

FOOD

Page

1 Laws for preservation
2 Seasons
5 Preservation of fish
Periods of hunting, locality of vegetable foods
7 Hunting - the unsuccessful hunter
8 Meat distribution - kangaroo, emu, division of
9 do do Murray district
10 Laws relating to "handing over" of food
11 Methods of hunting
(1) Kangaroo drive
12 (2) Kangaroo stalking
13 (3) Kangaroo pits (Gingin)
15 Distribution of kangaroo (Swan)
16 " " " (Williams district
Bridgetown
Beaufort River)
17 Signals used in hunting
Spearing of emu - cooking - division
18 Capture of emu - Murray and Vasse, Perth and Guildford
Stakes to catch kangaroo - S.W.
19 Kangaroo pits - Northern
" " Murchison
Qualities of a hunter
20 Fraser Range traps
21 Capture of emu
22 Native wallaby traps - Marmion
23 Habits of animals (Jobaitech's description)
Kangaroo
24 Opossum, iguana, lizard, snakes
26 Capture of porcupine, bandicoot, wild cat
Kimberley emu spearing
27 Game caught at watering places
28 Gingin hunting - opossum
Distribution of food
29 Gingin "run" and products of its various places
31 "Grandfathers" of Gingin district
32 Meat food of Perth district
33 S.W. capture of birds, opossum and squirrels
34 West Kimberley game
Native dogs as hunters
36 Capture of ducks - Bunbury, Murray and Vasse
37 Capture of birds - Roebourne methods
38 Native companions, turkeys, pelicans, etc., methods of
capture
39 White cockatoos - S.W.
40 Cockatoos, Ashburton and Gascoyne
41 Capture of birds - N.W.
42 Capture of nyngaree - Murchison
43 Methods of fishing - nets, weirs
44 Spearing
45 Other methods
47 Kitchen middens
Kimberley coastal fishing
48 Depuch Island, etc.
Capture of dugong
50 Turtle fishing (Broome)
51 Fish traps
52 Murchison and Gascoyne rafts and platforms
53 Turtles - Roebourne
55 Fishing - Perth, Nullagine, Ashburton
56 Varieties of fishing - West Kimberley
57 Stupefying fish
59 Northern fish - edible shark, porpoise, etc.
60 Seasons for fish - South

- 61 Reptiles
Snakes of West Kimberley
- 62 Fraser Range - lizard hunting
- 63 Edible grubs
- 64 West Kimberley grubs
- 65 Eastern Goldfields - white ants, etc.
- 67 Vegetable foods
- 71 Eucla, Murray, Roebourne, West Kimberley
Roots and seed pounding
- 73 Edible gum, seeds, etc.
Upper Murchison roots
- 75 Roebourne products, cooking leaves
- 76 " seed sifting
Northern seed gathering
West Kimberley red earth, wild honey
- 77 Tobacco - Fraser Range, Gascoyne, Ashburton, Roebourne and
West Kimberley
- 78 Lists of vegetable products in various districts of W.A.
- 84 " " " " " Broome, also seasons
- 85 Sunday Island
- 86 Cannibalism
- 90 Preparation and Cooking of Food
Fire making methods (1) upright (2) horizontal
- 91 Ovens, etc. Gingin
- 92 Cooking - Eucla
" roots and seeds of S.W.
- 93 Northern coast, fish, etc.
Ashburton and Gascoyne - damper
East Murchison - preservation of surplus meat
- 94 Snake cooking, turkeys, etc.
- 95 Turtles, dugong
- 96 Waianwonga cooking
Sinews of kangaroo
Bandicoot, emu cooking - S.W.
- 98 Vegetable cooking
Size of meals
- 100 Water Supply
Water-bearing trees
- 103 Wells
- 104 Clay pans
- 106 Food Restrictions
Young people
- 107 Totemic restriction
- 108 Suggestions as to reason for restrictions
- 110 Old people have no restriction

F O O D

In the matter of food the Western aborigines may be said to be omniverous, for they will eat almost everything that land and water produce. Even poisonous substances are eaten after they have undergone a process which removes their deleterious qualities.

Every species of animal, every species of bird, with one universal exception - that of the blue pigeon - every species of fish, flesh and fowl, affords substance to the natives of the West.

There is an infinite variety of articles of food to be obtained from both the animal and vegetable kingdom. It may not be so varied nor so plentiful in the arid interior as it is along the coast line, but that even there life can be abundantly sustained, the presence of numerous central tribes tends to show.

There is no portion of Western Australia which has been visited by the explorer which has not its native inhabitants who roam over their tribal territories in search of food. They live on the spontaneous products of nature. They hunt, fish, trap, dig roots, gather seeds and fruits, but they neither sow nor plant.

Although however, they do not cultivate the soil in any way there are certain laws extant amongst them which no doubt owe their origin to a desire to preserve and, in a measure, protect, the foods of the various districts. These laws are universal and are as follows :-

- (1) No plant, shrub or tree, bearing edible seed, fruits or roots, must be interfered with out of season, nor must the flower, generally called the "mdher" of the root, seed or fruit, be plucked.
- (2) Young people of both sexes are forbidden to eat the young of certain animals, birds, etc., until such period as the boys have completed their initiation into full manhood, and the girls have been handed over to their husbands.

Punishment for transgression of the laws relating to forbidden food varies in different districts, but it is generally inflicted by magic, by the eruption of sores, by the hair falling out or turning grey, and by the boy becoming "booyar" (immoral) and the

Sir George Grey alluded to the abundance of the warrain, also a potato-like root, in the neighbourhood of the Hutt River. This special and most succulent root covers a vast area and is to be found as far north as lat. 27° and South to about lat. 32°40'. It does not appear to go south of the Murray River, because, according to the natives, "demma goomber" ("big, or great grandparents") made that river its southern coastal boundary. It is however found inland amongst the hills of the Darling Range, upon the lower slopes of which it grows plentifully.

In the Swan district the natives had six seasons :-

Mo'kur	Winter	(about June and July)
Jil'ba	Spring	(August and September)
Kam'barong		(October and November)
Be eruk	Summer	(December and January)
Boornor	Early Autumn	(about February and March)
Win'yar'ung	Autumn	(April and May)

In the Broome district there are four seasons :-

Weeralboo	Spring
Lallurn	Summer
Munjungarree	
Mun'dhung'arree	Autumn
Barr'gana	Winter

These "seasons" appear to be the periods when certain roots and other foods are ripe. In the West Kimberley districts certain seeds are a staple food in the dry "lallurn" season, such as the beeloorn and jeerungoo seeds, the latter being the seed of the jamwood tree.

The nether millstone upon which the beelcorn and jeerungoo seeds are ground is called "lallurnjoonoo." No "magic" can be put into the beelcorn and jeerungoo mai (seed, or vegetable food) and their importance is shown by the special ceremony attending the gathering of the "first fruits",

Even in the dry country eastward of the Ophthalmia Ranges, many varieties of roots, seeds and fruit, as well as a plentiful supply of groundgame will be found and all along the Ninety Mile Beach - that treeless portion of the West - the ground for miles inland is honeycombed with the holes made by a certain species of bush rat and other small ground game. In the so-called desert areas far east of Wallal (the Southern end of the Ninety Mile Beach), several species of animal and vegetable foods are to be found.

In the estuaries and rivers, and all along the coast, there is abundance of fish at all the seasons of the year and as the dwellers along the sea board have both sea and land from which to obtain sustenance, it follows that there is no paucity of food at any time.

There are but a few instances on record in which a certain amount of thrift was shown in the storing and preserving of food. Grey mentions stores of bai'oo (zamia) nuts, which his native boy Kaiber found close to the Hutt River, during the journey of the party from Gantheaume Bay to Perth; Giles speaks of a "bag of seed" or rather twin bags, made of old trouser legs, which contained seeds evidently stored up for future use, and Dr. Scott Nind describes the preservation of surplus fish by the King George Sound natives.

The bai'oo nuts may, however, have been placed in the ground to eliminate the poisonous properties they possess and as most of the seeds ripen in the hot weather, they require to be gathered directly they reach maturity and the surplus quantity would, as in the case of the beelcorn and jeerungoo seeds of West Kimberley, be gathered and placed in a bark receptacle and either buried in the ground or placed in the forked branches of a tree.

With regard to the preservation of fish :- In one or two coastal districts, when a more than sufficient quantity of some large and succulent fish has been obtained, the natives have been known to roast the surplus fish and, separating the flesh from the bones, have either dried it in the sun, or packed it without any further process than the first cooking, in pieces of soft bark, when it will keep good for some days.

The natives always remove to that part of their hunting grounds which is most favourable for obtaining their seasonal supplies. Amongst the Southern and Southwestern natives there may be two periods of the year when they will suffer the pangs of hunger, these being midsummer and the middle of the rainy season. In the very hot weather they become excessively indolent and will go without food rather than exert themselves to obtain it and in the rainy season they also prefer to remain within the shelter of their huts rather than venture out in the cold and wet. Their women, however, must go out daily and gather roots and smallgame for the family, until such time as the men feel disposed to resume their hunting.

The vegetable foods vary in different latitudes and hence a native of, say, the Southwestern district who went beyond the confines of his own territory might starve through his ignorance of the foods growing in the strange country entered. In his own district a native knows exactly the localities where certain roots and other vegetable foods grow, the proper time of ripening and the readiest means of obtaining them. His camp is continually being shifted to that portion of his ground which contains the greatest abundance of certain root and other foods, and he remains in the vicinity until the supply of such food is exhausted. The warrain, koolyoo, joo bok and other roots have their defined habitats and their proper seasons. Outside their own area they are unknown.

The Xanthorrhœa, which affords an excellent supply of grubs all the year round, is not found north of about lat. 27°.

The tuart tree, the inner bark of which is a native delicacy is also confined within a certain radius, as are also certain orchids and other food bearing plants and trees.

On the Hutt River, Grey came upon two "native villages" which were evidently intended as fixed places of residence" owing to the extensive warrain grounds which covered an area of three and a half miles. Grey concluded that the superior huts, well-marked roads, deeply sunk wells and extensive warrain grounds, spoke of a large and comparatively speaking, resident population, the cause being the great facilities for procuring food in so rich a soil.

(It was at this point, Grey stated, that the geological formation of the northwestern and southwestern portions of the continent were associated together, the flora of which was so made up of those of both, that it was impossible to tell which predominated.)

All vegetable foods are collected by the women, except the honey flower of the banksia, of which the women receive but a very little portion, the honey being a favourite food of the natives. In the South Perth district, where once the banksia grew most abundantly, a fresh water spring on the Melville water side was widened and deepened as soon as the banksia flowers had ripened. The flowers were then gathered by the men and soaked in the water, where they fermented slightly, the drink thus obtained having a rather "heady" effect. Pinjarra, Guildford, York and Gingin and other district natives were invited yearly to the mungaitch feast at South Perth.

The men were the meat hunters, usually leaving the camp after a "breakfast" of the remains of the previous evening's meal, the women going marrain (vegetable) hunting at the same time. All returned to the camp in the early afternoon or evening, according to their success in hunting. When a native was continually unsuccessful in obtaining meat food, as soon as he returned to camp, the women, including his own wives, began to tease him and tell him, in song or recitative, that notwithstanding there was a splendid wind for hunting, and his geejees and meero (spears and spearthrower) in good condition, he was unable to bring any game. "Daaja boornaburt," or "wilya dowa boornart" (can't get his own living) were the contemptuous terms applied to him, and these expressions generally affected him so much that he not infrequently deserted the camp and went away by himself, eating roots like the women, or any small ground game that was easily caught. His wives can if they wish leave him and either return to their parents, or they may be annexed by some of his "brother stock", for if a man cannot supply his women with a sufficiency of meat, they can attach themselves to someone who will do so. While he is living apart, "hermit fashion", should any young hunters kill a kangaroo in his vicinity and cut it up, he may go to their camp and take a portion of the animal. They do not resent his act, merely laughing at him.

He may possibly die of starvation in his self imposed seclusion and if so, he is buried by those who may come upon his dead body. His kaanya comes back for a little while and then goes away and never comes back until he has become a capable hunter when one day he will return bringing a kangaroo or emu, and by judicious distribution of the meat, obtain the good will of his parents-in-law and his older relatives. His own wives either return to him or he will obtain some others from the same parents-in-law. This custom appeared to prevail in the Southwestern districts only.

All meat is distributed according to well-established rules, a community of food existing throughout the West. The portions assigned to each person vary but slightly in the different tribes.

In the Southwest, young bandicoots, opossums, eaglehawks, etc., are generally given to the parents-in-law of the hunter. He will however keep one opossum for himself and if it is the only one he has caught, he will still keep it, and find some other game for his elders. The best portion of the food is always given to the parents-in-law if they are in the vicinity.

When a young hunter has killed a kangaroo on his people's ground, he brings it to his father's camp for the latter to distribute. The father then portions out the meat according to invariable usage, keeping a certain prescribed part for himself and his family and also sending the young hunter some part of the meat.

A kangaroo would be divided as follows in camp :-
thigh to maan, yog and konk, also to maam and ngank (father's sister and mother's brother, father and mother) bookal and neend (back and tail) to jook (sister), ngoont (brother and dem(grandparents)), kaat and ngarril (head and ribs) for the hunter and his woman and children and the father and mother might have the gobbul (stomach and entrails) if they asked for it, or dem and jook might obtain it by asking.

Another method of dividing the kangaroo or emu was by the hunter cutting off the hind quarters and giving them to the rest of the camp members, keeping the fore part for himself and his family. If there were only a few people in camp, the meat was split down the middle and the fore and hind quarters were given to the others, the hunter keeping the head and the other fore and hind quarters for himself.

In the Murray district, the distribution of a kangaroo is as follows :- Yaburgurt stated that bookal (back) and dauel (thigh) were given to the father and mother of his dajjeluk, dauel also to ngooljer (brothers-in-law, or brothers of the dajjeluk), goong (rump part of back) to the mother and father of the hunter and also the hunter himself. Kaata (head) and goong might be given to demman and neenda (tail) to the father of the hunter.

When an emu was killed, the gobbul (belly, intestines, etc.) went to ngangan or ngangan kauat (mother and youngest mother), dauel, with part of side to hngooljar, mamman kardung (youngest father) gets dauel and part of side. Goong goes to the hunter.

