or during cooler weather, but do not like the bright sunshine or hot temperatures. They spend all day in the burrow and often many live in one burrow.

In the past the tails were used during funeral ceremonies and bereavement.

Quoll, Native Cat, Spotted Cat
Dasyurus hallucatus, *D. geoffroii* ?

Minija*
Gurdurruyundu

Minija is like a pussy cat, they are very good hunters and have small sharp teeth, they may have been eaten in the past but not in recent times.

Porcupine, Echidna
Tachyglossus aculeatus

Gurnanji
Girnanyji
Bagawuru
Bagayaru

The meat can be eaten after roasting on hot coals or in a ground oven; the prickles are burnt off first over flames. The meat tastes like pork and has lots of tasty fat on it, the meat often smells like ants because **gurnanji** eats lots of ants.

They live in burrows or cracks in rocks and can be tracked to their hiding place then pulled out with a piece of hooked wire, they prefer to live in rocky areas. They are best hunted in the early morning or late afternoon when it is cooler as they go out looking for ants then.

There is big creation period story for **gurnanji**, he tried to steal all the shade so that everyone would be in the sunshine all day, but everyone speared him and his back is still full of spears.

Dingo, wild dog

Marrany* (adults)

Canis familiaris

Gududu* (puppies)

In the past the flesh was eaten when there was no other meat, only young ones where eaten as they are more tender.

They are excellent pets and hunting partners and in the past people kept them to sniff out all sorts of animals like bandicoots, bilbies, porcupines and possums. They are really wild though and even when pets still remain wild bush animals.

There is a powerful creation period story about **marrany**. Some Jaru people think it is cruel and wrong that dingos are poisoned around cattle stations.

INSECTS

Dragonfly, Helicopter insect
Odonata, Anisoptera

Burrumayimi*
Burrumiyimi
Burramiyimi

Often seen around water, they have no particular use though some birds like to eat them. Helicopters are given the same name.

Beetles in general
Many taxa

Birniny

Bush Cockroach
Blattodea

Gumbulanginy*

Gumbulanginy sticks his bottom up and tries to squirt urine into your eye to make you go blind.

Ant bed
Isoptera, Termitidae

Munggu
Yingana
Ngardan

New ant beds are often built during the heavy rain period, to get out of the wet ground.

Termite, white ant
Isoptera, Termitidae

Gururr*
Warninyji*

They build a large earth nest above the ground and eat the inner wood of trees. The eggs and larvae can be eaten lightly roasted and are excellent food. They taste like scrambled eggs or witchetty grubs.

In the past they were cooked by placing a couple of large stones heated in a fire into a coolamon containing the small grubs, these were then stirred around, like weeties, in the coolamon to lightly roast the ants.

Gururr are the wood eating termites and **warninyji** the grass eating ones; **gururr** is the mother of **warninyji**.

Young men cannot eat them until they have been through ceremony. If young men eat them there will be big storms with a lot of rain and wind, Stan Brumby has seen this happen.

Praying mantis
Mantodea

Jirrilyjuwal*
Winggijuwat

These insects have no particular use, they are never hurt as they are considered special animals. The Jaru names refer to the long tails.

Stick insect
Phasmatodea, Phylliidae

Jirrilyjuwal
Winggijuwat

This insect looks like a stick or piece of wood and is difficult to see, they move in a jerking motion. The Jaru names refer to the long tails.

Earwig
Dermaptera

Nyurrurnnyurrurn*

Lirriny lives in wet areas under logs and rocks, they have a pair of pinchers on their tail end. Large ones can be used as bait when fishing with a handline.

Grasshopper
Orthoptera, Caelifera

Bilwilyji*
Birlbiji

There are many types of **birlbiji** and they can be used as bait when fishing with a handline. The short dark one can be eaten after roasting lightly on a small pad of burning grass; they are tasty and crunchy. Many birds also eat **birlbiji**.

Cricket
Orthoptera, check id

Lirriny

These small insects make a loud noise in the grass like 'lirrid...lirrid...lirrid..'. Larger **lirriny** are good bait when fishing with a handline.

Mole Cricket
Orthoptera, Gryllotalpidae

Nyurrurnnyurrurn*

This insect lives underground and has large pinchers on the front that can nip you.

Green Katydid
Orthoptera, *Caedicia* sp.

Giriny*

These green grasshopper-like insects are good bait for fishing. They live in green grass and leaves but fly into lights at night. They make a noise like 'giriyny...giriyny..'.

Head Lice

Jumbu*

Phthiraptera, *Pediculus humanus*

This small insects get into you hair and makes your and skin very itchy.

Body crab

Wawuya

Check identification

These small animals live in pubic hair and armpits.

Cicada

Yidiyidi*

Hemiptera, Cicadidae

There are many types of cicada. When they sing out loud on the trunks of trees it indicates that the rains will arrive soon, they are noisiest in the hottest weather. Young children use the skins left behind on tree trunks as toys, they also put the live insect close to their ear to hear them singing.

Water scorpion, Toe-cutter

Nyurrurnnyurrurn*

Hemiptera, Nepidae, *Ranatra* sp.

These large water insects are seen around the edge of swamps, rivers and billabongs looking for food; they can give you a painful bite. They are also found in troughs and tanks.

Ladybug, Small beetle

Birniny

Coleoptera, Coccinellidae

These small pretty beetles look like a lolly or toy, children often play with them. There are many different types and colours.

Blue and orange beetle

Nyirrinyirriny

Check name

This brightly coloured beetle has no use, it eats the leaves of many different plants.

Click Beetle

Digdig*

Coleoptera, Elateridae

This small beetle makes a clicking sound when you hold it; the Jaru name refers to this sound.

Ground Witchetty Grub, Moon-grub

Jalarn*

Xyluetes spp, and other taxa

Yalngan*

This grub is not eaten, only the tree one can be eaten. **Jalarn** can be used as bait for fishing with a handline. The Jaru names also mean moon and this grub is often called moon-grub.

Tree witchetty grub

Laju

Xyleutes spp., and other taxa

Lagan

Bun.gal

They can be eaten raw or lightly roasted and are very tasty. They are found in the lower stems and roots of various trees. The ground witchetty grub is not eaten.

Itchy grub

Maramara*

Check identification

The hairs from this little grub cause severe itchiness, swelling and sometimes blisters. If you get them on you it is best to go to the clinic. They are often on the leaves of **marlan**, the river red gum or the bloodwood, and you must watch out for them in the bush.

It is best not to camp under **marlan** or bloodwood trees in case they fall on you in the night.

Bag shelter moth, itchy grub

Nyinggi

Ochrogaster spp.

The bags of these caterpillars or grubs are often seen hanging in trees. If you touch them or they fall on you the hairs cause severe itching.

Housefly

Muru*

Diptera, Muscidae

These small black flies are very common, especially around cattle areas and settlements. They can be real a nuisance.

Marchfly

Gurrjal*

Diptera, Tabanidae

Gurrjal has a sharp painful bite; they can be killed easily as they are slow fliers. They only sting during the green grass period in the late build-up and early wet season.

Blowfly

Wirrirarl*

Diptera, Calliphoridae

These blue-black flies lay eggs on meat and make it go rotten. The eggs and maggots are called **wilywily***.

Mosquito

Giwirli

Diptera, Culicidae

Giwiny

Ginali

Girali

These small insects are often around wet areas; they can be a real nuisance and cause an itchy lump to form where they have sucked blood. They can be chased away by burning wagila, conkerberry or manure from a horse or cow.

Butterfly and moth

Malimali*

Lepidoptera

Mulimuli

There are many different types and they come in all colours and sizes.

Caterpillar

Bubugarra*

Larva stage of many taxa

Waburra

Larger caterpillars can be used as bait for fishing; there are many different types.

Sugarbag, native bees

Ngarlu*

Trigona spp.

Girranga*

Native beehives contain honey, wax and pollen. The honey is very sweet and dark and is highly sought after, its Jaru name is **ngarlu** or **girranga** or **wuru**, and these words are also used to refer to the beehives in general.

The small stingless can be called **murru**, which is also the name for flies.

The wax is called **darla***, and it can be used to patch up coolamons and boomerangs or to fix head to axes handles and spear shafts.

The yellow pollen is called **ngunyurliji*** and it is used as medicine to treat bad colds. It is mixed with water and drunk and has a sour taste. The pollen can also be called **gurndarri**.

The small stingless bees are called **ngalinya** if they are light in colour and **marraranggu** if they are dark in colour.

The nose or tunnel into the hive is called **nama***. The white eggs that look like sago and are salty to taste are called **gurla**.

Native beehives are found in trees or in the ground. Tree sugarbag is located by watching the bees to see where they go in the hole in the tree, or by listening to the trunk of the tree to hear the bees working inside.

Ground sugarbag is found by watching where bees go in to the hole, the ground sugarbag is a bit cheeky and some people don't eat it.

Paper-wasp

Jirrinnygal

Hymenoptera, Vespidae

These small wasps make a papery nest in trees, if you bump it they chase you and sting you. The sting is very painful but does not last long. Check the Jaru name Doris Ryder may have been talking about a European stinging bee.