The food law for the distribution of the emu is that everyone in camp must be supplied with a portion even if this necessitates the division of the bird into minute portions. Jookan ngalya - sisters - receive the wing parts.

When a Murray district native ran down a kangaroo singly and is too far away from his camp to return that night, he must cut off the kangaroo's paw and place it in front of him, close to his head or breast. Yongar mar moolyit daalong - cutting off kangaroo paw to place beside (the hunter). Should the janga (spirits) come at night when the hunter sleeps, they will see the mara yoodarn (paw or hand tied up) and will go away frightened (weyen).

Should a young man be visiting his wife's people and having been permitted to hunt over his father-in-law's territory, he brings down a kangaroo, the whole of the animal goes to the wife's people. If he should kill two or more kangaroos, half of his catch goes to his relations-in-law, the remainder being probably divided amongst his younger brother-in-law stock.

The food is never "handed" to relations-in-law, it is generally placed on a clean portion of ground near their camp. A man may give food from his hand to his own parents, and to his father's own brothers, and sometimes to his mother's own brothers, but in all other cases the food is placed in the ground for the recipients to pick up. The fear of magic passing from the body of the giver to the receiver or vice versa, is the reason for this law.

A man cannot hand food to a woman of his wife's stock. In the Vasse district, Doon'gunit, a Wordungmat, is kordamata (husband stock) to me (a Manitchmat). When I asked Doongunit for some meat food, he went at once to his camp where he had just cooked an opossum. He divided the animal lengthwise, and then gathering some clean boughs from a gum tree near, he placed the portion of the opossum upon these, covering it over with some more boughs. He then brought it over to my camp and laid it upon the ground beside me.

In the Albany and Esperance districts the same procedure was followed by men bearing a similar relationship to me. I, being a woman, can ask my kordamata for food, or even go to their camp and take what I require.

METHODS OF HUNTING

Their methods of hunting are varied and interesting, as is also their manner of preparing and cooking their food.

There are at least three general methods of catching kangaroo :-

- (1) A kangaroo battue, in which probably several neighbouring tribes will take part.
- (2) Stalking, or running down the animal.
- (3) Digging pits near its watering places or on tracks leading to favourite feeding grounds.

When a number of natives take part in a kangaroo "drive" it is called "yongar-a-kaa'been" or "yow'art-a-kaa'bin" (kangaroo surrounding). What is now King's Park, Perth, was once a favourite place for a battue, the slopes of the park towards Crawley and Subiaco furnishing good herbage at certain seasons. The natives engaged in the hunt assembled at a certain point, and from there each man took up his position at some spot. As he reached his appointed place, he made some special noise agreed upon beforehand to let the others know he had found his place. At a given signal some bushes in the vicinity were fired, one outlet only being left for the kangaroo, that outlet being almost perpendicular descent in the vicinity of Mounts Bay. The maddened animals, helped by shrieks, yells, smoke and flame, rushed headlong towards the foot of the Mount. Here, at various points several natives were stationed with their boordun (heavy hunting spears) in readiness, and the tumbling and floundering animals were quickly and easily despatched.

When a battue takes place on a plain, the hunters approach as nearly as possible to the grounds where the kangaroo are feeding, taking advantage of every cover, and being careful not to disturb the animals until they have come close enough to commence operations. Presently the kangaroo become alarmed and make a rush for some distant ground. Instantly every native in the vicinity emits a most appalling yell and the frightened animals stop for a moment and look in the direction whence the noise has come.

The moment's stop is fatal, for before the animals have again started for safety, the natives rush in upon them from all sides with spears poised, and despatch several before they have recovered from their surprise. Women and some older children may take part in these battues, provided sufficient cover is available.

The first spear that enters the kangaroo determines the ownership, even though the spear has not reached a vital spot. Should a boy have thrown the first spear, the animal becomes the property of his father. Any violation of this rule is the signal for a most desperate fight. Whether in hunting, bartering, or fighting, fair play characterises the actions of the natives, and should an unfair blow be dealt, the spears of every one, friend and foe and turned against the offender, who rarely escapes with his life.

Yon'gar ngardongin or kangaroo stalking is a method which, when successful, excites the greatest admiration amongst the tribe for it calls out every quality which the natives prize: strength, endurance and skill. A native finds the track of a kangaroo which he follows up quietly until he sights the animal. It immediately bounds away from him and he at once pursues it, following it up until darkness sets in, without allowing it a moment for food or drink. If he is fortunate in having some fire sticks with him he lights a little fire, beside which he sleeps until the first dawn. Should he have no firesticks he simply lies down in his tracks and waits the dawn. As soon as day breaks, he again starts the animal, following it throughout the day. At the end of the second day, or perhaps during the third day, the kangaroo falls down from weariness and is soon despatched and carried back to camp. Only a young man of great strength and endurance can accomplish such a feat, and if he continues to practise it he is soon looked up to by his fellows, who usually allude to him as "koort (or koord) boya" (heart of stone - very strong man.)

As soon as he has killed the kangaroo he may rest and refresh himself at the first waterhole and can take part of the entrails out and satisfy his hunger. The entrails are considered a great delicacy and are usually reserved for the older men, but in yongar ngardongin, the successful hunter may take these, or cut off any portion of the animal and eat it, before he starts with his quarry for the camp.

In making kangaroo pits in the Gingin district, a deep hole (binja bening - making a hole) was dug in the morning so that the smell of the freshly turned up clay or sand would not be perceived when the kangaroo went along the path at night. The hole was usually made on a beaten kangaroo track either towards water or some feeding ground. The earth was first loosened with a wanna (women's digging stick) which was sharpened to a point by being burnt and rubbed with bark. The pointed stick was worked in the ground and when sufficient earth was loosened, a walbai or wooden shovel was used to take the earth out. The walbai was a broad piece of wood, clumsy spoon-shaped implement without any handle, formed into shape by the aid of fire. It was caught in the hands and the earth was thrown in the direction of the wind, not in a heap, but loosely. The shovel was about a foot in length, nine inches in width and an inch and a half in thickness in the middle, tapering towards the edge.

When the pit had been dug, small boughs and brushwood were placed on top to hide the hole and next day the pit was visited when a kangaroo was generally found in it. The pits were always made wider at the bottom than at the top so as to afford no foothold to the animal in its efforts to escape. Emus were not infrequently caught in these pits. The many swamps, estuaries, and peninsulas along the coast were utilised for kangaroo driving, the animals getting bogged in the soft swampy soil, and being then easily speared. Winter time (maagoor - Gingin term) was the season chosen for a kangaroo battue.

Much feasting and gorging took place after a successful drive. The women made booka (cloaks) and goota (bags) of the female kangaroo skins. The head and forearms were usually the women's portion. The tails were divided between brothers-in-law or "babbin" (friends). An incision was made at the root of the tail and the skin drawn off, when the tail sinews were extracted and rolled round a piece of wood or bark. Seven skins of the female were the usual number for one cloak. When making the goota or bag, the legs were usually utilised for the handle.

In the Swan district, the distribution of the kangaroo was as follows :- The leg and hind quarter was the portion of the "yogga bider" (old grandmother of some influence), belonging to the family of the hunter. The hunter kept the fore-quarter for his family. The tail and part of the back were given to the relations-in-law (brothers-in-law, etc.), the thigh was given to "uncles", the back and entrails to the grandparents. The hunter does not divide the game he has caught, he usually hands it over to his father or some older relative to distribute. In some districts, when members of two families unite in hunting, the game they catch is divided equally between themselves, and each then takes his own quantity to his family.

The yogga bider must always get a goodly portion of the game, or she will bewitch the dogs or spear of the hunter, and then he will be unsuccessful. She becomes what is called "daaja booyan" (meat angry). The yogga bider is an important person in the tribe, from her supposed possession of magic. She also incites the young men to battle, but will on occasion stop them from fighting. When she has prevented a dog from catching game, the owner of the dog takes it over to her and asks her to "clear the dog" which she does by making a smoke and holding the dog in the smoke for a few seconds. This is called "dorda boma garrongin" ("driving the sulkiness out.")

After this ceremony the owner of the dog must always see that the yogga bidar is provided with a goodly portion of the game caught.

In the Williams district, the back and fore-quarter were given to maam yog (mother-in-law), bookal and dauel (part of back and thigh) to brothers and sisters-in-law, katta (head) to wife, gobbul (intestines, entrails, etc.) to grandparents, also neenduk (young kangaroo in pouch). The neenduk, if a very little one, may be given to the hunter's little son.

The Bridgetown man may give ngooljer (brothers-in-law) bookal or dauel of kangaroo, the sisters-in-law getting goong (back) and kaat (head). Kong might get bookal or dauel sometimes. Dem (grandparents) were given goobel (stomach), koort (heart), boyn (fat) to grease themselves, as the natives did not care to eat fat; the hunter got ngaaril and durditch (ribs and upper part).

When an emu was divided by the Bridgetown hunter, his konk got goong (back), gobbel and boyn. Ngooljarmat (brothers-in-law) got a side of the bird, grandparents got upper parts, the hunter keeping yaa] and doondeen (thigh bone and other smaller bones).

In the Beaufort River district the konk (uncles) got back and tail of kangaroo; ngoont (brother) leg; ngooljar, head, neck and arms; father, liver, heart and stomach. Killer of kangaroo, if a family man, obtains the side.

If a Bridgetown man is visiting the country of his wife's people, and catches a kangaroo on the ground, the whole of the animal is given to the wife's people, who will give him some other food in exchange. In some districts the blood of a newly killed kangaroo may be collected in one of the intestines so as to forma long sausage, and given to the grandparents or fathers-in-law of the hunter. In most of the Southern inland districts, kangaroo totem people drink the blood of the kangaroos they kill.

Certain general signals used by the older men when hunting game are as follows :-

- Kangaroo "boomer" (male) sighted : Motion of hands and arms in imitation of the forearms of the animal, and scratching ribs.
 Female kangaroo : Lean back, thrust out, and scratch the breast.
 Emu : Hand and arm bent above head.
 Duck : Hand and arm bent over head but lower down.

Emus were usually speared in the Southwest, but were never hunted by large numbers of natives. Three men at most will join in an emu hunt, and even this was only permissible on thick scrubby country. Small branches were stuck in the hairband of the hunter to hide his face and boughs were held upwards and downwards in the left hand, to cover the figure, the spears and meero being held in the right hand. The hunter advances slowly towards the emu, and being completely covered with boughs and leaves can approach to within about twenty yards when a sure throw despatches the bird. If the hunters were far from water, the emu was carried whole to the nearest waterhole.

A hole was then made and a big fire put in and allowed to burn out. Meanwhile the feathers of the bird were plucked out to be made into ornaments later on, and then the skin was taken off, and the thighs and backbone also broken. The neck was broken in various places and left attached to the fore part; the intestines were also taken out. The skin was cooked by itself, the thighs and fore part being also cooked separately. All were however cooked in the hollow oven, not on the coals. The emu was then divided. If two members of different families shared in the killing, the meat was equally divided between them as in the case of the kangaroo. If a Gingin man killed an emu, he gave his mammanmat (father stock) one thigh and part of the back. His grandparent had the stomach and part of the back. The ribs and other side bits were given to his mother and her people.

In the Murray district emus were sometimes caught in kangaroo pits (called kaarup beenungun - hole digging or making).

When the Vasse people killed an emu in the summer they at once made a fire and cooked the bird whole, as they feared it would get fly-blown if they carried it home uncooked. The bird however was always skinned and the skin cooked separately. All the woonardoo (feathers) were kept, as they were articles of barter, and were also worn at some of the Vasse dances.

The stomach and entrails of the emu may be eaten by the Vasse hunters if they have had a long chase after it, otherwise the hunter gets very little of the game he has killed, as, if he takes a portion they will say to him, "You brought it for us, and you are eating it yourself."

Joobatic stated that the Perth and Guildford natives dug a hole in the track along which emus and kangaroo came for water, covering the hole with brushwood. They then made a fence round the waterhole, leaving a small opening for the animal or bird to pass through. On the outside of the fence at the other end the hole was made and the animal or bird, jumping the fence, fell into the pit. The natives never drank water from the waterhole before the animals had come to drink.

Sometimes two men steal together from opposite directions upon a kangaroo or emu, and while one attracts the attention of the animal by breaking twigs or making some other bush noise, the other approaches from the opposite direction without the game seeing him until he is near enough to strike.

Another method of catching kangaroo was practised by the river people of the Southwest. On the bank of the river, at the usual crossing place of the animals the natives place a row of stakes in the ground, their pointed ends upwards, the ends being smeared with a thin coating of blackboy resin. The sharpened ends are laid at an angle of about 50 degrees. On the other bank of the river a similar row of stakes is placed. The stakes above the ground measured about four feet in length and were somewhat thicker and stronger than spears. In the vicinity of these, natives sometimes lay in ambush and as soon as the kangaroo were

caught on some of the stakes the hunters rushed out and speared them.

Where the junction of streams form small islands, many of these traps may be placed, and it is seldom that success does not follow.

In the northern districts where nets are used in trapping kangaroo the nets are usually placed near a waterhole frequented by kangaroo. Two parallel fences of brushwood are built beside the path and are left for a day or two in order that the kangaroo may become used to them. On the second or third day a strong net - the mesh being about five inches - is drawn across one end of the fenced-in path and when the kangaroo comes to water the natives rush out from a hiding place close by, so that they can spear him easily.

In the sandy parts of the Murchison district a kangaroo pit was dug to a depth of seven or eight feet, the natives "cottering" the earth that had been thrown out. They then placed two or three pointed sticks about three feet high, sticking up in the bottom of the pit, and then the hole was covered over with small sticks, grass, and a little earth. Some of the Murchison traps had no stakes at the bottom.

Many other qualities besides those mentioned must be brought into play by the native hunter. He is not always sure that his hunt is going to be successful. In the first place, he has not only to study every movement of his intended quarry, but he must also be on the alert for human enemies who may possibly be stalking him in revenge for a death in their tribe. While running down his game he may unconsciously be heading into a mob of its fellows, amongst whom it will be lost, or it may just happen that the kangaroo is strong and enduring enough to outstay him. Many obstacles have to be overcome when pursuing a kangaroo, but a good animal is worth striving for, not only for the honour of its capture, but also for the quantity of food it supplies, a good animal not infrequently turning the scale at 150 lbs.

In the districts north and east of Fraser Range, especially in the vicinity of rocks, brushwood fences were erected for trapping game. Some of these fences were over three feet in height, and extended in some places nearly half a mile, converging to an angle at one end. They served the purpose of a "rock wallaby battue" as these little animals are numerous in the slopes and valleys of the Fraser Range. They may also be constructed in zigzag shape at the foot of uneven slopes. Outside the angle a hole is dug, some four or five feet in depth and not more than a foot and a half at the top, the sides sloping towards the opening. A few branches of some brushwood cover the surface of the hole, and just inside the angle a moderately sized stone is placed. Across the top of the angle of the fence a stout sapling is laid. When the animal reaches the end of the fence it jumps over the stone and sapling and falls into the hole. Kangaroo and other large game may at times be driven into this trap, generally however kangaroo, emu, wild dog, etc., are stalked and speared by the Fraser Range people.

There is one peculiarity in connection with the emu which facilitates its capture and that is that it generally chooses a particular camping ground, and will return to this every night until it is either disturbed or is compelled to move in search of food. In the districts where nets are used, this habit is taken advantage of by the natives. The net is set some little distance from the emu's sleeping place, and the men, coming as close as possible to the bird, suddenly rush towards it, and send it in the direction of the net, in which it is at once entangled. Sometimes firesticks are used to drive it in the desired direction. The places are always suitably chosen for this method, and may be narrow entrances to creeks, or small flats bounded by steep banks or any place where the emu when put up can only run in the direction of the net.

Emus are not easily captured, being very fleet and strong. Dogs may outpace an emu when running up hill, but in running down hill the emu extends its wings which help it considerably, and it soon outdistances its pursuers. It will also defend itself by a well-directed kick at the dogs, often disabling them by the force of the blow, and not seldom killing one or more of them.

The flesh of the emu is highly prized by the natives, so much so that "brother will fight brother for emu" in the Southern districts. Emus will sometimes weigh over 130 lbs. By a wise disposition of the elders, it has become a "demma gcomber" law that no young people can partake of emu flesh.

In the Marmion and Edjudina districts, native wallaby traps were built in a somewhat similar manner to those at Fraser Range. The natives hunt the wallaby into the enclosure by spreading themselves out, beating the bushes and making a great noise, which sends the animals into the enclosure. They hop along until they reach the apex of the fence, which is made stronger at this point, and which also has some thick bushes behind which a native is hidden. As the wallaby reaches these he is quietly knocked on the head with a koondain (club) by the native. No pits were dug at the end of the fence in these districts, probably from the stony nature of the ground.

In the West Kimberley district a native will sometimes cover himself and his weapons entirely with mud, to destroy the odour, and then climbing a tree near a waterhole he spears the emu or kangaroo as they come to drink.

Joobaitch's description of the habits of certain animals is worth recording :-

The kangaroo has its young one in the winter time. I generally has only one at a time, but sometimes twins are born. They love the sun in the winter, but in the summer they scratch a hole under a tree or a log, and lie down underneath. All lie down in a shady place. Some go three or four in a mob, sometimes a big number travel together. Two or three males go in a large mob. When the young "joeys" grow up they go away with their mothers sometimes and make another mob. They always keep with their mothers.

The kangaroos rest day time in the summer, night time in the winter. They are always watching, particularly the young joeys. They are very cunning, they look and look, and pretend to eat, and look out of the corners of their eyes, or between their legs. They sit up and watch for a long time, and when they see anything they jump on their heels to give warning and then the whole mob get up and go away.

When fighting they scratch with their forepaws, and kick with their hind legs, making a grunting noise now and again. They fight with each other, but the old "boomers" are the best fighters, they easily beat the young ones who run away from them. When two old boomers fight they nearly kill each other. We always find the little one in the pouch, only an inch long. It is attached to the teat, and if it is pulled off before it leaves the teat of its own accord, it will die. When two come a new teat is formed for the second. The young one does not leave its mother until it is some moons old, but it will follow its mother always. A doe kangaroo leaves its mother to get married but the joey always stays. If the tail gets broken its strength will go away, but it will live, although it cannot fight. When sleeping in the summertime under the trees they sometimes throw dust over their heads to keep the flies away. The young kangaroos are always set to watch by their mothers.

The opossum feeds on the leaves and flowers of the gum tree or grass. He sleeps in a hollow tree, feeds at night, and as soon as daylight comes goes back to his bed. The opossums breed once a year, in the winter time. Only one young one is born, but sometimes they have twins. Kangaroos and opossums have only one teat, but when two are born another teat comes. The young opossum is only half an inch long when born.

The iguana eats toads, birds and rats. He makes his nest in the ground and sleeps there all the winter time. He lays his eggs in the winter, about seven or eight, that is the long-tailed iguana, the bob-tailed one only lays two eggs. A big black iguana will chase you, and hisses when it is angry. They don't hatch their young ones, nor feed them. Sometimes the male iguana eats the eggs, and the mother tries to hide them from him. She tunnels in various directions, so that the male cannot find the eggs. Sometimes the bob-tailed iguana swallows its young ones, we have found them inside the old ones in summer time.

The lizard lays its eggs on the ground in the summer time, and covers them over. They hatch themselves. Big lizards will eat little ones, frogs, and anything they can get. Some lizards can swim and keep under water for a long time. In the summer time they throw off their skins and get new ones, and while that is going on they do not like to show themselves.

There are black, red, grey, carpet snakes and diamond snakes or whip snakes (green). They lay about a dozen eggs, sometimes in an old ant nest. They let the eggs hatch themselves. They make either a hole in the ground or a nest in a hollow tree. They like to live in a place where there is plenty of grass. When they bite anyone they leave the poison in and the man dies. The boolya can't save him, he tries hard and sucks the wound, and blows upon it, but the man is dead in a little time.

The male emu hatches the eggs.

In spinifex country the grass is always burnt to get at the game. Eagles are always plentiful in spinifex country, as are also hawks. The dalgait is a marsupial allied to the wallaby except that it has no incisors or cutting teeth, and the opening of the pouch is from below instead of from above, a wise provision of nature, since the walgait is a burrowing animal, and it would be difficult for its young to seek shelter suddenly if the pouch were otherwise formed. Also, if the opening were made in the usual position, the earth would be thrown into the pouch.

Dalgait, jillabardee (big lizards) and other burrowing animals are dug out with the aid of the women's wanna or digging sticks. The earth is first loosened with the wanna, then the loosened soil is scratched out with the hands, and thrown "dog fashion" between the legs, or in a heap at the side.

In the West Kimberley district the game was caught by spearing; hitting with boomerang (lanjee), and knocking over with a club.

Porcupine were hit on the throat with a nowloo (club, Broome) Several wallabies (yalwa) will sometimes make burrows close to each other, all being entrances to a common sleeping place. The Kimberley men close all the burrows except one, and crawling down that, kill theyalwa. Dingoos are not infrequently caught asleep, and are knocked on the head with a nowloo. If they have young ones, these are wither eaten or kept. If kept, their feet are tied together, the front ones only being loosed when the animal is fed.

Koordee and karringboo (two species of bandicoot) are killed by putting the foot down upon them in their nests. Bats and flying foxes are killed by hitting them with nowloo as they fly in clouds towards the flowering trees.

The entrance to wild cat burrows (usually hollow trees) is closed and a hole is made near the nest and the animal speared through it. Sometimes a spear is driven down through the hole and when the animal rushes out it is caught by the tail and swung round and killed.

When hunting emu, the Kimberley man will paint himself with karrmul (mud) all over, also his spear, and selecting a dry tree, (not a green one as the emu would notice the difference in the colour of the tree and the hunter) the native takes up his position in the morning.

His spear has also been covered with karrmul. At noon the emu will probably come to the waterhole to drink, and the womba (man) spears it as it stoops to the water. The emu at once runs off with the spear in its body, stopping now and then to try and pull it out. The womba chases and when it falls despatches it with his nowloo and carries it to his camp in triumph.

(Broome district)

Page 16 , Notebook 11d,11

Widda widdee pindana game trap or fence.

Page 21

Warrajoool booroo - driving the game along their road to where some natives are in wait.

Yangaljalgajin nimminya - waiting for them at the goonbooroo.

(Narrow place - gate.)

In a dry district, where there is but a small pool or water-hole within a radius of many miles, numerous animals gather together from a great distance to drink from this solitary water-hole. Beside the pool the native constructs a rude hut in which he remains concealed, sometimes for hours, until the animals approach. Kangaroos, emu, turkey, cockatoo, etc., are speared or clubbed as they come near the water.

While engaged in some amateur survey work with Bishop Gibney in the neighbourhood of Beagle Bay, Nor' West, we came at about four a.m. upon a large pool round which some hundreds of birds of all kinds had apparently camped. As it was scarcely dawn when we arrived in the vicinity of the pool, and as the natives told us to walk quietly, it was not until we had approached the pool that the birds became aware of our presence. Then, with a universal whirr of wings, but with no other sound, they rose up in the air. The natives being provided with tomahawks and other implements necessary for the survey work, threw these into the midst of the flock, killing two turkeys and wounding and disabling several others, which they ran after and killed.

In the Gingin district opossums were caught in the hollows of trees, or were speared by moonlight. Sometimes a number of young Gingin natives went out opossum hunting by moonlight, and one of their number climbed a tree that held one or more opossums. The climber frightened the opossums, which at once ran down the tree. As soon as they reached the ground, the waiting natives chased them, and a great hunt by moonlight was held over the cleared ground along which the opossums ran. This moonlight hunting was carried out in a sporting sense rather than for the purpose of adding to the larder, for in such a hunt, unless the men are swift runners, the opossums have a good chance of getting away. In this district, when food is being given to a visiting tribe it is called "jal'yeeka marrain."

When the fur was plucked off the opossum it was sometimes put inside the animal's stomach to preserve the gravy. The entrails were taken out and cooked separately, but otherwise the opossum was cooked without being cut up.

Woolberr of Gingin threw the food to his mother, sisters and brothers. He placed it on a clear space for his kordamata. He gave it to his fathers out of his hand, also to his children, but he threw it down for his sister's children to take. He placed it on the ground in a clean place for his ngooljarmun (brothers-in-law). He put it in a clean place for his wife or wives to take over to their parents. If only husband and wife partake of the food caught, they will divide the goomel or other game in half, the husband taking the head part.

Some of the expressions used by the Gingin natives with reference to the preparing of their food are as follows :-

Kalluk darning (getting ready the fire), jabbun ee'rong'in (put food in and cover up), kaljal'obin (cooking the food), ween joo-gurn (putting food on bough plates).

Amongst the Southwestern natives, when numerous in'gamung, or jip jip insects (locusts) fly about in the summer, the murmur of the many insects tells the natives that there will be plenty daaja (meat food.)

The extent of country over which Woolberr, by virtue of his relationship, could roam, and the products of each place were thus given by Woolberr :-

The various places included in the Gingin "run" were :
 Beerdamunna, Bootoin, Beeamullo, Murnain-koojera, Boorna-ngarring, Nganjara (or Nganjarup), Minjeerdup, Bambaru (near Bootoin).
 The products of Beerdamunna were :

Kardar (long-tailed iguana), bil'yap (stump-tailed iguana), yoorndan (black iguana), boolyool (another species), woggal, bijjoordoo (another species of carpet snake), warrain, boorn, maaja jaggat, mulya, bun'yaloo, maajin, jin'gong, jitta, joo-bok, and a few other roots, maa'turn and karn'dain (two species of bush mice).

The Bootoin people had :

Yakkan (turtle), ngoora (black opossum), ngoorijoo (another species, like opossum, but living in water), wappee (little fish), wappee meerdara (short fish), wappee joordeeree (long fish), goomal, yowert, yindain (like a tamarin), goorra (brush kangaroo), murndeeng (small grubs), jootong (black-boy grubs), wannung (wattle grubs).

At Beeamullo there were :

Goomal, yowert, ngoora, warroc (kangaroo), goora (brush kangaroo), ngwoonarn (duck), katara (diver), koonjer (crane), waiocoo (small coast bird), kooleem (swamp hen), Wooljak nooba (young swan), bardeena (long nosed sea bird), nyeerimba (pelican), kooaraaga (mountain duck), and many other birds and roots.

The products of the Murnain-koojera people were :

Bai'oo nuts, yowert, weejee (emu), goora, buroona (a honey-bearing flower) karreea (another honey flower), koorup (a species of fruit obtained from a runner), kardar, bilyap,

tammaluk, walja (eaglehawk), beebilyer (turkey), walyoo (wallaby), jooles burdong (big lizard).

The Boorna-ngarring people had :

Yowert, koorndee (bandicoot), kardar, goora, plenty weejee, beebilyer, yakkan, katara, kooljak, ngwoonern, gooraaga, kaanoo (like a turnip root), jilga (crayfish), gooya (frogs) and wargal (frog).

Nganjara people had :

Kardar, goomal, koorndee, burngup (species of wallaby "living in the water"), yowert, goora, weejee, warroo, warrain (roots).

Minjeerdup products were :

Goomal (plenty), goora (also numerous), burngap (many), yowert (few), weejee (few), kardar (plenty), ngangara (small species of fish), warrain, mungaitch (mungaitch is pulled off the tree with a kalga - a long stick with a hook at the end,) beebilyer, bilyap.

The Gingin people had :

Warrain, maaja, ngoolya (roots), boorn, koolyoo, joohek, baioo nuts, goomal, ngoora, kardar, bilyap, walyoo, koondee, burngap, boodee (like a wallaby), goora, woota (pigeon - not a blue pigeon), ngow'o (pheasant), jitta, murrong (roots), grubs (a short stick, with a hook or barb at the end, was used to draw out the grubs from certain trees.

From Gingin to Bootoin was half a day's journey; from Bootoin to Beeamulla half a day; from Beeamulla to Murnain-koojera, half a day; all these places were almost the same distance. Ngallar-coo boojoor (our run or ground) was the term applied to all these districts by the Gingin men.