Mud-nest Hornet

Jirrinnygal *

Hymenoptera,

These yellow and black insects are quite large like a small bird. They build their nest from mud and lay their babies inside it.

Sugar-leaf
Check scientific name

Warrayayi
Barlinang*
Bin.ga

These small aphids can be eaten; they are very sweet and tasty. They are found on the leaves of **malan**, **warrany** and **lunja**, during the hot weather time from October to December.

They often occur in large numbers and a lot can be collected by pulling off the twigs and whipping the leaves with a stick so that the sugar-leaf falls off. If a lot is collected it can be made into a sweet damper, and kept for eating later. During the first heavy rains you often see sugar-leaf being washed away in the rivers and creeks.

OTHER ANIMALS

Ants

The term **bingi** can be used generically for any ant, but is also used to refer to the red meat ant and the black sugar ant.

Bull ant
Hymenoptera, *Myrmecia* spp.

Lidabrij*

This large black ant has a painful bite that causes swelling and redness, it hurts for a long time.

Red meat ant
Hymenoptera, *Iridomyrmex* spp.

Bingi*

This ant is attracted to meat, if you eat beef in the bush and leave scraps around **bingi** will come in large numbers. Bones and meat scraps are thrown on the fire so that **bingi** does not come into camps in the bush. They live in holes and often make a track from one hole to the other.

Ginger ant, yellow ant
Hymenoptera,

Ngunynguny*

This small ant has painful sting, but it only lasts for a short time.

Sugar ant
Hymenoptera, *Ochetellus* spp., *Tapinoma* spp.

Bingi*

This small black ant is attracted to sugar and sweet foods, it often comes into kitchens

Black ant
Check identification

Munayaga*
Murnayiga
Munayiga

The eggs can be eaten raw; they are creamy and tasty. They live in long anthills and sometimes logs, and are collected in a coolamon and winnowed to remove ants and rubbish. The eggs can then be eaten.

Green tree ant
Hymenoptera, *Oecophylla smaragdina*

These ants live in trees and make a nest in the leaves. The nests can be used as medicine. They are soaked or boiled in water and the liquid drunk to treat colds and congestion. They have sharp bite, but it only hurts for a few seconds. Green ants are only found in northern Jaru areas like Turner River and Warn.gu.

Spiders **Yumbu**
Arachnida

This Jaru name refers to any spider, the web is called **yudu** or **yurru**. The red-backed spider is recognised as being very poisonous and causing severe pain, it can kill small children and babies. There is another large spider that lives in a burrow that has a very painful bite as well.

Scorpion **Ngarrarnanggubayarru***
Arachnida, Scorpiones

Ngarrarnanggubayarru has got a very cheeky sting, it causes strong pain and swelling. They live anywhere in the bush and care must be taken not to touch one or roll it up in your swag. The name literally means 'I might bite you'.

Centipede **Ganbarr***
Chilopoda **Yirrinyji***

There are many different types of **ganbarru** but they have all got a cheeky sting.

Big Blue Tick **Midiri***
Arachnida,

This tick can live on kangaroos, bullocks, dogs and people.

Small Black Tick **Wigirli**
Arachnida,

This small tick lives on native animals and can get on to people as well.

Leech **Yilgan***
Check identification

They live in water or near wet areas and try to get on the skin so they can suck out blood. When you pull them off the place where they sucked blood will not stop bleeding for a long time.

Snail
Gastropoda,

Yilgin*

Yilgin leaves a silvery track behind when it moves; they can be used as bait to catch barramundi or turtles.

Worm

Wunyju

These are good to use for bait to catch small fish, which in turn can be used as bait to catch larger fish.

Mussel
Velesunio wilsonii

Wirrjangarniny
Wirrjangarnany
Wirrjangarna
Bambirriny

The meat inside the shell can be eaten after boiling or lightly roasting on hot coals. They are also good medicine for runny tummy or cold sick. They can also be used as bait for fishing with a handline to catch fish or prawns.

They are caught by feeling around with your feet or hands in the mud at the edge of billabongs and creeks. In the past the shells were sharpened on stones and used as knives to cut meat.

Pearlshell
Check identification

Jaguli

The shells from pearls were traded into Jaru country in the past and used in ceremonies.

Prawn
Macrobrachium spp., *Caridina* spp.

Jalij*

The flesh can be eaten after cooking on hot coals and then peeling off the outer hard skin. The flesh is very tasty. They can also be used as bait when fishing for barra, black bream or catfish.

They can be caught on light handlines or by using rolls or spinifex or malan as fish poison overnight.

Freshwater Crab
Check identification

Galarr*
Murlgurru
Marlajilawuja
Murlgurr

The meat can be eaten after roasting in hot coals and peeling off the shell. The meat is good medicine for colds and influenza. They can be caught on a handline or dug up out of the mud in the dry season. In the past they were collected in large dilly bags and were considered a good food source.

In the wet season they walk around away from water. They are eaten by many birds like brolga, pelican, jabiru.

The Jaru name **marlajilawuja** literally means many hands; the way the crab walks sideways is considered funny.

FERAL and INTRODUCED ANIMALS

House mouse
Mus musculus

Junguny*

This mouse lives in houses and eats food scraps or any food left out. The Jaru refers to the native delicate mouse, which looks similar.

Rat
Rattus rattus

Lilguny*

Rats often live in old houses and near rubbish dumps, they can get quite big. The Jaru name refers to a native rat that is similar in appearance.

Cat, Pujikat
Felis catus

Ngaya

Wild cats can be eaten after roasting the flesh; it is quite tasty. There used to be more feral cats on Jaru country, but there are still plenty around now.

Horse
Equus caballus

**Dimana
Yawarda**

Used extensively on stations and pastoral leases, they are also kept as pets. The meat is not eaten. There are quite a few feral horses on Jaru country.

Donkey
Equus asinus

**Man.gajuwal
Man.girrgirrujuwal
Yiyirruljuwal
Ginggong**

There are large numbers of feral donkeys in the Kimberley and western areas of the Northern Territory. IN the past they were used extensively at stations and missions to carry heavy loads. The Jaru name refers to the long ears.

Mule
Equus caballus x asinus

Miyalbaga*

Mules are a cross between horses and donkeys and are stubborn and stupid animals; they won't work properly and cannot have babies. The Jaru name refers to the fact they are slow to learn anything.

Pig

Nganggirrnganggirr

Sus scrofa

The meat can be eaten after roasting, it is very tasty. There are not many feral pigs in the south east Kimberley.

One-humped Camel
Camelus dromedarius

Yugiyibgaji
Yuguyibgaji
Yugiribgaji
Gawajuwal
Narrajuwal

Aboriginal people in desert areas eat the meat; there are some in southern Jaru areas like Ringers Soak, and also near the Turner River. When walking the heads bob up and down and this is what the Jaru name refers to.

Bullock
Bos taurus, B. indicus

Wulyjubirri
Wulyjubirriny
Bulugi*
Yuljubirriny*
Bulumanu

The meat is eaten after roasting or cooking on hot coals and ashes, it is very good meat. There are great numbers of cattle on stations in the east Kimberley.

Large bulls can be called **burrurna** or **warlagarringurr** (sleeping under supplejack tree).

Water Buffalo
Bubalus bubalis

Guliny*

In the past a few water buffalo have been seen on Jaru country after they have followed rivers and creeks down from the Northern Territory areas like Birrindudu. They were very cheeky animals and were avoided. They have not been seen since the BTEC scheme when most feral buffalo were shot.

Sheep
Ovis aries

Gugunja*

The meat is good to eat and the wool can be used to make clothing. They were raised by missionaries in a few places on Jaru country but could not survive the hot time of year.

Goats
Caprus hircus

Minggaji*

Goats were kept by missionaries and some station owners for meat and milk in the past. Occasionally they would escape and live in hills and rocky country, there were feral goats living in the hills near Palm Spring in the past. The Jaru name is based on the sound they made. There are no feral goats in the bush now.

Check the name **walagarringarna**, Tas at RS.

Camp dogs
Canis familiaris

Gunyarri*
Bunbulu*
Walagu
Marranyngamari

These domesticated dogs are recognised as being a lot quieter than dingoes; they can be trained as hunting partners and are good pets.

Red Ochre

Murdu

The red ochre is crushed and used as medicine, it is rubbed onto sores to make them heal quicker and to stop infection. It can also be rubbed onto the head to stop headaches.

6. PROJECT COMPLETION NEEDS

Outlined below are estimates of the time and resources required to complete the recording of traditional biological knowledge for Jaru and Kija languages, and possible mechanisms for funding plant and animal publications for each language.

Jaru plants and animals

There is a significant amount of data checking needed to complete the Jaru plants and animals book; some of this checking would be best done in the field, especially in the late wet or early dry season, and some could be undertaken at the KLRC Halls Creek.

Once plant and animal names have been correctly attested to species, there will be a need to compare and correlate information recorded in Joe Blythe's linguistic database and the Jaru plant and animal manuscript.