It may be interesting to some old settlers of the Gingin district to mention the names of all the old "grandfathers" of these respective places, all of whom are now dead.

Wow'il'ee, a Boctoin owner, Woolberr's mammanbuk (father stock)

Weetilbur, Beeamulla, Woolberr's mooran (grandfather)

Katturt, Boornangarring, (Woolberr's mooran - grandfather)

Warn'goonga, Murnain-koojera, Woolberr's kangun (uncle - mother's brother)

Beerrban, Nganjara, Woolberr's mammanbuk

Wallooburra, Minjeerda, or Ninjeerda, Woolberr's mooran.

Ngoor'dun'gur, Bambarn, Woolberr's mooran

Bong'oogoo and Gooneelee, two brothers, living where Gingin township now is, Woolberr's mooran.

Koonenung, Woolberr's father, also lived at Gingin.

All these old men had large families, some of them possessing five or six wives. All their descendants are dead.

In what is now the Perth district, there were yongar and warra (male and female kangaroo), weja, goomal, moocroeroo (rock brush), kwarra (brush), ngwarra (black opossum), dammar or tamar, walya (kangaroo rat), dannart (little animal, like a mouse), dalgait, ngoordeejangit (native "cat"), daaran (water rat), morda (mouse), moorna (snake), yorna (stump-tailed iguana), boming (rat like a brush kangaroo), woorark, woordook (little animal, like a puppy in size), woggal, kweenda, (bandicoot), wabbunga (native "squirrel"), yaggain (native dog), jeejeenung (seal, caught sometimes at Fremantle), balawara (species of opossum, now extinct), burngup (also extinct, on the mainland).

Besides these, which Joo baitch enumerated, there were fish of various kinds, all of which, except the stingray, were eaten, frogs, grubs, birds (except the blue pigeon and some smaller birds), roots, gum, honey and seed.

Joobaitch stated that his father caught many birds by throwing stones at them, or by hiding near the waterholes, and knocking the birds with his dowuk (club) as they came to drink. The Southern natives neither made, nor used, nets.

They climbed trees with the aid of their kojja (hammer) by making "toe holds" in the tree. They clasped the tree with one hand, made the hole, stuck their toe into it, then stuck the pointed end of the kojja into the wood above the hole, and pulled themselves up by its aid. They also climbed trees with the aid of fibrous ropes, but only in the districts where these ropes could be obtained.

Joobaitch stated that his mother was an expert climber. They only climbed trees for opossums, or occasionally a bird's nest. There were no wild bees in the Southwest.

There are several species of opossum in Western Australia: the ngwarra (black), goomal (grey), Western ringtailed, the flying opossum of the Nor'West and the lesser phalanger of the Southwest. A small species of the common grey opossum, called locally bilbee, was once plentiful in the neighbourhood of Beagle Bay, but is now nearly extinct.

Sometimes opossum will make a nest for themselves on the tops of high trees, with small boughs and brushwood. They may also make camping places in the vicinity of rockholes, in hollow logs, etc.

Opossums are less alarmed by sound and scent than any other marsupials. A loud noise startles them, but there is no need for such caution in approaching their nests as in the case of the kangaroo, etc.

Flying squirrels are procured in the same way as opossums. Wallabies are killed in various ways, by surprising them in their sleeping places, by burning them out, by nets, by bush traps, by spearing, and in the case of the burrowing species, by digging them out of the ground.

The bilbee (small animal like an opossum) of the West Kimberley district was nearly always burnt out of its shelters. (Amongst the Kamilroi tribe, the word bilbee or bilba means bandicoot, and has been one of the totems of the Ippi section of the Kamilroi people.)

The spinifex wallabies supply the principal food of the natives in the triodba areas. In the Victoria desert there are rock wallabies, mallee hens, spinifex wallabies and eagles, the last named being very plentiful in spinifex country, where they find an abundance of wallaby and other small ground game.

The bandicoot may also be caught in its burrow, or knocked down with a club. The porcupine, which burrows in the ground to a good depth, is got out with the wanna, and then speared. It is generally cooked in its quills.

The flying fox season in the West Kimberley district is a plentiful, if brief one, as the flowers upon which they feed, are rarely of long duration. The flesh of the flying fox is not unlike the opossum in flavour.

Although a domestic specimen of the native dog is found in almost every camp, the animal is almost universally killed and eaten. Should the whole trunk of a tree be hollow, and a native suspects that some game is within it, a fire will be made near some small opening at the bottom, and the smoke directed inwards, the game, whatever it is, being soon unearthed by this means.

The native dogs will scent opossum and other small game, but no pains are taken by the native to train the animal to any particular method of hunting. The dogs have naturally a keen scent and draw upon their game like a pointer and either spring upon it or chase it. They will catch wallaby, opossum and other small game, but they are easily outdistanced by the larger animals. The dog who accompanies his master must always receive a portion of the day's "bag", and if the dog has been lent to another native, payment in food must be given for the loan. The dog will eat roots, fruit, any species of animal or vegetable food. If food is scarce, they will at times wander into the bush and get

their own living for a few days, but they always return to the camp again. I have not heard of an instance of a dog becoming feral after having been tamed from puppyhood by a native.

When out hunting the native is always looking for tracks, and finds most of his game in this way. He sees signs upon the ground and marks on the tree trunks which tell him whether the game is still there or has gone further afield. He will track a laying emu for hours in the hope of finding its eggs.

Hawks are always attracted by fire as it drives out the ground game or burns it. A native of some of these inland districts when hawk hunting, digs a hole in the sand some four or five feet deep, sets a certain area on fire, and jumping into the hole, pulls a few partly burnt bushes over it and crouches there dangling a mouse or a rat, impaled on a short stick. The hawk swoops down to seize the rat and is caught and either choked or knocked with a stick, and flung into the hole. A dozen or more hawks may be caught in a short time in this manner.

Frogs feed at night and are buried in the sand during the day, generally a lot together. The native tracks them up and digs them out.

In the Eucla district it was customary for two natives to go out bird hunting. One carried a large bunch of hawks' or other feathers attached to a long spear, which he held high in the air as he walked, dangling it to and fro at intervals. His companion walked with him, carrying a light barbed spear with which he speared the small game which had fled into hiding, frightened by the hovering of the feathers. In this way a good day's bag was secured.

In the Bunbury, Murray and Vasse districts, a native will catch ducks by the following method. He swims in the deep waters of a lake or large pool, covering his head with some marine growth and keeping only his mouth and nose above water. He glides gently underneath some ducks that have alighted in the water and catching them by the feet drag them down before they have time to cry out, twists their necks and sticks them in his belt. Twenty or more may be gathered this way. When the young man considers he has had enough for the day, he rises suddenly from the water and in an instant the lake is cleared of ducks, I once met a native some forty miles east of Broome, whose day's catch consisted of eight ducks, five white cockatoos, four iguanas, two mallee hens, and one or two green legged birds of a species unknown to me. All these he had dangling from his hair string belt, his appearance suggesting a new species of ballet dancing costume. All natives are keenly sensitive to ridicule, and hence whatever occasion they may afford for laughter it is not always advisable to give way to one's feelings in this respect.

Sometimes a small enclosure of boughs is made on the edge of a lake or clay pan and left for a few days until the waterfowl have become accustomed to it, when one morning a native will occupy it and spear the birds as they alight, or knock them over with his club. The waters of a shallow lake or waterhole can also be muddied to hide the native concealed beneath them.

In the Roeburne district the natives make nets from the fibrous blades of the triodia (spinifex) these nets being of varying size and mesh.

To catch the smaller birds which come to the pools for water, the Roeburne natives first place some brushwood round the pool, leaving a few openings at certain points in the "fence". From these openings they erect a double fence of light saplings or twigs about six feet wide, two feet in height and running along for several yards. The saplings are arched overhead, and at the end of the "lane" a net is spread, which encloses the passage or lane. When birds come to drink they usually alight on the edge of the pool, and after they have drunk, they do not at once return, but run up one or the other of the openings thus made which leads them straight into the meshes of the net. The hunter is generally concealed under a few bushes near the end, and as soon as the birds are entangled he draws the net and secures a good many in this way. All birds are eaten, except the blue pigeon, the wag-tail, the robin and some others of the smaller variety. Birds are killed on the wing, with boomerang and club, also in the water, on branches of trees or while resting on the ground. They can also be taken by trapping. The spear used for throwing at birds is of very light make, and is projected from the spear thrower to a considerable distance. During the moulting season many swans may be caught through venturing into shallow water, when their retreat is cut off by the watching natives, and the birds being unable to fly back to the deep water, fall an easy prey to the hunters.

Turkeys may be caught in some places in the Nor' West by placing a net around their nest while they are away feeding. In the Broome district they are stalked by the natives, holding wirrigin (small boughs) in front of them and when close enough, throwing their nowloo (clubs) when they seldom miss their quarry.

In the Pilbara district, fish are caught with nets, by spear-
ing and in large bundles of spinifex, bushes or grass.

Native companions, which weigh about 25 lbs., are killed by the natives for food. In some districts however, I have found that natives will not kill this bird, wither because of its friendly disposition, or it may have been prohibited by some of the elders of the tribe. It is a bird easily killed, for it will not desert a favourite camping ground, even after the advent of a settler thereon. These birds will often be seen going through their "dances" in the "home paddocks" of white people, through these paddocks having once been their special camping grounds. In the districts where there is no native embargo upon the bird as an article of food, the hunter can walk quietly up to within hitting distance of the birds, and bring one down with club, boomerang or spear.

Turkeys are caught most frequently through their inordinate curiosity. A native advances towards the bird, holding a bough in front of him. He glides quietly along. the bird standing and watching his movements, probably wondering what the moving object is. It thus allows the hunter to get within easy hitting distance, when it is invariably secured. A good turkey has been known to weigh nearly thirty pounds.

Pelicans, shags, geese, and many other birds are caught by the netting process before mentioned. Sometimes a large net will be suspended from between two trees, which may be found in the vicinity of a large pool or lake. The net hangs loosely between the trees, natives being placed at the foot of the trees, holding light discs of bark in their hands. Women then steal round to the opposite end of the pool and put the birds up, taking care that they go in the desired direction. When the birds are approaching the net, one or two of the natives utter the "hawk's whistle" when the flock at once lowers its flight. Should the birds fly too high at first, or are inclined to take any other direction than that in which the net is set, the discs are set flying over their heads, or some other point, and the whirring sound resembling that made by the eagle or hawk when swooping on its prey, the birds fly from the pieces of bark and straight into the net, where many are captured. The natives

sound what is known as the "hawk's whistle" by pulling out their underlip with forefinger and thumb and pressing the lip together. The tongue is placed against the groove, and in the small hollow thus formed, the breath is forced through. Whistling is performed in other ways, each peculiar sound made having some special significance. A certain whistle, softly uttered, tells that an enemy is near, another that game is in the vicinity, and when a number of natives are engaged in a battue, a whistle announces their arrival at their appointed places.

White cockatoos are amongst the most difficult to catch "napping". Sentinels are always placed in the vicinity of their roosting places and at the slightest sound the birds nearest to the sentinel are wakened and in a moment the whole flock is on the alert. If the native can approach more closely to the trees before he is perceived by the birds, when he is within striking distance he emerges into the open. The birds see him and fly round in a circle. He sends his kailee amongst them, the weapon never failing to hit some of them. He will then get one of the wounded birds, knowing the attachment the cockatoos have for each other, and tying the disabled bird to a tree, he watches for the return of some of its companions, and spears them, or despatches them with his kailee.

Joobaitch stated that swans and ducks were often caught by the natives burning a great number of grass trees in certain directions, over which they knew the birds would fly. Coming towards the firelight the birds became blinded with the glare, and getting confused as to their route, dropped to the earth, where they were immediately speared by the natives lying in wait for them.

A method of catching cockatoos in the Ashburton and Gascoyne districts is as follows :- The cockatoos generally choose a tall tree, standing well up and away from its fellows, to roost upon. Three or four young natives make towards where the birds are roosting, for the noise the cockatoos make while they are choosing their respective roosts, and arranging whos is to be sentinel for the night, can be heard some distance away. A wild windy night is chosen, and care must be taken to get past the sentinels, who are located in some trees a little distance from the others. When the natives have reached the tree upon which the birds are sleeping, one of their number climbs it noiselessly, carrying with him a short club. As soon as he has reached the first lot of sleeping birds, he catches each of them a quick blow on the head, when they drop stunned to the ground and have their necks at once wrung by the natives waiting under the tree. Quite a dozen birds have been despatched before the alarm has been given.

Turkeys may be caught in some places in the Nor'West by placing a net around their nest while they are away feeding. In the Broome district they are stalked by the natives holding wirrgin (leaves) in front of them and when close enough, throwing their nowloo (clubs) when they seldom miss their quarry.

Pigeons, especially the spinifex pigeon, were caught at springs and waterholes, by allowing them to come to the edge of the pool to drink, and then shouting behind them, when they rush into the water and are easily caught.

Heron and crane were not much eaten in many parts of the North, the birds being "too wild to catch". Young cranes and herons may sometimes be caught in their nests.

Iguanas if startled are chased, when they run for their holes, or the nearest tree or waterhole. The natives invariably catch them. Snakes are killed with the club, or a stick broken off a tree. Seagulls (mooragin) are killed in the Broome district by holding a torch at night near the beach. They fly towards the light and are hit with nowloo or lanjee (kailee).

Marrjilla, another species of seagull is caught in another fashion. A native puts some waljooroo (long bean creeper) round his head and going into the water he waits for the marrjilla. Presently several of the seagull come over towards the waiting native, who throws three or four kanjee successively at them, killing at least two or three.

The Murchison natives caught the nying'arree, a small, plump, greyish coloured bird, in the following manner :- The larger waterholes which these birds frequented were covered up and a number of small rock holes were filled with water. Into these small holes they placed a few branches and seeds of a native bush called "narraga" and "balbin" which possess some stupifying qualities, and then moved into cover. Soon the nyingarree came in hundreds to their watering place, and as they drank the impregnated water, they one by one collapsed, until over fifty lay upon the ground, too stupified to move. When the natives thought there were sufficient for their purpose, they rushed out of their hiding place and gathered the drugged birds, placing them in their belts to carry them the more easily. This method has also been used to catch emu. When the natives have gathered more nyingarree than they can consume, they cook and pound the remainder into a sort of mince when it will keep for days.