Based on discussions with Joe Blythe and personal experience in preparing similar books from biologically similar areas the following estimated times are needed to complete the Jaru Plants and Animals manuscript to be ready to submit to a printer.

Field checking of plants and animals	10 days
Transcription of tapes recorded	6 days
Correlation of manuscript and database	2 days
Manuscript preparation for publishing	7 days
Total days	25 days

These times are based on a linguist, ethnobiologist and senior Jaru knowledge custodians participating in the process in a similar fashion to the research carried out during this project.

Possible funding sources for a Jaru plants and animals book include the Kimberley Language Resource Centre, Ord-Bonaparte Program, WWF Australia, Australian Institute of Aboriginal and Torres Strait Islander Studies, Faculty of Indigenous Research and Education (NTU), local shire councils and tourist services.

Kija plants and animals

There is less data checking needed to complete the Kija plants and animals book; as more time was spent on this language during the project. There is need to spend time with southern Kija people, who generally reside in the Halls Creek area, checking names and uses.

Based on discussions with Joe Blythe and personal experience in preparing similar books from biologically similar areas the following estimated times are needed to complete the Kija Plants and Animals manuscript to be ready to submit to a printer.

Field checking of plants and animals	5 days
Transcription of tapes recorded	3 days

Correlation of manuscript and database	2 days
Manuscript preparation for publishing	7 days
Total days	17 days

These times are based on a linguist, ethnobiologist and senior Kija knowledge custodians participating in the process in a similar fashion to the research carried out during this project.

Possible funding sources for a Kija plants and animals book include Argyle Diamond Mines, Department of Conservation and Land Management, Warmun Art Centre, Kimberley Language Resource Centre, Ord-Bonaparte Program, WWF Australia, local shire councils and tourist services.

Precautionary note

When preparing publications for printing accepted wisdom states that it always takes significantly longer than estimated to get material to a printer. This also holds true, in my experience, for data checking. As a consequence the estimates above are provided on the understanding that this process could in fact take longer.

7. ACKNOWLEDGMENTS

Joe Blythe, a linguist based in Broome and previously at the KLRC, Halls Creek, played an integral role in the project. His linguistic knowledge of Kija and Jaru languages, his experience with the Kija and Jaru people involved in the project and his ability to remain positive, and indeed capable of undertaking research, even when seriously injured, was impressive and critically important to the project.

The **Kija** and **Jaru people** who worked on the project provided the intellectual foundation and conservation impetus upon which this report is built. Their cumulative desire to record and preserve traditional biological knowledge was a critical factor that led to the success of this project.

Bonnie Deegan provided critical momentum and assistance throughout the Jaru fieldwork; her desire to record Jaru biological knowledge played an important role in the establishment of this project.

Barbara Sturt, Doris Ryder, May Butcher and **Stan Brumby** also played critical roles in the recording of Jaru plant and animal knowledge.

Shirley Purdie, Lena Nyadbi, Peggy Patrick, Goody Barrett, Mona Ramsay, and **Dotty Watbi** played critical roles in the recording of Kija plant and animal knowledge.

Phyllis Thomas and **Nora Badngarri** played important roles in the recording of both Kija and Jaru plant and animal knowledge.

The staff of the **Kimberley Language Resource Centre at Halls Creek** provided valuable support and assistance throughout the project, and allowed us extensive use of their excellent facilities. In particular **Edgar Price, Michelle Martin, Janelle White, Rhonda Matthews, Vicky Butters** and **Tamara Griffiths** were extremely helpful.

The staff of the **Kimberley Land Council** in Kununurra and Halls Creek provided support and assistance during the project. **Kylie Pursche** played an important role in the early planning of the project, and the organisation and logistics of the fieldwork. **Archie Tanner, Russell Gallagher** and **Lawrence Emery** also provided help during the project.

Tas Tsunoda, a linguist from the University of Tokyo, assisted with early Jaru fieldwork and allowed access to his recordings over the previous 20 years. **Frances Kofod**, a linguist who has worked with Kija people for over two decades, generously allowed us access to data she had collected for the purposes of confirmation and corroboration.

Brain Prince and **Paula Cooney** at the Ord-Bonaparte Program in Kununurra, provided assistance as required.

Dave Sherwell and **Julie Trembath** from Keep River National Park provided accommodation and 'trailer minding facilities' during the project. Staff at Old Town Halls Creek campground and the Turkey Creek Roadhouse provided comfortable accommodation during the project.

Tricia Handasyde of the Department of Conservation and Land Management, Kununurra provided botanical input.

John Woinarski, Ian Cowie, Chris Mangion and **Michael Michie** of the Department of Infrastructure, Planning and Environment, Northern Territory, provided biological assistance and advice.

Eddie Cannella and other staff of Biostat assisted with various animal identifications while undertaking a fauna survey at Argyle Diamond Mine.

8. DATA SETS COLLECTED

Data sets recorded by the ethnobiologist during the project are outlined below. All data sets are included in their entirety in this report as hard copy, electronic file, or both.

Jaru plant and animal names and uses

Jaru names and uses of 183 plants and 201 animals are presented in chapter 5 of this report. The plants are arranged alphabetically by scientific name; animals are grouped according to major natural groups, such as birds, reptiles, fish, etc. The data is fully indexed by Jaru name.

Kija plant and animal names and uses

Kija names and uses of 219 plants and 222 animals are presented in chapter 4 of this report. The plants are arranged alphabetically by scientific name; animals are grouped according to major natural groups, such as birds, reptiles, fish, etc. The data is fully indexed by Kija name.

Image (photographic) files

Two hundred and two images of Jaru fieldwork were recorded during the project.

Two hundred and sixty three images of Kija fieldwork were recorded during the project.

Audio (sound) files

A total of 173 audio files of Jaru plant and animal knowledge discussions were recorded during this project. In total 174 files of Kija plant and animal knowledge discussions were also recorded.

These discussions were recorded in an electronic format using a Sony ICD-MS515 digital recorder and are stored as Memory Stick Voice files.

The cassette tape recordings undertaken concurrently by Joe Blythe are of significantly higher recording quality and are suitable for linguistic analysis.

Kija audio recordings:

Date and time of recording	File size	Primary subject and location recording made
24/08/2002 07:10 PM	553,984	Kija Plants, Bedford Downs,
24/08/2002 07:27 PM	1,701,888	Kija Plants, Bedford Downs,
24/08/2002 07:32 PM	618,496	Kija Plants, Bedford Downs,
24/08/2002 07:35 PM	266,240	Kija Plants, Bedford Downs,
24/08/2002 07:45 PM	646,144	Kija Plants, Bedford Downs,
24/08/2002 07:48 PM	233,472	Kija Plants, Bedford Downs,
24/08/2002 07:58 PM	1,089,536	Kija Plants, Bedford Downs,
24/08/2002 08:11 PM	701,440	Kija Plants, Bedford Downs,
24/08/2002 08:13 PM	202,752	Kija Plants, Bedford Downs,
25/08/2002 10:27 AM	850,944	Kija Plants, Fig Tree Hole,
25/08/2002 10:28 AM	80,896	Kija Plants, Fig Tree Hole,
25/08/2002 10:37 AM	703,488	Kija Plants, Fig Tree Hole,
25/08/2002 04:02 PM	802,816	Kija Plants, Fig Tree Hole,
25/08/2002 04:11 PM	661,504	Kija Plants, Fig Tree Hole,
25/08/2002 04:25 PM	1,567,744	Kija Plants, Fig Tree Hole,
29/08/2002 04:17 PM	518,144	Kija Plants, Rukuny (Crocodile Hole),
29/08/2002 04:19 PM	262,144	Kija Plants, Rukuny (Crocodile Hole),
29/08/2002 04:36 PM	1,924,096	Kija Plants, Rukuny (Crocodile Hole),
29/08/2002 04:40 PM	364,544	Kija Plants, Rukuny (Crocodile Hole),
10/09/2002 05:17 PM	799,744	Kija Plants, Billymack Springvale,
11/09/2002 02:36 PM	1,047,552	Kija Plants, Rukuny (Crocodile Hole),
11/09/2002 04:53 PM	710,656	Kija Plants, Rukuny (Crocodile Hole),
11/09/2002 05:15 PM	2,569,216	Kija Plants, Rukuny (Crocodile Hole),
12/09/2002 01:13 AM	9,355,264	Kija Plants, Rukuny (Crocodile Hole),
12/09/2002 12:58 PM	75,776	Kija Birds, Violet Valley,
12/09/2002 01:16 PM	2,198,528	Kija Birds, Violet Valley,
12/09/2002 01:28 PM	1,079,296	Kija Birds, Violet Valley,
12/09/2002 01:38 PM	1,163,264	Kija Birds, Violet Valley,
12/09/2002 01:46 PM	1,013,760	Kija Birds, Violet Valley,
12/09/2002 01:56 PM	1,175,552	Kija Birds, Violet Valley,
12/09/2002 02:06 PM	437,248	Kija Birds, Violet Valley,
12/09/2002 02:10 PM	539,648	Kija Birds, Violet Valley,
12/09/2002 02:41 PM	2,076,672	Kija Birds, Violet Valley,
12/09/2002 03:06 PM	2,853,888	Kija Birds, Violet Valley,
12/09/2002 03:14 PM	910,336	Kija Birds, Violet Valley,
12/09/2002 03:20 PM	521,216	Kija Birds, Violet Valley,
12/09/2002 03:41 PM	2,236,416	Kija Birds, Violet Valley,
12/09/2002 03:55 PM	1,329,152	Kija Birds, Violet Valley,
12/09/2002 04:10 PM	1,830,912	Kija Birds, Violet Valley,
12/09/2002 05:24 PM	2,091,008	Kija Birds, Violet Valley,
12/09/2002 05:44 PM	2,330,624	Kija Birds, Violet Valley,
12/09/2002 06:04 PM	2,456,576	Kija Birds, Violet Valley,
13/09/2002 01:50 PM	847,872	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 01:51 PM	77,824	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 02:03 PM	1,258,496	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 02:15 PM	926,720	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 02:35 PM	2,490,368	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 02:57 PM	2,576,384	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 03:53 PM	2,447,360	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 04:21 PM	2,103,296	Kija Snakes, frogs, plants, Chinaman's Gardens,
13/09/2002 04:49 PM	62,464	Kija Snakes, frogs, plants, Chinaman's Gardens,
15/09/2002 10:37 AM	58,368	Kija reptiles, ferals, Warmun and March Fly Creek,
15/09/2002 10:42 AM	286,720	Kija reptiles, ferals, Warmun and March Fly Creek,
15/09/2002 11:12 AM	758,784	Kija reptiles, ferals, Warmun and March Fly Creek,
15/09/2002 11:32 AM	1,799,168	Kija reptiles, ferals, Warmun and March Fly Creek,
15/09/2002 11:40 AM	896,000	Kija reptiles, ferals, Warmun and March Fly Creek,
15/09/2002 12:38 PM	285,696	Kija reptiles, ferals, Warmun and March Fly Creek,
23/10/2002 01:10 PM	1,155,072	Kija plants, fire, Bream Gorge, Osmond Valley,
23/10/2002 01:21 PM	1,129,472	Kija plants, fire, Bream Gorge, Osmond Valley,
23/10/2002 01:29 PM	1,010,688	Kija plants, fire, Bream Gorge, Osmond Valley,
23/10/2002 01:35 PM	757,760	Kija plants, fire, Bream Gorge, Osmond Valley,
23/10/2002 02:17 PM	610,304	Kija plants, fire, Bream Gorge, Osmond Valley,