Natives will kill a bird as it flies from the nest by first sending the spear through the nest from underneath, and then, as the bird flies out, striking it down with his club. Pigeons, quail and other small birds are caught in this way.

These weirs might be constructed in fresh or salt water. In the former they were placed so as to take advantage of floods, or dams were made which increased the artificial supply of water. In the estuaries and tidal inlets they were constructed in certain spots which were left nearly dry at low tide.

In the Murray and Southwestern districts, the monga were supplemented by ngoonjook - a species of interwoven wire grass, with the tenacity and strength of the strongest fibre, which was drawn net-fashion through shallow or deep water. The Southern natives did not weave nets, but the ngoonjook answered all purposes in this respect.

Large catches were made by these means, especially in the beginning of the rainy season, as at that time the fish returned from their spawning up stream. During the fishing season and at special times, the natives have worked at these weirs day and night, relieving each other at intervals, and so plentiful has the supply been that in the early days of white settlement the white people purchased load upon load of surplus fish for manuring purposes. Vestiges of the weir at Peel's Inlet still remain, but of the many hundreds of natives from Gingin downwards who visited Mandura, etc., in the season, only one or two old men are now living.

In the larger rivers of the Southwest many of the fish were speared in the following manner :- Selecting a certain spot, a number of natives, carrying with them the sharp pointed hardwood spears generally used for fishing, none of these being more than six or seven feet in length, formed themselves in a kind of semi-circle at the spot selected and then all dived simultaneously under the water, remaining down a considerable time. Gradually they emerged, each bringing one or more fish which he had succeeded in spearing at the bottom of the water. They threw the fish to their friends on shore, and if they required a further supply, they swam a few yards further away and repeated their operations. In this manner a great quantity of fish will be caught.

Fish spearing may also be carried on at the edges of streams, inlets and creeks into which tidal waters run. The natives are adepts at this kind of work, never failing to hit the fish aimed at. In the Kimberley coastal districts, where the tide rushes in at the rate of six feet or more an hour, I have seen a young native spearing fish in this manner. As he caught them he swung them on a light thin sapling and did not desist until his catch covered the whole length of the sapling. I tried this method, which looked so easy, but even with the most careful instructions given by my young friend, it was not until I had reached my twentieth try that I succeeded in spearing a giddden-giddden or parrot fish, and then I only just caught him by the tail. Vannouwer saw the remains of several weirs in a rivulet (probably a tributary of the Kalgan) in the vicinity of Oyster Harbour, some of which were constructed of loose stones, others with sticks and stumps of wood. These weirs together with some footholds made by native hammers in the bark of high trees, were the only indications which Vannouwer perceived of the country possessing human inhabitants.

Another method of fishing in the King George Sound district consisted in driving the fish into shallow water, and spearing them as they reached the shallows. During calm weather the natives went in search of flat fish which lay at the bottom of the clear water, beyond the sandbanks. At night too, the natives lighted torches of blackboy, or some other tree, and wading into the water, showed the fish resting at the bottom, when they were wasily speared. They have also caught fish by throwing pieces of broken shell fish into the water and spearing the fish as they seize the bait. No lines nor hooks were used until the advent of the white settlers.

Bora boming was the term applied to a method of fishing in which several natives seat themselves in water which only reaches to their waists, and having fixed a ngoonjook in front of them, in a sort of paper-bark "basket" called koolyung, which they have carried with them into the water, they catch the little fish which try to pass through the ngoonjook.

They quickly fill their koolyung in this manner, the larger fish being caught in the ngoonjook. The middle of the day, or early afternoon, is bora boming time.

Ngowett was the term applied to driving fish in towards an enclosure made of stinkwood fixed near the shores of the estuaries of the Southwest. The natives made a large circle and drove the fish towards the enclosure where they were easily caught.

When the Swan district natives desired an invitation to Mandura, etc., for the native fishing season, one of the older men generally asked a Southwestern visitor from Mandura or some other fishing ground, "Daaja wa gabba la?" (Fish all gone away to the sea?) and the desired invitation soon came.

Schnapper are caught in the Southwest by driving them into shallow water where they are unable to swim, and then lifting them and throwing them on the shore without troubling to spear them. Some of the schnapper weighed from ten to twelve or fifteen pounds.

In the Southwest the stingaree (bamba) was not eaten, nor the rock oyster (called yarrgoomburt in the Vasse district) and amongst some Southern tribes the shark (warnung) was not eaten. I could not find the connection between the rock oyster and the spirit native of the same name who guarded the monga which lay half way to Koorannup. Baaburgurt, Doongun and Warrert, the only surviving natives who might possibly have been acquainted with the legend, were too old to remember distinctly the tradition connected with yarrgoomburt, the rock oyster. All three confirmed the story of Yarrgoomburt the keeper of the monga opening.

In many places on the Northern and Northwestern coast, large mounds of shell, called by many scientists "kitchen middens" are found, many of them so large as to appear to have taken centuries to form. King, Grey, Dampier and others came upon these mounds during their exploration of the Northwestern regions and up to the present day these mounds are being added to, or fresh ones formed by the Kimberley natives, by whom shell fish are still caught in abundance in the wide stretches of beach along many parts of the Northern and Northwestern coast.

The Nor' West natives have many methods of catching fish in pools, rivers, inlets and along the sea coast. Traps, weirs, poison, spearing, hitting with club or lanjee (boomerang), fishing by torchlight and numerous other means of ensuring a plentiful supply at all seasons.

In many parts of the Kimberley coast there are numerous inlets or creeks as they are called, and as in some of these places there is a rise and fall of between twenty and forty feet in the tide, these creeks are regularly more or less full, and in a few hours dry up, thus affording the natives splendid opportunities for catching the fish that come in with the tide. The creeks are mostly fringed with mangroves in and about which the fish gravel in search for food. Often there are holes, generally near the shore or rock basins, and in these the fish are frequently left by the receding tide. Not infrequently sharks and dugong have been left behind in this way.

By stirring up the mud in the bottom of some of these holes and also in the pools, the fish, which rise to the surface at once, are caught without any further trouble. There is a very large species of crab, weighing two or three pounds, which is generally speared and the Northern natives catch crayfish by pulling them out of the rockholes or by puddling them out of the mud. They use the net to catch smaller fish, prawns, etc. the net being from five to twelve feet in length, It is dragged along the shores of the creeks or islands and will bring in an unlimited supply of the smaller shellfish.

Along the Nor'West coast there is also a number of small islands which the natives are able to reach at low spring tides, as Depuch, Bazout, Delambre, Picard, etc., and a long stretch of land, divided from the mainland by the Flying Foam Passage. In these places the natives procure the eggs of seagulls, redbill, and other birds, and also large quantities of turtles eggs, besides many fish.

In the early days the natives transported themselves to the various islands by means of logs of mangrove wood, two of these being joined neatly together end to end, while a third and shorter piece formed a primitive stern. The joint was contrived by driving three or four pegs into the end of the log, and by bending them slightly, they were placed in opposite holes in the part to be joined on. Another kind had a sort of deck furnished by pegs stuck slantwise into the log, the pegs being intertwined with a species of light rush. The raft used at Hanover Bay consisted of five mangrove stems lashed together with fibre to a frame of smaller wood, the ends being roughly pointed. This raft could carry two natives with spears and baskets, fire making apparatus, etc. The logs were propelled by hand, the native's feet resting on the end. The raft was apparently propelled by a rough sapling worked by the man in front. With the aid of these logs the natives travelled to the islets and reefs in search of food. The last of these primitive rafts was seen at Lewis Island in 1883. The present day natives use the white man's boat for sea excursions.

Dugong are captured in nets, and by spearing when they have ventured too close in shore. Dugong somewhat resemble pig in that they have a snout like a pig, also tusks and bristles, the bristles growing on the snout and partly along the back, the rest of the body being smooth like a porpoise; the flippers and tail also resemble those of the porpoise, only they are more fleshy. The dugong suckles its young. They are found at certain seasons of the year schooling in small numbers in the inlets and mangrove creeks and in the smaller straits between the islets. They appear to root about the bottom of the sea for their food,

which consists chiefly of seaweed and certain shellfish. Their flesh resembles both pork and beef, according to the part of the body from which it is taken. The fat portion, when properly cured, makes exceedingly good bacon. The weight of a good dugong would be upwards of four hundred pounds, a smaller species weighing about one hundred and fifty pounds.

During the season when they approach in shore, a watch is generally kept by some native familiar with the habits of the animal and its movements in the water. The watcher sits on a hill or some spot which commands a good view of the beach, bay, or inlet as the case may be, and as soon as the dugong is sighted, if in the district where nets are used, several natives at once run down to the nearest point where the dugong are feeding, bearing with them a strong net made of spinifex fibre, similar in shape to a tennis net, having wooden supports at each end. They also take short pointed sticks, like skewers, and some smooth round stones. As they hurry to the shore they look now and again at the watcher who informs them by signal of the movements of the dugong.

When the men, who are allexpert swimmers and divers, arrive at the spot where the animals are feeding, one half of the party swim out beyond the dugong so that the animals are between them and the shore. The men carrying the net swim from the shore towards their prey, the net stretched between them and held upright with its wooden supports. The outer natives form a half circle and also move quietly towards the dugong. Each party continued moving until both are close up to their prey, then, at a given signal, the half circle of the swimmers dive beneath the water, the men with the net remaining on the surface, holding the net straight up and down. The divers meanwhile are approaching the dugong along the sea bed, hitting the stones together that they have brought with them. The sound is like a mimic explosion and frightens the dugong who rush in the direction opposite to the sound, when one of their number is sure to become entangled in the net. The dugong finding itself entangled rushes forward, carrying both net and men with it. The natives

continue to hold the net firmly and are dragged in the struggle hither and thither, as the animal flounders in the meshes of the net. Sometimes they will be seen bobbing up and down as the animal drags them with it in its frantic efforts to escape. Presently the other swimmers will have made their way towards them and, one of their number gouges the dugong's eyes out with the sharp pointed stick he has carried in his hair and the animal being thus rendered helpless is towed ashore. Should the men get exhausted before help arrives, both animal and net will probably be lost.

The carcass is divided according to food law, its fat or oil being drunk by those to whom such portion is due.

Turtle fishing may be carried on by day or night. Turtles are often left on the sand at night when the tide is out, and the natives coming upon them turn them over before they can reach the water. Turtles also often lie asleep on the water near the islands in the daytime. A native, on seeing the turtle, will swim out noiselessly towards it, and when within about ten yards, will dive and come up directly underneath, and gripping the turtle, taking care to keep well away from the head, he overturns it, when it can be easily hauled in to the shore. Some of these turtles will weigh nearly 200 lbs.

In the Broome district several natives will engage in turtle fishing at times. One of their number sits in the beega (shade) and watches for a turtle. Presently he sees one, and coming out from his beega, he throws sand in the air, shouting out, "Wow, wow." A male and female turtle approach the shore, and when they have reached the beach, the male returns to the water, leaving the female to find her way to the chosen place. The native, who has been joined by the others, watches her until she is close enough to rush upon her, when all run quickly and overturn her. The stomach and other entrails are the property of the man who first saw the turtle. Should the natives miss their catch, their failure is ascribed to the ngargalula having drawn the turtle back into the water. The ngargalula is of course invisible to the men. If the little "spirit" does not like the hunters it will draw the turtle back.

All seacoast natives are familiar with the habits of the fish, and any departure from their known habits renders the fish, whatever it may be, *meerijool* (magic). The *koolibal*, a species of turtle, is specially "looked after" by the *ngargalula*, who is also friendly to those who are *koolibal jalnga* (turtle totem people).

Fish traps were made on the reefs, in shape like a tongs, or like a coil with tail. The natives also chose a place with hollows under the rock, and at high water a number swam out just beyond the hollow places, surrounded them in a semi-circle, and then, beating the water decreased their distance from the hollows. They thus drove the fish into the trap and as soon as a goodly number had entered, bunches of grass filled up the openings, and the fish were easily recovered at low water. In large pools in the watercourses and rivers of the inland districts, a method of catching fish in a "bag-net" is as follows :- One native takes the net and entering the water dives underneath, holding the mouth of the net wide open. Other natives enter the water about fifty or a hundred yards from the place where the first man plunged in, and also dive to the bottom of the pool. They carry stones as in the case of dugong fishing, and striking these together, cause the startled fish/rush to the opposite end of the pool where the man with the net is moving slowly towards them, and many are captured in this manner. In a shallower pool they simply go into the water and stir up the mud at the bottom, spearing or catching the fish as they rise to the surface.

An interesting method was observed by Dr. House amongst the northern Kimberley natives :- With coarse grass and wattle bark, they make what looks like an enormous straw bottle, the inside of which they fill with bark obtained from the root of a shrub which grows along the banks of all the rivers in those regions, and which is known on the Fitzroy River as *magalla*, and then drag the "bottle" backwards and forwards through the pool, the result being that the fish become stupified and come to the surface where they are easily caught. Whether the stupifying effect is due to the properties of the bark, or the effect of stirring up the pool, Dr. House could not state.

In the Murchison district, where there are deep pools which contain fish, a light raft made of wood, sometimes only a single log, sometimes two light pieces, roughly fastened together with fibrous bark, is covered with paperbark, and some light branches. A few bushes are also stuck underneath the raft and hang downwards, so as to form a sort of net, or break. The raft is then placed in the pool and is propelled by a native who swims or walks behind it according to the depth of the pool. All round the water, men, women and children are standing, and all at once begin to shout, scream, beat the water with their hands, etc. etc. The noise startles the fish, which rush towards the raft, but are balked from swimming underneath it by the long screen of bushes, and in their fright jump into the air, only to fall upon the raft, where the native propelling it promptly kills them with his club.