23/10/2002 02:23 PM	649,216	Kija plants, fire, Bream Gorge, Osmond Valley,
25/10/2002 01:51 PM	2,211,840	Kija insects, Wirnapa Springs,
25/10/2002 01:51 PM	51,200	Kija insects, Wirnapa Springs,
25/10/2002 02:06 PM	1,421,312	Kija insects, Wirnapa Springs,
25/10/2002 02:18 PM	1,434,624	Kija insects, Wirnapa Springs,
25/10/2002 02:22 PM	336,896	Kija insects, Wirnapa Springs,
25/10/2002 02:23 PM	138,240	Kija insects, Wirnapa Springs,
25/10/2002 02:32 PM	558,080	Kija insects, Wirnapa Springs,
25/10/2002 02:43 PM	1,334,272	Kija insects, Wirnapa Springs,
25/10/2002 03:08 PM	2,055,168	Kija insects, Wirnapa Springs,
25/10/2002 03:25 PM	82,944	Kija insects, Wirnapa Springs,
25/10/2002 03:42 PM	36,864	Kija insects, Wirnapa Springs,
26/10/2002 11:16 AM	1,020,928	Kija insects and water animals, Warrmarn,
26/10/2002 11:20 AM	384,000	Kija insects and water animals, Warrmarn,
26/10/2002 11:41 AM	1,454,080	Kija insects and water animals, Warrmarn,
26/10/2002 11:48 AM	889,856	Kija insects and water animals, Warrmarn,
26/10/2002 11:50 AM	194,560	Kija insects and water animals, Warrmarn,
26/10/2002 12:06 PM	772,096	Kija insects and water animals, Warrmarn,
26/10/2002 12:10 PM	349,184	Kija insects and water animals, Warrmarn,
26/10/2002 12:18 PM	871,424	Kija insects and water animals, Warrmarn,
26/10/2002 12:35 PM	1,197,056	Kija insects and water animals, Warrmarn,
26/10/2002 12:36 PM	80,896	Kija insects and water animals, Warrmarn,
26/10/2002 12:39 PM	368,640	Kija insects and water animals, Warrmarn,
26/10/2002 12:43 PM	428,032	Kija insects and water animals, Warrmarn,
26/10/2002 12:48 PM	641,024	Kija insects and water animals, Warrmarn,
26/10/2002 12:49 PM	67,584	Kija insects and water animals, Warrmarn,
26/10/2002 12:54 PM	480,256	Kija insects and water animals, Warrmarn,
26/10/2002 12:57 PM	296,960	Kija insects and water animals, Warrmarn,
26/10/2002 01:01 PM	397,312	Kija insects and water animals, Warrmarn,
26/10/2002 01:15 PM	412,672	Kija insects and water animals, Warrmarn,
27/10/2002 11:11 AM	57,344	Kija plants checking, Warrmarn,
27/10/2002 11:32 AM	2,505,728	Kija plants checking, Warrmarn,
27/10/2002 11:46 AM	1,414,144	Kija plants checking, Warrmarn,
27/10/2002 12:03 PM	2,123,776	Kija plants checking, Warrmarn,
27/10/2002 12:08 PM	507,904	Kija plants checking, Warrmarn,
27/10/2002 12:17 PM	888,832	Kija plants checking, Warrmarn,
27/10/2002 12:44 PM	2,747,392	Kija plants checking, Warrmarn,
27/10/2002 12:50 PM	567,296	Kija plants checking, Warrmarn,
27/10/2002 12:55 PM	370,688	Kija plants checking, Warrmarn,
28/11/2002 07:59 AM	363,520	Kija animals, Argyle Diamond Mine,
28/11/2002 09:48 AM	679,936	Kija animals, Argyle Diamond Mine,
28/11/2002 11:08 AM	136,192	Kija animals, Argyle Diamond Mine,
28/11/2002 11:46 AM	169,984	Kija animals, Argyle Diamond Mine,
28/11/2002 11:47 AM	77,824	Kija animals, Argyle Diamond Mine,
28/11/2002 11:48 AM	63,488	Kija animals, Argyle Diamond Mine,
28/11/2002 11:59 AM	490,496	Kija animals, Argyle Diamond Mine,
28/11/2002 12:02 PM	363,520	Kija animals, Argyle Diamond Mine,
29/11/2002 12:52 PM	2,006,016	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 01:01 PM	1,036,288	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 01:06 PM	560,128	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 01:07 PM	164,864	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 01:13 PM	583,680	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 02:55 PM	1,655,808	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 03:07 PM	1,451,008	Kija seasons, habitats, plant parts, Warrmarn,
29/11/2002 03:19 PM	208,896	Kija seasons, habitats, plant parts, Warrmarn,
30/11/2002 04:18 PM	517,120	Kija plants and animals general, Texas Downs,
30/11/2002 04:25 PM	435,200	Kija plants and animals general, Texas Downs,
30/11/2002 04:32 PM	394,240	Kija plants and animals general, Texas Downs,
01/12/2002 02:33 PM	1,307,648	Kija country near Lake Argyle, fish,
01/12/2002 02:45 PM	1,248,256	Kija country near Lake Argyle, fish,
29/03/2003 02:15 PM	2,020,352	Kija mammals and plants checking, Warrmarn,
29/03/2003 02:31 PM	1,385,472	Kija mammals and plants checking, Warrmarn,
29/03/2003 02:41 PM	1,205,248	Kija mammals and plants checking, Warrmarn,
29/03/2003 03:08 PM	429,056	Kija mammals and plants checking, Warrmarn,
29/03/2003 03:27 PM	1,542,144	Kija mammals and plants checking, Warrmarn,
29/03/2003 03:29 PM	235,520	Kija mammals and plants checking, Warrmarn,

29/03/2003 03:50 PM	2,543,616	Kija mammals and plants checking, Warrmarn,
29/03/2003 03:52 PM	150,528	Kija mammals and plants checking, Warrmarn,
29/03/2003 04:11 PM	1,970,176	Kija mammals and plants checking, Warrmarn,
29/03/2003 04:26 PM	1,257,472	Kija mammals and plants checking, Warrmarn,
29/03/2003 04:28 PM	197,632	Kija mammals and plants checking, Warrmarn,
30/03/2003 11:21 AM	3,393,536	Kija plants checking fro Joe data, Warrmarn,
30/03/2003 11:33 AM	1,436,672	Kija plants checking fro Joe data, Warrmarn,
30/03/2003 11:46 AM	1,612,800	Kija plants checking fro Joe data, Warrmarn,
30/03/2003 12:23 PM	3,022,848	Kija plants checking fro Joe data, Warrmarn,
30/03/2003 02:12 PM	1,505,280	Kija fish checking, Warrmarn,
30/03/2003 02:14 PM	246,784	Kija fish checking, Warrmarn,
30/03/2003 03:15 PM	4,068,352	Kija fish checking, Warrmarn,
30/03/2003 03:19 PM	538,624	Kija fish checking, Warrmarn,
30/03/2003 03:48 PM	2,116,608	Kija fish checking, Warrmarn,
02/05/2003 02:40 PM	363,520	Kija water plants, Greenvale, 02 May 2003,
03/05/2003 10:06 AM	4,423,680	Kija fish checking, Foal Creek, Bow River,
03/05/2003 10:11 AM	589,824	Kija fish checking, Foal Creek, Bow River,
03/05/2003 10:55 AM	2,160,640	Kija fish checking, Foal Creek, Bow River,
03/05/2003 03:42 PM	4,719,616	Kija snakes checking, Foal Creek, Bow River,
03/05/2003 04:00 PM	1,750,016	Kija snakes checking, Foal Creek, Bow River,
03/05/2003 04:22 PM	2,618,368	Kija snakes checking, Foal Creek, Bow River,
01/06/2003 11:39 AM	4,065,280	Kija plants checking skins and names, Warrmarn,
01/06/2003 12:06 PM	3,243,008	Kija plants checking skins and names, Warrmarn,
01/06/2003 12:24 PM	2,023,424	Kija plants checking skins and names, Warrmarn,
01/06/2003 01:10 PM	4,876,288	Kija plants checking skins and names, Warrmarn,
01/06/2003 01:17 PM	846,848	Kija plants checking skins and names, Warrmarn,
01/06/2003 01:33 PM	1,986,560	Kija plants checking skins and names, Warrmarn,
01/06/2003 02:31 PM	671,744	Kija plants checking skins and names, Warrmarn,
01/06/2003 03:35 PM	2,877,440	Kija plants checking skins and names, Warrmarn,
01/06/2003 03:50 PM	1,809,408	Kija plants checking skins and names, Warrmarn,
01/06/2003 04:51 PM	4,306,944	Kija plants checking skins and names, Warrmarn,
01/06/2003 04:54 PM	259,072	Kija plants checking skins and names, Warrmarn,
01/06/2003 05:25 PM	2,095,104	Kija plants checking skins and names, Warrmarn,
02/06/2003 01:38 PM	5,981,184	Kija mammals checking, Violet Valley,
02/06/2003 02:01 PM	2,759,680	Kija mammals checking, Violet Valley,
02/06/2003 02:20 PM	2,321,408	Kija mammals checking, Violet Valley,
02/06/2003 02:37 PM	2,015,232	Kija mammals checking, Violet Valley,
02/06/2003 03:25 PM	1,896,448	Kija mammals checking, Violet Valley,
02/06/2003 04:03 PM	4,586,496	Kija mammals checking, Violet Valley,
02/06/2003 04:05 PM	193,536	Kija mammals checking, Violet Valley,
02/06/2003 04:16 PM	940,032	Kija mammals checking, Violet Valley,
03/06/2003 12:16 PM	3,510,272	Kija seasons and sugarbag checking, Warrmarn,
03/06/2003 12:25 PM	1,067,008	Kija seasons and sugarbag checking, Warrmarn,
03/06/2003 12:54 PM	2,884,608	Kija seasons and sugarbag checking, Warrmarn,
03/06/2003 01:58 PM	2,920,448	Kija seasons and sugarbag checking, Warrmarn,
03/06/2003 02:53 PM	4,672,512	Kija seasons and sugarbag checking, Warrmarn,

Jaru audio recordings:

Date and time of recording	File size	Primary subject and location recording made
05/08/2002 11:41 AM	699,392	Jaru Plants, Mardiwa Loop,
05/08/2002 11:45 AM	361,472	Jaru Plants, Mardiwa Loop,
05/08/2002 11:59 AM	1,585,152	Jaru Plants, Mardiwa Loop,
05/08/2002 12:01 PM	168,960	Jaru Plants, Mardiwa Loop,
05/08/2002 12:08 PM	580,608	Jaru Plants, Mardiwa Loop,
05/08/2002 12:20 PM	1,147,904	Jaru Plants, Mardiwa Loop,
05/08/2002 12:25 PM	470,016	Jaru Plants, Mardiwa Loop,
05/08/2002 12:36 PM	1,184,768	Jaru Plants, Mardiwa Loop,
05/08/2002 12:44 PM	832,512	Jaru Plants, Mardiwa Loop,
05/08/2002 12:48 PM	55,296	Jaru Plants, Mardiwa Loop,
05/08/2002 12:52 PM	225,280	Jaru Plants, Mardiwa Loop,
05/08/2002 12:58 PM	439,296	Jaru Plants, Mardiwa Loop,
05/08/2002 01:00 PM	162,816	Jaru Plants, Mardiwa Loop,
06/08/2002 12:00 PM	183,296	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 12:02 PM	247,808	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 12:14 PM	685,056	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 12:20 PM	321,536	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 12:21 PM	122,880	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 01:14 PM	460,800	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 01:20 PM	824,320	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 01:22 PM	89,088	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 01:26 PM	340,992	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 01:39 PM	1,488,896	Jaru Plants, Halls Creek and Elvire River,
06/08/2002 01:47 PM	687,104	Jaru Plants, Halls Creek and Elvire River,
14/08/2002 08:07 PM	2,707,456	Jaru Plants, Caroline Pool and Halls Creek,
14/08/2002 08:07 PM	2,320,384	Jaru Plants, Caroline Pool and Halls Creek,
14/08/2002 08:07 PM	601,088	Jaru Plants, Caroline Pool and Halls Creek,
14/08/2002 08:07 PM	626,688	Jaru Plants, Caroline Pool and Halls Creek,
14/08/2002 08:07 PM	1,957,888	Jaru Plants, Caroline Pool and Halls Creek,
20/08/2002 01:50 PM	1,887,232	Jaru Plants, Palm Spring and Sawpit Gorge,
20/08/2002 01:56 PM	544,768	Jaru Plants, Palm Spring and Sawpit Gorge,
20/08/2002 03:38 PM	1,640,448	Jaru Plants, Palm Spring and Sawpit Gorge,
21/08/2002 03:48 PM	841,728	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 03:55 PM	482,304	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 04:03 PM	798,720	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 04:10 PM	595,968	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 04:18 PM	808,960	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 04:27 PM	968,704	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 04:42 PM	972,800	Jaru Plants, Halls Creek hospital lawn,
21/08/2002 04:57 PM	342,016	Jaru Plants, Halls Creek hospital lawn,
22/08/2002 04:30 PM	1,482,752	Jaru Plants, Wungu, Old Flora,
22/08/2002 04:46 PM	1,914,880	Jaru Plants, Wungu, Old Flora,
22/08/2002 04:54 PM	962,560	Jaru Plants, Wungu, Old Flora,
22/08/2002 05:06 PM	533,504	Jaru Plants, Wungu, Old Flora,
27/08/2002 01:15 PM	2,536,448	Jaru Plants, Tanami Dam,
27/08/2002 01:19 PM	444,416	Jaru Plants, Tanami Dam,
27/08/2002 01:21 PM	135,168	Jaru Plants, Tanami Dam,
27/08/2002 01:27 PM	540,672	Jaru Plants, Tanami Dam,
27/08/2002 01:36 PM	1,019,904	Jaru Plants, Tanami Dam,
27/08/2002 01:40 PM	324,608	Jaru Plants, Tanami Dam,
27/08/2002 01:56 PM	1,705,984	Jaru Plants, Tanami Dam,
27/08/2002 02:22 PM	924,672	Jaru Plants, Tanami Dam,
28/08/2002 02:22 PM	1,456,128	Jaru Plants, 20 Mile Gorge, Elvire River,
28/08/2002 02:24 PM	112,640	Jaru Plants, 20 Mile Gorge, Elvire River,
28/08/2002 02:32 PM	990,208	Jaru Plants, 20 Mile Gorge, Elvire River,
28/08/2002 02:44 PM	873,472	Jaru Plants, 20 Mile Gorge, Elvire River,
28/08/2002 02:58 PM	1,018,880	Jaru Plants, 20 Mile Gorge, Elvire River,
29/10/2002 06:21 PM	779,264	Jaru plants, Rijarr (Turner River),
29/10/2002 06:23 PM	222,208	Jaru plants, Rijarr (Turner River),
29/10/2002 09:59 PM	111,616	Jaru songs, Rijarr (Turner River),
29/10/2002 10:04 PM	590,848	Jaru songs, Rijarr (Turner River),
29/10/2002 10:05 PM	115,712	Jaru songs, Rijarr (Turner River),