This method was slightly varied in the Gascoyne district. A floating platform, made of large sheets of paperbark, is constructed at one end of the pool which is to be dragged. The platform is about five feet long and three feet wide, hollowed like a dish, with a "back" to it about three feet high. To each end of the platform is fastened a "rope" ten or twelve feet long, formed of the trailing branches of the cajjeput tree, bound together with strips of the inner fibrous bark, or with rushes. These ropes are from nine inches to one foot in diameter tapering towards the end. A thick curtain of branches of cajjeput is fastened to the under side of the rope, so as to hang down and block the fish from swimming underneath. Then all the natives taking part join in dragging the raft from one end of the pool to the other, this driving all the fish before it. When the fish get into shallow water, the men make a great splashing along the ropes, thus causing the fish to try and leap back over the platform into the only place where the water is undisturbed. They strike the back of the platform and fall into the dish-shaped body of it, where they are promptly killed.

In the Roeburne district, turtles were either surprised on the beach where they had come to deposit their eggs, or in the water, when they are asleep. The sharp edges of their shells renders caution always necessary in dealing with them, particularly the females, the edges of their shells being particularly keen. The native swims out to the sleeping turtle, and turns it on its back, taking care to wrench the fore flippers. He then attaches a long string to it, and tows it ashore.

Fresh water turtle are extremely abundant about December and January, in the more Southern districts. The habits of this turtle are to swim lazily near the surface of the water in search of food. When alarmed by the noise made by the native hunting it, the turtle at once sinks to the bottom and the native, going down with it, feels with his foot for his whereabouts. Presently his foot falls upon the hard shell and treading it to the ground he reaches down with hand and secures it.

Mussels are also caught by diving, the women performing this work. In the Nor' West they carry a spinifex net with them, and holding this in their mouths, dive to the bottom of the water, catch the mussels with either or both hands, rise to the surface occasionally for breath, and in a short time fill their bags. All seacoast natives, men and women, can remain a long time under water, the Nor' West coastal natives particularly.

Seals are not infrequently surprised on the beach or some little distance inland, or by catching them on outlying reefs and islands.

The Southern natives used the woodada (a small species of frog) as a bait to catch the goonok, locally known as jilgee, a small species of crayfish. They first collected a few woodada, and tying one of these round its middle with a batta (rush) string, they let it down one of the goonok holes. If the batta is not long enough, two or three pieces are tied together. The woodada is let down very gently at the end of the string, and as soon as the goonok bites at it, the string is pulled up and the native inserts her hand underneath the goonok, and throws

quickly into her goota (kangaroo skin bag) and pursues her work until the goota is filled.

Many frogs and fresh water fish are caught in the half-dried swamps, the animals burying themselves in the mud. The women loosen the mud with their wanna and then inserting hand and arm into the softened earth, catch the frogs or fish buried beneath. Many pounds weight of frogs and fish may be caught in this way.

When the Perth, Gingin and other district natives visited Mandura in the fishing season (boornur = autumn), they usually went to the beach with the "fishermen", but they were forbidden to go near the monga or into certain parts of the water, "because they eat the noomar and joo bok (species of fungus and root) and the fish will not come where they smell the noomar." The visitors could stand on the bank, and see the fish taken from the monga but they could not go near it. They were given all the fish food they could eat from the monga. Two or three months might be spent at these fishing grounds by the visitors who lived exclusively upon fish. As soon as they became satiated with their fish diet, they returned to their own districts.

Berreek was the native name of the spot where the remains of the old Mandura district weir still stands.

At one time the Swan natives could go across to Garden Island "without touching the water", so that the "meenya" (smell) of the seals they caught would not catch the water.

In the winter or rainy season the mullet became half blind through the mixture of flood waters with the estuaries, and were then easily caught.

In the Nullagine district a hollow log was placed in the water, left for some hours, then lifted out quickly, when it invariably contained some fish.

The coastal natives of the Ashburton and Nor'West Cape also used a species of raft, similar to that used in the Roeburne district, but made of stumpy corkwood trees, growing near the swamps. Two straight lengths of these were pegged together with hardwood pegs, with a third stem piece curving upwards usually added to the two lengths. Pegs were driven into the sides at an angle of about 45° and interwoven with reeds. The natives knelt on these and paddled with their hands out to the reefs, sometimes going three miles outside the reefs to the black rock.

In these districts a dugong has not seldom been speared by the natives through its having ventured too close inshore.

In signalling the capture of a female dugong, the Ashburton natives hold their arms almost straight above their heads, the finger-tips nearly touching. Standing erect, and folding the arms round the body, means that a male dugong has been captured.

In the Pilbara district, fish are caught with nets, by spearing and in large bundles of spinifex, bushes or grass.

- There are many varieties of fishing in the West Kimberley district.
- Mal'gon'don'joonoo - trapping fish,
- Woon'doongo joonoo - fishing by torchlight
- Lang'arra joonoo - fishing with karrajoonoo
(Small fish, half-cooked, chewed and spat into the water)
- Kan'jee joonoo - fishing with janga and nee'barda
(shellfish bait)
- Jardagurra - fishtraps
- Joombal joonoo - fishing in the day time
- Wallagingoon jardal - putting posts (jardal = posts) in the river, with boughs and leaves laid lengthwise between them, or roughly intertwined. These traps last some time.
- Lammardunan joonoo - laying one or more traps, made of saplings and bushes across a tidal river. Fish are left by the tide in each enclosure and killed at leisure. These enclosures also last some time. Enclosure = woornowoo, small boughs = yooloo-yooloo.
- Rarra
- When a greater number of fish has been caught than the natives can eat, the surplus is first cooked in the ashes or embers in the usual way; the fish is then placed on some rocks that had been heated by fire, or on some smaller stones and thus dried and hardened, when it will keep for some time. Process is termed rarra, or raara.
- Koolajoonung - Deep holes where the fish are left by the tide.
- Koonjoola - Small species of flat head, cooked like the karrajoonoo and bitten and spat out. When the fish come up to eat the bait they are speared. This is the langarrajoonoo method.

In the Kanjeejoonoo method, neebarda and janga are smashed up with stones and thrown into the sea, the barrumbarra and other fish greedily eating this bait, walga-walga and beeree-nyan'gool preferring the karrajoonoo and kanioola bait.

- Ngaggoola joonoo - Catching the fish in the koolajoonong (deep holes) with poison
- Yal'ngam' joonoo - A coil-shaped trap made of stone walls,
or
Jardagarrajoonoo
- Neemanya - Gate or entrance, also made like a broken ring, the material being stone. Shells are thrown along the entrance, the fish following them in the rising tide. Just before the tide turns the "gate" is closed with koodoo-koodoo (thick long grass) and the fish are killed at will.
- Goorda-goorda joonoo - Two walls, made of stone, at right angles to each other with an opening left at the angle. Two or three natives stand in the narrow entrance and kill the fish as they try to go back with the receding tide.
- Dardarajoonoo - Closing up some likely entrances with rock.
- Ngardana nganjoonoo - Clapping the hands in water. The clapping makes a sound like a cannon and the fish run shorewards from it. The clapping is continued until the tide goes out, the fish, afraid to venture back towards the sound of the clapping, being left on the beach in great numbers.
- Walburraboerjoonoo - Walking along the beach and spearing the fish that come close in shore.
- Yagganjoonoo - Going in first ankle deep into the water and spearing all the fish that can be reached; then knee deep, and spearing stingaree, then thigh deep and spearing other fish and then retreating to the shore as the tide comes in.
- Dardaljoonoo - A sort of floating trap or platform, made of light bark or mangrove logs, upon which the fish jump when chased by the natives.

Poison is used to catch fish as well as other game in the North Western and Northern Kimberleys.

In some of the pools of the Shaw River, fish were caught by putting a poisonous plant into the water, which has the effect of stupifying the fish when they float at once on the surface. If sufficient quantities of the bush are put in the water it will kill the fish. I tried the effect of this bush plant in a small pool in the Shaw River, the fish immediately coming to the surface. By taking the plant out of the water after a very short immersion, the fish appear to recover, hence a small dose of the plant only stupifies them.

Yal'ngamoo is the name of a shrub growing in the pindana (inland). The women collect this and hammer it with a goordee (a wooden hammer made from the mangrove tree), then tie the smaller pieces with moongoo (fibrous bark), making several bunches. It is then put into the ground and covered up for the night, Next day it is taken our and wetted and then it is put on the fire. It smells powerfully while being cooked. After it has been cooked it is mixed with sand or earth and then scattered over the water, when the fish come up at once and are caught or speared.

Leerramarrajoonoo are the roots of a jcombain tree which are beaten to a pulp and splashed through the water. All the fish in the vicinity die.

Ginbeejoonoo - throwing poisonous gum into the water. The gum is gathered from the gartgoo (gum?tree) or bilow'el (another species of gum tree) and placed in a binjin or warndää (wooden or bark vessel). The men take the vessel down to the water, wade in for some distance and letting the water cover the gum, they rub it and the surrounding water turns red. The fish rise as soon as the gum mixes with the water and are easily caught.

Some species of jcombain trees do not need cooking. These the natives cut into lengths and beat witha nowloo, loosening the strands which they throw into the water. The jcombain tree bears an edible seed. Its wood is used at Munjungarree (autumn) for poisoning the fish. Mun'gin is the poison of a species of starfish. The natives obtain this and rub it on a rock, partly powdering it, and then they throw it into rockholes along the beach where it kills all the fish.

There appear to be several species of edible sharks in the northern waters :- Jarrambul, won'goomun, nanbil, (flatheaded shark), ngallinjardee joonoo (big flatheaded shark), tehoorwai, or joorwai (little baby shark, born munjungarree time (autumn). The bilgereee - a big shark - is not eaten. There are certain seasons when the young only of the nanbil (or nganbil) and wongoomun are eaten.

A broken ring of stars, or stars forming a coil, are supposed by the West Kimberley natives to represent a fish-trap, both the stars and the trap they represent being called jardagarra. The legend concerning the jardagarra was not obtained.

At Lallurn and Munjungarree (summer and autumn) they hold the Manow'ra or turtle dance.

There are two kinds of porpoise which frequent the northern waters, the eeberingmalla (large porpoise) and the pajjalburra (smaller species). Both kinds are eaten.

The game traps in the pindana are called widda-widda and are made in a somewhat similar manner to those already described.

Beeloornjoonoo is the name given to a species of reddish fish like the gidden-gidden or parrot fish. Beeloorn is the name of one of the chief seed foods, but the connection between seed and fish could not be remembered by my informants.

The Kimberley natives do not cut their fish as the white people do. They generally cut them at the side or back.

The use of the native plants, gum, etc., for poisoning fish is common to other peoples besides the aborigines of Western Australia. In Fiji a poison plant is used for stupifying or intoxicating the fish. In Southeastern India the hill people do the same. They form a dam in a river and put in the plant when the fish at once come to the surface. A somewhat similar method was practised in England by poachers, chloride of lime being the agent employed.

Spearing fish by torchlight is still practised in Scotland and Ireland. This method is so successful that a great many more fish than are needed or are eaten are caught, the sport it affords leading the native to continue spearing long after he has obtained a sufficiency.

The Sunday Island Natives practise similar methods of catching fish to their neighbours on the mainland. One of their traps consists of an artificial dam having a passage leading up to it, the passage gradually lessening as it reaches the dam or pool. The natives follow the fish up the passage and closing up the entrance with boughs and sticks, are able to spear the fish at their leisure. In the "tailed coil" trap the fish travel along the edge and when they have reached the "bowl" of the coil, the entrance is closed. All kinds of fish, turtle and dugong, are the principal foods of the Sunday Island natives.

The "kitchen middens" or heaps of edible mollusc shells are not peculiar to the Western Australia. Similar shell heaps have been found in the Baltic, Scotland, Brazil and the United States.

In the Southern coastal districts, when the red gum is in blossom, it is the salmon season, also the bai'oo (zamia nut) season. In the West Kimberley district when the reerrwal (sesbania) is in flower, the fish have spawned.

Boornur (autumn) and early mo'kur (winter), the sea mullet and other large fish are caught, also the opossum.

Beeruk is the goonok (crayfish) and yakkan (turtle) season, also the nimmat, warden, or deeda, three names applied to a little fish resembling whitebait, which is very plentiful in Southwestern waters. These fish are caught in great abundance and make a very dainty dish when cooked in a certain species of melaleuca bark, which imparts a delicate flavour to the fish.

Large sea snakes are eaten when caught.

REPTILES

Insects and grubs of many kinds serve to add variety to the food supply of the natives.

Of snakes they ate all the varieties worth cooking, whether poisonous or not, only the very small species being left uneaten. Some were eaten as food, others as purgatives or medicine. In the Southwestern district, the yorna or stump-tailed iguana acted as an anti_bilious medicine, also the kardar (big lizard). In all districts certain foods possessed medicinal properties well known to the inhabitants of the districts, and when they were desired to act as medicine they were eaten without any other mixture. When they were used as food, they were generally mixed with other foods which mitigated or mullified their medicinal qualities.

In the West Kimberley district the following snakes were used as food :- Banningbooroo (carpet snake), balleedee (carpet snake, another species), goonda-goonda and ngoomboo, two more species of carpet snake, mandeegurra and woolgardain, two kinds of whip snake, ngool-ngool, black snake, koolerding and me'al'booroo, mangrove snakes, and many others. When the woolgardain is chased it runs to the koombara (rocks) and puts its head between the stones, when it is easily killed with a hammer.

Carpet snakes are easily tracked. Having followed up the trail to their holes, one of the natives who carries a long green supple stick, inserts this in the snake's nest, and if the stick happens to reach the snake, a hole is dug just over the place where the snake is located. When the hole is made the snake will then be worked along until the native, by putting his hand into the hole, will be able to seize the reptile by the tail and draw it about half way out, when its back will be broken by a sharp hit with the club (nowloo). When the entire snake is pulled out of the hole, the natives generally smash its head, although they know it is not poisonous. They then carry it twisted round their bodies where it will continue writhing for some time.

The Fraser Range natives had an ingenious method of catching lizards. One native made a small fan of feathers about four or five inches long which he fastened to a long thin rod. When a lizard ran past the fan was agitated in front of it, when its attention was at once drawn to the object. Another native accompanying the "fan wielder" speared the animal as it stood at gaze. The fan was also used to catch other ground game in the Fraser Range district.

A native will only eat venomous snakes which he has himself killed, as he believes that the snake, when wounded, bites itself and thus poisons its flesh.

Water and land rats are eaten. In the rainy season the bush rats are often compelled, through the flooding of their nests, to leave their country and go to some elevated ground. It is at this period that they are caught in the greatest numbers and can be easily captured by men, women and children, using sticks, stones, spears or any weapon.

Lizards, snakes, iguanas and other reptiles are found amongst the rocks, trees and thick undergrowths, and are either chased or burnt out. Winnaroo, the big black iguana of the West Kimberley district, is a favourite food in its season.

There are at least four species of edible grub, which are considered a great delicacy by the natives, and by those of the white people who have overcome their prejudice to the wriggling insects. These are :- the wattle grub, the *Xanthorrhæa*, the gum tree (various species) and the ground grub.

The wattle tree grub is the largest, and the most delicately flavoured. Not more than two of these are found in the wattle trees, unlike the *Xanthorrhæa* grub of which over a hundred have been found in a good tree.

The presence of a grub in a wattle tree is generally ascertained from the diseased state of the wood and the appearance of certain excrescences on its trunk or branches. This grub may be eaten raw, or roasted in the same manner as the deeda or whitebait of the Southwest.

The blackboy grubs have a flavour very like a good hazelnut. If the top of the blackboy looks somewhat withered, the natives know that it contains some grubs, and giving it a few kicks with his foot, the tree falls over, the grubs being found at its root. Until the tops of the grass trees are dead, the grubs are not matured and to hasten this end a native will break off the tops of the grass trees at a particular season. If two or more men belonging to the same hunting ground, break off the tops of certain trees, these trees are the individual property of the persons who broke their tops off, until the grubs have been extracted, no one else having a right to touch the tree. A native who extracts grubs from a tree which does not belong to him, is punished according to native law. Grey relates that a native travelled between thirty and forty miles to lay a complaint before the Resident of King George's Sound against another native who had extracted the grubs from a tree which the complainant had marked. The punishment consists in the offender holding out his thigh to be speared.

The blackboys were cut down about April and left for three months or so, and at the end of the specified time the native returned to the vicinity with some elderly relative to obtain the grubs. No one else could touch the grubs, except the young

children or grandchildren of the temporary owner of the trees. The grubs are gathered in a paper bark vessel, and the quantity may be sufficient to supply the natives for weeks, as each man may have cut down a circular or other shaped patch for his own use and the use of his own relatives. The changes which the blackboy grub undergoes are three. Firstly there is the bardee which is eaten by the natives; secondly, the changing of the bardee into the monaitch or "white beetle", and thirdly, turning into a brown beetle or "mundok koota" ("brown beetle in a bag.")

Swamp bardees are called maalurnbuk in the Southwest, the jamwood bardee being called nyittinuk or yora.

In the West Kimberley district the grubs of the kandeeleep tree are called joogardoo, the jamwood grubs being called bal'ngan'joonjoon. The jamwood grub is very large and is found at the roots of the tree. The bandicoot digs at the roots and exposes them and the native gets the grub easily. The jamwood supplies seed, gum, grubs and the best of wood for their weapons and message sticks.

The "jammoy" tree also supplies an edible grub to the Kimberley native. Red gum, mahogany, stinkwood and other trees yield a plentiful supply of grubs to the Southern people. The wattle tree grub is the largest, the xanthorrhæa and mahogany coming next in the abundance of their yield. The grubs from the mahogany are, when matured, of a reddish colour. Some time after a fire has been through a mahogany forest, the natives go hunting for the bardees which feed upon the dead wood. Putting their ears against the trunk, they listen for the sound of the grubs eating the wood. When the presence of the bardees is ascertained, the bark is chopped away and many bark vessels are filled with the yield of one tree.

White ants and a species of honey ant are the only kind that appear to be eaten.

In the Eastern Goldfields district, white ants' nests are generally found in hollow logs. The nest is broken and its contents are gathered into a piece of bark. When they are collected, together with some sand and dirt, the latter is removed by what might be called "dry-blowing." The ants are thrown up into the air and the sand and dust collected with them is removed in the process. The Goldfields natives eat them raw, only mixing them with small pieces of the fibrous bark of a tree. They do not swallow the bark, but chew all the ants they have placed in it, and when all these have been extracted, they fill the chewed bark again and again with the ants, until their hunger is satisfied or the ants are finished. At the roots of most of the trees and larger shrubs in the Eastern Goldfields, edible grubs are found. Honey ants, which are the female wood boring species, will often have to be dug from a depth of four to five feet, the insects being found near the bottom of the taproots. The cyst of the insect, nearly half an inch in diameter, contains a yellowish fluid not unlike wild honey. West borungur (honey ant totem people) in the Fraser Range district do not eat their totem.

The larvae of the cossus moth and several wood boring insects are eaten when found.

Another species of honey ant is found in the loose sandy soil of the interior of the State and is used as food by the natives.

Wild bees (*Trigona carbonaria*) are found in many parts of the north west and the Kimberley districts, and are used as food, honey, wax, and bees being all mixed up together and eaten.

In the dense mallee scrubs of the inland parts of the West, two species of insects, the *spindylaspis eucalypti* and *S. munnifera* produce upon their larvae a sweet scale or covering, this being eaten by the natives who frequent the mallee districts in great numbers in the season when the "manna" is at its best.

Several species of cicada are eaten, both pupae and insects being used as food.

There is a species of small black ant which gathers in its nest a large quantity of grass seeds. The natives root up the nests of these ants and rob them of their grain, often securing more than a scoop full from one nest.

Mangrove tree grubs are also edible.

In the Nor' West, white ants are generally dug out of the anthills after heavy summer rains, at which time they are much larger than usual, probably being full of eggs. It is at this time they acquire wings and fly away from the nest. In the Roeburne district the white ants are not generally eaten raw, but have some heated stones placed amongst them and are stirred about and around these.

Vegetable food

The vegetable foods of the aborigines were by no means so scanty as the apparent aridity of the soil has led many travellers to believe.

The abundance of root and other foods varied with the nature of the soil and other causes, but there was no lack of vegetable products of one kind or another at all seasons of the year, in both the northern, southern and inland regions. In addition to the root foods there were also fruits and seeds, every season having its own special supply of one or another of these. Quandong, native currants, custard apples, nuts, beans, fungus, (various kinds), the fruit of the mesembryanthemum (the "pig-face" plant), the wild cherry, grapes, several species of parasitic plants, and many other kinds and varieties, all growing in various parts of the West, some being abundant in the most arid areas.

Most of these fruits, etc., are agreeable in taste and flavour, and it was not unusual amongst the white settlers of the early days of Western Australia to live practically on native foods for a considerable period, owing to the uncertainty of supplies from home and while the country had not yet begun to yield its own products.

Many of the root foods resembled home products in a wild state. There were native onions, potatoes, carrots, parsnips, beans, spinach, cabbage, etc. etc. At the present day there is in the Nor' West a plant locally known as "fat hen" which is eaten regularly by the white settlers in the districts where it grows. I have found it at the head of the Fortescue, Ashburton and Gascoyne Rivers, and have eaten it at all those places. It very much resembles spinach and is a most agreeable change from the eternal tinned vegetable of civilisation.

Many roots, if eaten by themselves, act medicinally. The meern, a species of red root tasting like "red pepper" must be mixed with a kind of red earth (sometimes the earth of certain ants' nests) or it will cause purging and dysentery.

Kwonnert, the gum of the jamwood, or mimosa, is in season in the summer months. The natives are aware that this gum has also medicinal properties and will cure diarrhoea. White people have successfully tested its qualities in this respect.

Manna is a saccharine exudation from the leaves of certain species of eucalypti. It is called dangail in the South West and is one of the district totems in the places where it is most abundant. It is also found in the North and Nor' West. It is of a whitish colour and exceedingly sweet. It is usually found in the early morning on the ground under the trees and in the season the natives rise early and collect the manna in great quantities.

Ngwalya was the name of a root growing in the Williams district which was eaten as a medicine, red gum being eaten for stomach pains, by both men and women.

There was a species of sweet yam growing plentifully on the margins of trenches, dug by the Trappists of Beagle Bay, but whether the root was indigenous to the district or was introduced by the Malays or Manilamen could not definitely be ascertained. It now grows plentifully along the edges of waterholes, etc., in West Kimberley.

Wild figs are plentiful in parts of the Ashburton and Fortescue districts, also an abundance of grass, spinifex, and other seeds, and along the coast, mangrove seeds are plentiful in their season. The nuts of certain species of mangroves growing about the Nor' West Cape must be ground, kneaded and baked in the ashes, after they have been repeatedly washed, before they are rid of a poisonous ingredient.

Seeds of the box tree are ground with grass seeds in many of the inland districts. Bulrush roots, a species of typha, are found on the Oakever. They must be roasted before being eaten.

Whatever root or other foods are in season, the districts where they grow are annually visited at their ripening by the owners of the hunting grounds. In the case of the kwonnert, mungaitch, melok, mullet and other foods being found in greater abundance at one place, that district will be visited by one or more outlying tribes, who live upon the special products until these have become exhausted. The visits are always regulated for the time of the year when some special food is ripe or in season.

Fern roots, sedge roots, mulga roots, York gum roots, are all a staple food of the natives.

Warrain is the most plentiful root in the South, koolyoo is abundant in the Murchison, Gascoyne, Ashburton and other districts and other edible roots and seeds have definite habitats where they grow plentifully in their season.

In the Southern districts, besides the warrain, the principal roots foods are :- Joggat, the small bulbous root of a rush growing in certain districts. It is very fibrous, and is generally pounded before being eaten. It is only edible at one period of the year.

Joobok and other bulbous roots of orchids are roasted and eaten. The stem of the joobok as well as its root is eaten.

Boorn and meern are both mixed with red earth before being eaten. The species of earth with which they were mixed in the Swan district was called koolber. The boorn is found as far north as Mt. Horner and like many other roots, is in season in early spring.

Joolal, jidda, jungong, ngwalya, kwerdain, maaja, moolyert, beelon, dundong, were also some of the principal root foods of the Southwestern natives. The work of obtaining all root, seed, fruit and vegetable foods belonged to the women.

The baico or Zamia nut required burying for a fortnight or longer before being used, or it might be steeped in water for some days. The outer husk alone was eaten, the kernel being poisonous. The Vasse natives stated that the wallaby buried the baico nuts for some days before eating them. Other natives stated that both the wallaby and opossum can eat the baico nuts without injury.

When freed from their deleterious quality, the baico nuts taste rather like pepper. I have eaten some that have been steeped in water for seven days, the bright red of the covering of the nut having changed to a dark dull brown in that time and I have also eaten those that have been pitted for three weeks, the skin having become quite soft in that period. There does not appear to be a regular period fixed for the removal of the poison. Sometimes the natives, being hungry, have eaten the nuts before they were softened or "seasoned", but they were always immediately ill, though their illness did not end fatally. The unripe nuts produce intense vomiting and violent stomach pains. The baico nuts are collected in March.

Kuttaitch, joo'la'we, beealuk, karr, yogganuk, jett, koolyet, yook, etc., are amongst other Southern roots.

The trees and flowers from which honey is obtained in the South are :- Mungaitch, boy'jarn (a small "cup flower" which hold honey), bungarra (red banksia, growing in swamps), nyoombeed (the flower of the red gum), mungaitch nganga (banksia mother), a small species growing in swamps.

The Eucla district natives are stated to have many roots, berries and other vegetable foods throughout the seasons, Ngoora, a species of berry, quondongs, wild cherries, wild grapes, etc. The bark of a species of mallee was eaten, either mixed with white ants or pounded and roasted. It was frequently eaten unpounded.

In the Eucla and Fraser Range districts, acacia and grass seeds were pounded together, mixed with water, made into cakes and baked.

(Peschel, in "Races of Man," p. 160, draws attention to the fact that in the many species of native grasses and their methods of preparation, when they are crushed and made into bread, it is evident that the manufacture of flour, and the baking of bread are older than agriculture.)

The flat surfaces of many of the rocks in the Fraser Range district show traces of many generations of seed pounding. They are in some places deeply indented through constant use. The upper millstones are of various sizes and may be used by one or both hands.

In the Murray district, wooden "pats" were used to pound up certain roots, millstones being apparently unused by, though not unknown to the Mandura and Pinjarra people.

In the Roeburne district, the nether millstones, usually about a foot square, were left at certain camps, only the upper millstones, round waterworn stones, about the size of an emu's egg, being carried in the wooden scoop. In West Kimberley, the nether millstones were called lallurnjooonoo, as they were used only at Lallurn or summer time. These were also left in the neighbourhood of the trees whereon grew the principal seeds. There is always a considerable cavity in these nether millstones showing that they have been used probably for centuries.

Kurrajong tree seeds are roasted and eaten in the districts where they grow, the natives also chewing the roots of this tree for the sap they contain. They will eat the young roots. The gum of the Kurrajong is also eaten.

In the Eucla district the bark of mallee roots is peeled off, placed on a slow fire which dries and loosens the outer skin. This is removed and cooked lightly on the embers until it becomes crisp, when it is pounded into a fine fibrous mass and eaten.

A species of thysanotus from this district yields tuberous roots, which, being rather watery, quench both hunger and thirst.

Yanjet or yanjedee is a favourite root food, having a taste like wheaten flour. It is the bulbous root of a rush growing in many parts of the Southwest. Walja-jenna, or eaglehawk's foot, is another species of root in the South, as are also ee-e'la, gamak, biralluk, banak and boonyalla.

There were at least three species of edible gum :- Mena, bojjong or bujjong, kwonnert. Mena must be wetted and rolled, melted and cooked slightly in the fire. Bojjong is also pounded and mixed with water, roasted and eaten. Kwonnert may be eaten raw or roasted. In the latter case it is mixed with water. The kwonnert season was in beeruk (summer).

The yakka (wooden "pat") may be used as a poker when certain roots are being cooked. Gamba is the name given to the smaller pat, these taking the place of millstones in the Murray district.

Warrain, joobok, koolyoo, karna and other tuberous roots were not pounded.

The bark of the Tuart tree (twerts) was wrapped round mena in the Swan district, pounded into a cake and cooked. It could also be eaten raw.

In the Eastern districts, a certain gum flowed from a tree at a particular season, and was caught in a bark vessel placed under the tree, the gum being very good to eat and most satisfying. The name of the tree could not be ascertained.