29/10/2002 10:06 PM	82,944	Jaru songs, Rijarr (Turner River),
29/10/2002 10:20 PM	1,636,352	Jaru songs, Rijarr (Turner River),
29/10/2002 10:21 PM	106,496	Jaru songs, Rijarr (Turner River),
29/10/2002 10:22 PM	91,136	Jaru songs, Rijarr (Turner River),
29/10/2002 10:23 PM	96,256	Jaru songs, Rijarr (Turner River),
29/10/2002 10:24 PM	99,328	Jaru songs, Rijarr (Turner River),
29/10/2002 10:25 PM	87,040	Jaru songs, Rijarr (Turner River),
29/10/2002 10:31 PM	591,872	Jaru songs, Rijarr (Turner River),
29/10/2002 10:35 PM	425,984	Jaru songs, Rijarr (Turner River),
29/10/2002 10:37 PM	151,552	Jaru songs, Rijarr (Turner River),
29/10/2002 10:40 PM	308,224	Jaru songs, Rijarr (Turner River),
30/10/2002 09:13 AM	2,516,992	Jaru birds, Rijarr (Turner River),
30/10/2002 09:19 AM	688,128	Jaru birds, Rijarr (Turner River),
30/10/2002 09:32 AM	1,544,192	Jaru birds, Rijarr (Turner River),
30/10/2002 09:33 AM	60,416	Jaru birds, Rijarr (Turner River),
30/10/2002 09:41 AM	926,720	Jaru birds, Rijarr (Turner River),
30/10/2002 09:45 AM	417,792	Jaru birds, Rijarr (Turner River),
30/10/2002 09:47 AM	175,104	Jaru birds, Rijarr (Turner River),
30/10/2002 09:59 AM	1,476,608	Jaru birds, Rijarr (Turner River),
30/10/2002 10:09 AM	1,004,544	Jaru birds, Rijarr (Turner River),
30/10/2002 10:18 AM	1,033,216	Jaru birds, Rijarr (Turner River),
30/10/2002 10:57 AM	2,125,824	Jaru birds, Rijarr (Turner River),
30/10/2002 10:58 AM	104,448	Jaru birds, Rijarr (Turner River),
30/10/2002 11:05 AM	592,896	Jaru birds, Rijarr (Turner River),
30/10/2002 11:26 AM	2,546,688	Jaru birds, Rijarr (Turner River),
30/10/2002 11:38 AM	1,468,416	Jaru birds, Rijarr (Turner River),
30/10/2002 11:47 AM	968,704	Jaru birds, Rijarr (Turner River),
30/10/2002 12:22 PM	36,864	Jaru birds, Rijarr (Turner River),
30/10/2002 01:21 PM	7,087,104	Jaru birds, Rijarr (Turner River),
30/10/2002 01:53 PM	3,943,424	Jaru birds, Rijarr (Turner River),
30/10/2002 02:01 PM	843,776	Jaru birds, Rijarr (Turner River),
30/10/2002 02:08 PM	824,320	Jaru birds, Rijarr (Turner River),
31/10/2002 08:11 AM	1,905,664	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 08:20 AM	1,025,024	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 08:24 AM	357,376	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 08:33 AM	713,728	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 08:37 AM	443,392	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 08:48 AM	1,275,904	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 08:51 AM	92,160	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 09:17 AM	1,827,840	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 09:53 AM	3,633,152	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 10:03 AM	65,536	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 10:57 AM	64,512	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 11:07 AM	1,250,304	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 11:25 AM	2,038,784	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 11:35 AM	1,188,864	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 11:45 AM	982,016	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 11:48 AM	392,192	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 11:54 AM	529,408	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 12:02 PM	809,984	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 12:06 PM	387,072	Jaru reptiles, fish, frogs, Rijarr (Turner River),
31/10/2002 12:12 PM	570,368	Jaru reptiles, fish, frogs, Rijarr (Turner River),
02/12/2002 12:30 PM	125,952	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 01:04 PM	3,910,656	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 01:20 PM	1,928,192	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 01:27 PM	851,968	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 02:16 PM	1,948,672	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 02:17 PM	70,656	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 02:19 PM	186,368	Jaru mammals and other animals, KLRC Halls Creek,
02/12/2002 02:52 PM	1,110,016	Jaru mammals and other animals, KLRC Halls Creek,
03/12/2002 12:32 PM	1,584,128	Jaru insects and other animals, Banjo Bore,
03/12/2002 12:40 PM	979,968	Jaru insects and other animals, Banjo Bore,
03/12/2002 12:46 PM	504,832	Jaru insects and other animals, Banjo Bore,
03/12/2002 01:14 PM	3,107,840	Jaru insects and other animals, Banjo Bore,
03/12/2002 01:31 PM	1,486,848	Jaru insects and other animals, Banjo Bore,
04/12/2002 10:57 AM	1,923,072	Jaru animals in dictionary checking, KLRC Halls Creek,

26/03/2003 03:45 PM	2,975,744	Jaru mammals checking, Gardens Creek,
26/03/2003 03:59 PM	1,682,432	Jaru mammals checking, Gardens Creek,
26/03/2003 04:05 PM	766,976	Jaru mammals checking, Gardens Creek,
26/03/2003 04:30 PM	3,058,688	Jaru mammals checking, Gardens Creek,
26/03/2003 04:36 PM	747,520	Jaru mammals checking, Gardens Creek,
26/03/2003 04:56 PM	2,088,960	Jaru mammals checking, Gardens Creek,
26/03/2003 05:31 PM	1,536,000	Jaru mammals checking, Gardens Creek,
28/03/2003 12:05 PM	619,520	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 12:26 PM	1,711,104	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 12:41 PM	1,694,720	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 12:51 PM	943,104	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 01:05 PM	1,688,576	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 01:13 PM	940,032	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 01:13 PM	86,016	Jaru mammals and fish checking, Caroline Pool,
28/03/2003 02:35 PM	2,575,360	Jaru mammals and fish checking, Caroline Pool,
01/04/2003 06:24 PM	4,755,456	Jaru plants, Ringer Soak,
01/04/2003 06:31 PM	811,008	Jaru plants, Ringer Soak,
01/04/2003 06:42 PM	1,308,672	Jaru plants, Ringer Soak,
02/04/2003 12:38 PM	2,735,104	Jaru plants, Spring near Mt Brophy,
02/04/2003 05:02 PM	2,823,168	Jaru plants, Spring near Mt Brophy,
03/04/2003 10:38 AM	2,339,840	Jaru mammals checking, Ringers Soak,
03/04/2003 10:49 AM	1,288,192	Jaru mammals checking, Ringers Soak,
03/04/2003 11:20 AM	3,770,368	Jaru mammals checking, Ringers Soak,
03/04/2003 11:30 AM	1,218,560	Jaru mammals checking, Ringers Soak,
30/04/2003 01:51 PM	2,394,112	Jaru birds checking, Yuyurn, Old Lamboo,
30/04/2003 02:28 PM	4,054,016	Jaru birds checking, Yuyurn, Old Lamboo,
30/04/2003 03:09 PM	4,008,960	Jaru birds checking, Yuyurn, Old Lamboo,
30/04/2003 05:15 PM	9,207,808	Jaru birds checking, Yuyurn, Old Lamboo,
30/04/2003 05:26 PM	1,278,976	Jaru birds checking, Yuyurn, Old Lamboo,
06/05/2003 01:08 PM	3,695,616	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 01:34 PM	3,155,968	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 01:45 PM	1,343,488	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 02:00 PM	1,789,952	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 02:29 PM	3,536,896	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 03:47 PM	2,500,608	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 04:22 PM	3,615,744	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 04:41 PM	2,280,448	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 04:51 PM	1,212,416	Jaru insects and seasons checking, Banjo Bore,
06/05/2003 05:01 PM	1,108,992	Jaru insects and seasons checking, Banjo Bore,
28/05/2003 01:09 PM	629,760	Jaru plant checking, Blue Hole, Purnululu,
28/05/2003 01:46 PM	612,352	Jaru plant checking, Blue Hole, Purnululu,
28/05/2003 02:39 PM	3,355,648	Jaru plant checking, Blue Hole, Purnululu,
28/05/2003 02:53 PM	1,661,952	Jaru plant checking, Blue Hole, Purnululu,
30/05/2003 11:32 AM	7,325,696	Jaru plant and animal checking, Blue Hole, Purnululu,
30/05/2003 11:35 AM	350,208	Jaru plant and animal checking, Blue Hole, Purnululu,

Field note books

Six field note books were completed during the project. The Watershed All-weather 150x100mm 100 page notebooks contain waterproof archival paper annotated in pencil. The books are numbered 1-6 and labelled according to date begun and completed.

These notes should be used in conjunction with the audio files recorded concurrently; many of the notes are difficult to read and are probably only of significant benefit to the person who made the notes.

The note books will be lodged at the Kimberley Language Resource Centre, Halls Creek, or Kimberley Land Council Library when data curation is complete.

Plant voucher collections and collection books

Herbarium collections of 220 plants were made during fieldwork as vouchers in support of the ethnobotanical recordings. Collection numbers GMW 7426-7499, GMW 8000-8147 relate to the project and are listed below.

Many plants encountered in the field were unsuitable for collection due to the poor quality of vegetative material available. Time constraints due to the short duration of the project and the amount of ethnobiological data recorded also contributed to the low numbers of plant collections made. Some plant collections are sterile and consequently are of low taxonomic value.

Plant collecting books and plant specimens will be lodged at the Northern Territory Herbarium (DNA), Palmerston, NT, when plant identification is complete.

A listing of collections is provided below with information ordered as follows (some plant collections are not included):

Plant genus and species name; Glenn Wightman's collectors number, latitude, longitude, location, date of collection.

GENUS	SPECIES	COLL	LAT	LONG	LOCALITY DESCRIPTION	DATE
		8013	182500	1275000	Palm Spring, Halls Creek area	20/08/02
Abelmoschus	ficulneus	7490	181000	1274000	Halls Creek area, East Kimb.	07/08/02
Acacia		7485	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Acacia		8056	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Acacia		8069	182825	1273747	Tanami Dam, south west of HC	27/08/02
Acacia		8091	163800	1280600	Crocodile Hole, East Kimb.	11/09/02
Acacia		8103	180746	1284106	Marella Gorge, East Kimberley	18/09/02
Acacia	ampliceps	7464	181000	1274000	Halls Creek area, East Kimb.	13/06/02
Acacia	ampliceps	8079	181627	1275236	Twenty-mile Gorge, East of HC	28/08/02
Acacia	ampliceps	8086	181400	1274100	Halls Creek township	29/08/02
Acacia	bivenosa	7482	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Acacia	colei	7481	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Acacia	colei	8070	182825	1273747	Tanami Dam, south west of HC	27/08/02
Acacia	cowleana	7470	181000	1274000	Halls Creek area, East Kimb.	05/08/02
Acacia	farnesiana	7484	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Acacia	hemignosta	8061	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Acacia	holosericea	8093	163800	1280600	Crocodile Hole, East	11/09/02
Acacia	lamprocarpa	8040	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Acacia	lysiphloia	7468	181000	1274000	Halls Creek area, East Kimb.	13/06/02
Acacia	lysiphloia	8057	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Acacia	maconochieana	8015	181332	1274014	Halls Creek Hospital, W.A.	20/08/02

Acacia	orthocarpa	7476	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Acacia	platycarpa	8140	170800	1272700	Bow River Station, East Kimb.	04/05/03
Acacia	plectocarpa	7491	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Acacia	pyrifolia	8021	181700	1275800	Wungu Station, East Kimb.	22/08/02
Acacia	retinervia	8001	182500	1275000	PalmSpring, Halls Creek area	20/08/02
Acacia	tumida	7432	171400	1280300	Violet Valley, East Kimberley	12/06/02
Acacia	tumida	8059	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Amyema		8102	173700	1274400	Billymack Spring, East Kimb.	11/09/02
Amyema	bifurcata	8018	181332	1274014	Halls Creek township	22/08/02
Amyema	bifurcata	8060	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Aponogeton		8126	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Arundinella		7442	171400	1280300	Violet Valley, East Kimberley	13/06/02
Atalaya	hemiglauca	8089	163800	1280600	Crocodile Hole, East Kimb.	11/09/02
Barringtonia	acutangula	8082	163800	1280600	Crocodile Hole, East Kimb.	29/08/02
Blumea		8030	181300	1274000	Halls Creek area, East Kimb.	22/08/02
Blumea		8139	170800	1272700	Bow River Station, East Kimb.	04/05/03
Brachychiton		8132	171200	1275700	Violet Valley, East Kimberley	05/05/02
Brachychiton	viscidulus	7459	171400	1280300	Violet Valley, East Kimberley	13/06/02
Buchanania	obovata	8045	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Calandrinia	uniflora	8129	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Callitris	intratropica	7445	171400	1280300	Violet Valley, East Kimberley	13/06/02
Calytrix	brownii	8146	170800	1272700	Bow River Station, East Kimb.	04/05/03
Calytrix	exstipulata	8147	170800	1272700	Bow River Station, East Kimb.	04/05/03
Capparis	lasiantha	7492	181000	1274000	Halls Creek area, East Kimb.	07/08/02
Capparis	lasiantha	8136	170800	1274700	Bow River Station, East Kimb.	04/05/03
Capparis	lasiantha	8137	170800	1274700	Bow River Station, East Kimb.	04/05/03
Capparis	umbonata	7474	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Capparis	umbonata	8066	182825	1273747	Tanami Dam, south west of	27/08/02
Carissa	lanceolata	7448	171400	1280300	Violet Valley, East Kimberley	13/06/02
Celtis	philippensis	7489	181200	1274500	Caroline Pool area, Halls	07/08/02
Celtis	philippensis	8090	163800	1280600	Crocodile Hole, East Kimb.	11/09/02
Cleome	viscosa	8002	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02
Clerodendrum		8047	172537	1273606	Fig Tree Hole, East Kimberley	25/08/02
Clerodendrum	floribundum	8010	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02
Clerodendrum	floribundum	8012	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02
Cochlospermum	fraseri	7427	170500	1281000	Mabel Downs, East Kimberley	12/06/02
Corymbia		8019	181332	1274014	Halls Creek township	22/08/02
Corymbia	abbreviata	8134	170805	1274704	Bow River Station, East Kimb.	04/05/03
Corymbia	aspera	8004	182500	1275000	PalmSpring, Halls Creek area	20/08/02
Corymbia	aspera	8014	182500	1275000	PalmSpring, Halls Creek area	20/08/02
Corymbia	aspera	8051	172537	1273606	Fig Tree Hole, Bedford	25/08/02

Corymbia	confertiflora	7452	171400	1280300	Violet Valley, East Kimberley	13/06/02
Corymbia	confertiflora	7471	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Corymbia	grandifolia	8077	181627	1275236	Twenty-mile Gorge, East of HC	28/08/02
Corymbia	setosa	8062	162825	1273747	Tanami Dam, south west of HC	27/08/02
Cycas	pruinosa	7453	171400	1280300	Violet Valley, East Kimberley	13/06/02
Cycas	pruinosa	8053	172600	1273700	Bedford Downs Station, East Kimb.	25/08/02
Cymbidium	canaliculatum	7434	171400	1280300	Violet Valley, East Kimberley	12/06/02
Cymbopogon	bombycinus	7440	170500	1281000	Mabel Downs, East Kimberley	13/06/02
Cymbopogon	procerus	7441	170500	1281000	Mabel Downs, East Kimberley	13/06/02
Cyperus		7439	171400	1280300	Violet Valley, East Kimberley	13/06/02
Cyperus		8096	173700	1274400	Billymack Spring, Springvale,	11/09/02
Dodonaea	oxyptera	8032	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Dolichandrone	heterophylla	7437	171400	1280300	Violet Valley, East Kimberley	13/06/02
Dolichandrone	heterophylla	7487	181200	1274500	Halls Creek area, East Kimb.	07/08/02
Enchylaena		8038	181300	1274000	Halls Creek Area, East Kimb.	24/08/02
Enneapogon		8065	182825	1273747	Tanami Dam, south west of HC	27/08/02
Eremophila		8073	182825	1273747	Marella Gorge area	18/09/02
Eremophila		8104	182500	1282700	Cattle Creek, Duncan	19/09/02
Erythrina	vespertilio	8042	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Erythroxylum	ellipticum	8141	170800	1272700	Bow River Station, East Kimb.	04/05/03
Eucalyptus		8020	181332	1274014	Halls Creek township	22/08/02
Eucalyptus		8062	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Eucalyptus	brevifolia	7428	170500	1281000	Mabel Downs, East Kimberley	12/06/02
Eucalyptus	camaldulensis	8034	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Eucalyptus	cupularis	7460	171400	1280300	Violet Valley, East Kimberley	13/06/02
Eucalyptus	cupularis	8075	181500	1274200	5 km East of Halls Creek	28/08/02
Eucalyptus	jensenii	8058	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Eucalyptus	microtheca	7472	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Eucalyptus	tephrodes	8041	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Ficus	aculeata	8039	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Ficus	coronata	7455	171400	1280300	Violet Valley, East Kimberley	13/06/02
Ficus	coronulata	7477	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Ficus	coronulata	8044	172300	1273000	Bedford Downs Station, East	24/08/02
Ficus	coronulata	8084	163800	1280600	Crocodile Hole, East	29/08/02
Ficus	opposita	7455	171400	1280300	Violet Valley, East Kimberley	13/06/02
Ficus	opposita	7466	181000	1274000	Halls Creek area, East Kimb.	13/06/02
Ficus	platypoda	8005	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02
Ficus	platypoda	8050	172537	1273606	Fig Tree Hole, Bedford	25/08/02
Ficus	racemosa	7451	171400	1280300	Violet Valley, East Kimberley	13/06/02
Ficus	racemosa	8006	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02

Ficus	scobina	8095	163800	1280600	Crocodile Hole, East Kimb.	11/09/02
Fimbristylis		8105	180746	1284106	Marella Gorge, East Kimberley	19/09/02
Flueggea	virosa	7454	171400	1280300	Violet Valley, East Kimberley	13/06/02
Flueggea	virosa	7465	181000	1274000	Halls Creek area, East Kimb.	13/06/02
Gardenia		7446	171400	1280500	Violet Valley, East Kimberley	13/06/02
Gardenia		8052	172537	1273606	Fig Tree Hole, Bedford	25/08/02
Gardenia		8101	163800	1280500	Crocodile Hole, East Kimb.	11/09/02
Grevillea		8071	182825	1273747	Tanami Dam, south west of HC	27/08/02
Grevillea		8072	182825	1273747	Tanami Dam, south west of HC	27/08/02
Grevillea	pyramidalis	7431	171400	1280300	Violet Valley, East Kimberley	12/06/02
Grevillea	refracta	7450	171400	1280300	Violet Valley, East Kimberley	13/06/02
Grevillea	refracta	8054	172200	1271600	Bedford Downs Station, East Kimb.	25/08/02
Grevillea	striata	7479	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Grevillea	striata	8055	172300	1271600	Bedford Downs Station, East Kimb.	25/08/02
Grevillea	wickhamii	8022	181700	1275800	Wungu Station, East Kimb.	22/08/02
Grevillea	wickhamii	8064	182825	1273747	Tanami Dam, south west of HC	27/08/02
Grewia	retusifolia	7458	171400	1280300	Violet Valley, East Kimberley	13/06/02
Gymnema		8064	182825	1273747	Tanami Dam, south west of HC	27/08/02
Gyrocarpus	americanus	7456	174300	1280300	Violet Valley, East Kimberley	13/06/02
Haemodorum	ensifolium	8144	170800	1272700	Bow River Station, East Kimb.	04/05/03
Hakea	arborescens	7429	171400	1280300	Violet Valley, East Kimberley	12/06/02
Hakea	arborescens	8024	181700	1275800	Wungu Station, East Kimb.	22/08/02
Hakea	chordophylla	7469	181000	1274000	Halls Creek area, East Kimb.	05/08/02
Hakea	macrocarpa	7462	171400	1280300	Violet Valley, East Kimberley	13/06/02
Imperata	cylindrica	8028	182500	1275000	Palm Springs, East Kimberley,	22/08/02
Ipomoea		8130	170805	1274704	Tringiny area, road to Greenvale	04/05/03
Ipomoea	costata	7494	181200	1274500	Caroline pool, Halls Creek	07/08/02
Livistona		8031	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Lobelia	quadrangularis	7447	171400	1280300	Violet Valley, East Kimberley	12/06/02
Lobelia	quadrangularis	8000	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02
Lysiana		8099	173700	1274400	Billimack Spring, Springvale,	11/09/02
Lysiana	spathulata	7483	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Marsilea		8125	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Melaleuca	bracteata	7495	181000	1274000	Halls Creek area, East Kimb.	07/08/02
Melaleuca	bracteata	8046	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Melaleuca	lasiandra	8138	170800	1274700	Bow River Station, East Kimb.	04/05/03
Melaleuca	leucadendra	8025	181700	1275800	Wungu Station, East Kimb.	22/08/02
Melaleuca	leucadendra	8087	163800	1280600	Crocodile Hole, East Kimb.	29/08/02
Melaleuca	minutifolia	7475	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Melaleuca	minutifolia	8106	180746	1284106	Marella Gorge, East Kimberley	18/09/02
Melaleuca	viridiflora	8143	170800	1272700	Bow River Station, East Kimb.	04/05/03

Monochoria	cyanea	8124	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Nymphaea		8123	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Ottelia		8128	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Pandanus	spiralis	8037	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Parkinsonia	aculeata	8097	163800	1280500	Crocodile Hole, East Kimb.	11/09/02
Petalostigma	pubescens	8035	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Phragmites	vallatoria	8009	182500	1275000	Palm Spring, Halls Creek area	20/08/02
Pouteria	sericea	7457	171400	1280300	Violet Valley, East Kimberley	13/06/02
Pouteria	sericea	8142	170800	1272700	Bow River Station, East Kimb.	04/05/03
Premna	acuminata	7444	171400	1280300	Violet Valley, East Kimberley	13/06/02
Premna	acuminata	7493	181000	1274000	Halls Creek area, East Kimb.	07/08/02
Premna	acuminata	8092	163800	1280600	Crocodile Hole, East Kimb.	11/09/02
Pterocaulon	serrulatum	7430	171400	1280300	Violet Valley, East Kimberley	12/06/02
Pterocaulon	serrulatum	7488	181200	1274500	Halls Creek area, East Kimb.	07/08/02
Pterocaulon	sphacelatum	8016	181332	1274014	Halls Creek Township, W.A.	22/08/02
Pterocaulon	sphacelatum	8145	170800	1272700	Bow River Station, East Kimb.	04/05/03
Santalum	lanceolatum	7463	181000	1274000	Halls Creek area, East Kimb.	13/06/02
Santalum	lanceolatum	7496	181000	1274000	Halls Creek area, East Kimb.	07/08/02
Santalum	lanceolatum	8033	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Santalum	lanceolatum	8094	163800	1280600	Crocodile Hole, East Kimb.	11/09/02
Sarcostemma	viminale	7486	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Sarcostemma	viminale	8048	172300	1273000	Bedford Downs Station, East Kimb.	25/08/02
Sarcostemma	viminale	8049	172537	1273606	Fig Tree Hole, East Kimberley	25/08/02
Senna		8074	182825	1273747	Marella Gorge area, East Kimb.	18/09/02
Senna	magnifolia	8026	181700	1275800	Wungu Station, East Kimb.	22/08/02
Senna	notabilis	8100	173700	1274400	Billymack Spring, East Kimb.	11/09/02
Sesbania	formosa	8003	182500	1275000	Palm Spring, Halls Creek area	20/08/02
Solanum		8017	181735	1275844	Wungu Station, East Kimb.	22/08/02
Solanum		8027	181700	1275800	Wungu Station, East Kimb.	22/08/02
Solanum		8083	163800	1280600	Crocodile Hole, East Kimb.	29/08/02
Spermacoce		8109	183343	1271934	5km S. of old Lamboo	23/03/03
Spermacoce		8131	171144	1274410	5km S.W. of Handling Pool,	04/05/03
Spermacoce		8135	170805	1274704	Bow River Station, East Kimb.	04/05/03
Spermacoce	D139758	8109	183343	1271934	5km south of Old Lamboo	23/03/03
Streptoglossa		8011	182500	1275000	Palm Spring, Halls Creek area	20/08/02
Streptoglossa		8068	182825	1273747	Tanami Dam, south west of HC	27/08/02
Streptoglossa	bubakii	7438	171400	1280300	Violet Valley, East Kimberley	13/06/02
Streptoglossa	bubakii	7467	181000	1274000	Halls Creek area, East Kimb.	13/06/02
Streptoglossa	odora	7426	170500	1281000	Mabel Downs, East Kimberley	12/06/02
Syzygium	eucalyptoides	8088	163800	1280600	Crocodile Hole, East Kimb.	11/09/02

Tephrosia	rosea	8098	163800	1280500	Crocodile Hole, East	11/09/02
Terminalia	arostrata	8023	181700	1275800	Wungu Station, East Kimb.	22/08/02
Terminalia	bursarina	8085	163800	1280600	Crocodile Hole, East Kimb.	29/08/02
Terminalia	canescens	8080	163800	1280600	Crocodile Hole, East Kimb.	29/08/02
Terminalia	platyphylla	8036	172300	1273000	Bedford Downs Station, East Kimb.	24/08/02
Terminalia	pterocarya	8081	163800	1280600	Crocodile Hole, East Kimb.	29/08/02
Timonius	timon	8008	182500	1275000	PalmSpring, Halls Creek area	20/08/02
Tinospora	smilacina	7473	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Trema	tomentosa	8127	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Triglochin	dubium	8122	170457	1275028	Greenvale Homestead, East Kimb.	04/05/03
Typha	domingensis	7443	171400	1280300	Violet Valley, East Kimberley	13/06/02
Typha	domingensis	8029	182500	1275000	Palm Springs, East Kimberley,	22/08/02
Ventilago	viminalis	7436	171400	1280300	Violet Valley, East Kimberley	13/06/02
Ventilago	viminalis	7478	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Vigna		8007	182531	1274913	Saw Pit Gorge, Halls Creek	20/08/02
Vigna	lanceolata	8133	171144	1274410	Bow River Station, East Kimberley	05/05/03
Vitex	glabrata	7433	171400	1280300	Violet Valley, East Kimberley	12/06/02
Vitex	glabrata	7480	181200	1274500	Caroline Pool, Halls Creek	07/08/02
Wrightia	saligna	7461	171400	1280300	Violet Valley, East Kimberley	13/06/02
Xerochloa	imberbis	7497	181000	1274000	Halls Creek area, East Kimb.	07/08/02

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