The species of flag from which yanjedee is obtained grows in swampy places. The natives clean the roots, and open them out, the roots consisting of filaments with a farinaceous substance between them. When opened and roasted, the filaments are removed and the floury substance pounded into a cake.

Mungart or Hamwood seeds are pounded on the booka or kangaroo skin cloak in the Southern districts. They are "cooked" in the ashes in a bark vessel in which they are scarcely more than heated.

In the Upper Murchison district, the roots of a beautiful convolvulus were very plentiful. The roots resembled sweet potatoes and some of them grew very large. Wild rockmelons were also found in this district - about the size of a pigeon's egg. A species of grain like "plump-drake" is gathered from a kind of oaten or wheaten grass, which is very abundant on the river flats. (This is probably the seed which, in the Roeburne, and Ashburton districts, is called tchinberbee.) Onion-like roots and a species of wild fig, also grow plentifully in the Murchison district. Native watermelons were also found near Mt. Augustus, and a fruit, shaped like a pear, about three inches in length, grows on a small creeper in the same district. The interior of this fruit consists of a number of small flat green seeds, like flattened young green peas. I have found this fruit as far north as the 18th degree of latitude. In taste it also resembles an early pea.

A purple flowering bean, somewhat resembling the horse bean, is found in the Roeburne district, the seeds forming a favourite food in their season.

The gouty stemmed tree grows as far South as the Roeburne district and is also found in the northern Kimberley district. This tree yields an excellent fruit, in shape like a cocconut. Inside the rind is a soft white pulpy fruit in which are placed several almond-like seeds, arranged somewhat like those in the pomegranate. If the bark of the tree is cut it yields an edible gum of a milky whiteness, which in taste and appearance resembles macaroni. When this bark is soaked in water, a most agreeable drink is obtained. This tree grows also in the neighbourhood of Cambridge Gulf and in other parts of North Kimberley. Gregory, Cunningham and other explorers described it as bearing some resemblance to the *Adansonia* of Africa.

The Kimberley natives feed abundantly on the fresh water mussels which abound in the Prince Regent and other rivers on the north coast. In the vicinity of these rivers are many pandanus and other trees which yield an abundant quantity of seed pods, containing a kernel-like fruit which tastes like almonds. These the natives eat with mussels, a very agreeable combination.

There are several kinds of grapes and berries also in the Kimberley district, all of which are edible. Many of these sweet tasting berries grow on parasitical plants attached to various trees. I have eaten several species on the Shaw River, the plants attaching themselves to some species of mallee, jam-wood, etc. There are also many kinds of fungus, almost all of which are eaten raw or cooked. The phosphorescent fungus is not eaten.

It has been said that the Southern natives "cultivated" the jitta root by burning the leaves of the plant in the dry season, "in order to improve it", but this statement could not obtain confirmation from any of the old natives familiar with the root.

The only restraint practised is the "totemic" embargo placed upon the flowers of edible roots, seed and fruit, none of which must be touched by young hands.

Wild plums, figs, and other fruit grow in the Roeburne district. Nalgoo (small round roots), bookajee (bulrush roots) kulba (wild cherries), jeema (wild currants), walyarra (the pear-shaped seedpod already described), bajjala (a fruit resembling a pomegranate), worrombo (another species of pod growing on the coast), kolumburr (a nut, somewhat similar to the zamia, and having to undergo some process before it can be eaten), ngaaburda (native rock melon), munjeemurra (a species of wild gooseberry), taaburree (wild fig).

The Murchison natives are said to gather the fruit of the thysanotus in winter and bury the surplus quantity until summer, when it is unearthed and eaten. This statement has however not been confirmed by the Murchison natives examined.

A species of strychnos found near the Oakover furnished a diet during two days to Warburton and his party. The seeds and fruit of the plant were eaten both raw and cooked.

The Roeburne district natives steamed certain vegetable leaves by first placing them in some bark from the cajeput tree, and then sprinkling them with water. A fire that had been lighted some time had heated several stones and these hot stones were placed on the wet leaves and the latter turned about with a stick. When the stones have lost their fierce heat and have produced steam the bark is folded round the leaves to keep the heat in and in twenty minutes or so the leaves are cooked.

Seeds are sifted by the Roeburne district natives in a very deft manner by a certain peculiar motion of the wrist and hand, the husks going out at one end of the wooden vessel, while the seeds remain at the other end. I have tried them with sugar and sand in equal quantities placed in the wooden scoop, and they have in ten minutes thoroughly separated the grains of sugar from those of sand by the same motion with which they sifted the seeds.

FOOD

Ashburton

According to Yabbaroo, seven varieties of spinifex furnish seed food for the Nor' Western natives, the native names of the various species being as follows :-

Tcoalga	-	roughest edible kind for stock
Waddadee	-	grassy spinifex
Yoomboo	-	oaten-headed
Theonthoosarra	-	edible coast spinifex
Wintna	-	"buck" spinifex
Maiaburna	-	" " "
Perridin	-	porcupine or thistle buck

and used as a drink. The bees are singleless and much smaller than the common house fly. It is therefore difficult to track them by sight to their nests. If a native can catch one of these little insects, he will attach a tiny patch of white down, or some other light substance, to the bee, and following this slight guide, will soon reach the nest. Or selecting a tree that looks as if it contained a nest, the honey seeker goes down on his hands and knees and scans the ground closely for any dead bees which may have been thrown out of the nest. He very soon finds one, and climbing the tree, soon scoops out the honey. It will be remembered that honey seeking is connected with a certain stage of the young men's initiation in the West Kimberley district.

The jarradain baaloo, a species of tree in the Kimberley district, is somewhat similar to the mungaitch of the Southwest, in that it produces a honey-bearing flower called womma-womma,

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In the Northern districts the seeds are generally all gathered off the trees at once and the surplus quantities put aside for early use, not so much storing the seed, as saving it from being lost. The seeds ripen quickly in the heat, and must be collected as soon as they ripen.

In the West Kimberley district there is a kind of fatty red earth which the natives are very fond of, either eating it by itself or mixing it up with seeds, roots and other edible substances, and baking it in the ashes.

Wild honey, the product of the stingless bee of the Nor' West, is either eaten in its natural state or mixed with water and used as a drink. The bees are stingless and much smaller than the common house fly. It is therefore difficult to track them by sight to their nests. If a native can catch one of these little insects, he will attach a tiny patch of white down, or some other light substance, to the bee, and following this slight guide, will soon reach the nest. Or selecting a tree that looks as if it contained a nest, the honey seeker goes down on his hands and knees and scans the ground closely for any dead bees which may have been thrown out of the nest. He very soon finds one, and climbing the tree, soon scoops out the honey. It will be remembered that honey seeking is connected with a certain stage of the young men's initiation in the West Kimberley district.

The jarradain baaloo, a species of tree in the Kimberley district, is somewhat similar to the mungaitch of the Southwest, in that it produces a honey-bearing flower called womma-womma,

which is made into a sweet drink. If much of this drink is taken it produces a slight giddiness, as the flower ferments if kept in water for any time. The flowers are ripe in barr-gana (winter).

In the Fraser Range district a species of native tobacco was found which the natives were very fond of chewing. The plant was mixed with ashes or fibre and chewed for some time, the same "quid" being used by several natives.

In the Gascoyne, Ashburton and Roeburne districts, a certain weed, growing on the volcanic hills and between the rocks, was used by the natives of those districts. The leaf has a strong pungent flavour. It is picked in a green state, pounded and mixed with a little ashes of the snakewood. Some stringy bark fibre is then matted and teased, and the leaf and ash are placed in this, the whole being rolled up in a ball about the size of a loquat. The native will chew this for some time, although the pungency of the raw leaf makes his eyes water and his face contorted.

In some places the leaf is sprinkled with a little water

Boolga is a piece of tobacco first put on a coal, then broken up, then mixed with wood ashes, then a piece of tarry rope or other similar substance is unwound and made fibrous and mixed with the tobacco and ashes. A piece of string is then tied round the mass to keep it lumped together, and in this form it is chewed and passed round. The natives above the Minilya River practise this custom. Those living below the Minilya do not.

(Cornally, informant, Notebook 3b, P. 156.)

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In some places the leaf is sprinkled with a little water as well as the ashes. The native swallows the juice of the "quid".

In the West Kimberley district, gilalla is the name given to a "tobacco" leaf, in shape like a turnip, which is dried in the sun, slightly cooked in the ashes, and then chewed without any other preparation. It creates a curious sensation in the users of it, stupifying them and having a somewhat drunken effect upon them. Boolgoo is the Roeburne district term for the native tobacco used in that district.

VEGETABLE FOODS

The following are some of the local names for the edible root, seed and other vegetable foods in various districts. It will be seen that even in those areas usually termed "arid", there is a goodly variety of seed and other foods :-

Balladonia district

Ngarda (species of banksia), barroo (gum), woordoo (mushroom), nulla (seeds), munjallee (vegetables), ngammin (locally known amongst white people as "lemon colic"), doogula (grubs).

Bremer Bay district, Jerramungup, Korrlup, etc.

Yook, gwerdin, meen, moyanung, waddee-waddee, koggurn, jool, karr, werrarn (warrain), mardeen, all root foods. Koorup, nojeen, gurdar, neenam, gammuk, all berries. Walgal (zamia), men (gum), joo'onert (jamwood seed and gum), woort, yoggainung, baaberr, koolbeetch, ngoonyok, all fungi.

Albany and Denmark, etc.

Ben, meen, joobok, all roots, koolbar (earth), jakkut, kwardining, men (gum), kwonnert, mungit (banksia), baaluk, maamgurt (two species of grub).

Mt. Barker

Kwardingan, jakkat, yook, boy wetch (zamia), kwonnert, men, mungait (banksia).

Kendemup

Kwarding, meen (root), kwerning boy (zamia), jokkut, yook, joobuk, kwonnert, towbert (grubs).

Blackwood district, Bridgetown, etc.

Boy (zamia), joobok, men, kwonnert, kootung, (manna from gum tree), bert, da'aw (two species of grub).

Swan, Murray, Vasse and Gingin products already given.Meckering

Warrain, boorn, dwotta (roots), weeruk (roots), ngoogak (manna), mairok, korna, joobok (roots).

Southern Cross

Goorndain, karre (manna), goongain (fungus), gwin-jaroo (vine root), kookain (roots), nyaala (root),

moondar (fungus), dhoogalin (mushroom), jarran (wild sugar, manna), moorurn, yalya (two species of seed), koobung (berry), joombarra (native peach), warndarn (grub). A bright green bush growing at Southern Cross was called Tondarup.

Canegrass district

Beloo (seeds), moorin (seeds), windailga, mooga (two species kurrajong seeds), daaron (roots), garre (manna and gum), yoogo (root of kurrajong), maiee (vegetables), longee (grub). (When the kurrajong seeds are first eaten, blood comes in the mouth, but then the seed knows the eater and no more blood comes.)

Mulline

Goordoogoolaa (root), goondama (wild grape), nyorrgoo (root), murdambooroo (red seeds), kaia (kurrajong seeds), walgoo (quandong), boggoorda (mulga seeds), banjo (jamwood seeds).

Laverton

Jinba, goonan, weerango, yoornee, wanjee, jeewa, noomaa-dhoolgoo, mola, kojurn, walgoo, dharron, nammeelee, dhoonja, yooldhoo, mardeea, kalga, karrearr, weenjalga (or windaiga), yarleecor, bulja, boorulgoo (three species of water roots).

Duketon

Jinba (grass seeds), koordal (tree seeds), koolyoo (root), loongee (grub).

Victoria Plains

Karna, joobok, boorn, wanga (wild cherry), kwon-nert, maatcha, kookain, twerta (root of tuart tree), woorda (mushroom), wommilyer (manna), baioc nuts, mena (gum).

Berkshire Valley

Dhoota (roots of tuart or gum tree), karnoora (turnip-like root), ngaggara (gum), goondhow (runner), mungarda (jamwood seed), dhangooree (runner), gooraara (seed), maatha (onion root), jeeloo, joobok, (roots) ganyoora (root), baiarda (zamia), weetoo (seeds),

wagga (native peach), mungarda, wilban-jungoo (mushroom), baggoorda, kaia (mulga water roots).

Dandarraga

Warrain, boy dhanda (zamia nuts), wagga (peach), weelbanjung (mushroom), meenangarrung (manna), ngoko (banksia).

Watheroo, Marah

Warrain, joobok, karncoora (roots), mungarda, ngoogoolya (seed), maaja, kwardin, koogain.

Carnamah

Karnoo, maajee, mungarda, gooraara (seed from prickly bush).

Dongara

Wogo (root), meenungarra (manna), emba (gum), oorumboora (turnip-like root), janga (root), mulgoo (root), koggala (root), mullaja (roots), ajjooka (potato), mungarda, aanoowarra (like a long turnip), weedajooroo (fungus), welbanyoongoo (fungus).

Mibbeean, Murchison

Koolyoo, ngalgoo, wongaling, boora, kardilga, yajjoonga (like carrots), boornamarra (seeds), wangalin (peach), kowarrjee (fungus), beebagarra (manna), bimba (gum). (Ngarra-ngarra - name of poison plant put into waterholes to catch game, fresh soak made afterwards.)

Gullewa

Ngalgoo, mooramonga (roots), boorogoo (jamwood seed), kooraara (seed), boggoorda, balbin (seeds), yajjooga, bimba, weeleega (mushroom), meenungarra (manna).

Oerilhunya, Mure'ree, N.W. Namine

Kooldhoo (roots), ngowala, bilbela (carrot), jee (turnip), warrain (seeds), dharran (mushroom), thoordooroo (manna), joolabardee (grub), ngoorgo-bardee (ground grub), yalloor bardee (gum tree grub).

Murxum

Koggoola (bean), gooraara, mungarda, marnain (seeds), walgoo (quondong), beebil (bulbous "pig-face" plant, root and fruit eaten), kaggara (bean), boolee-boolee (seed, growing at Meelya, Field's Find.)

Yeedeling, N.W. Peak Hill

Kaanco (turnip), kwonnert, karrajin (root), marraja (root), kaggoola (root and fruit), yellar (like grass), janga (berry), kullaa (root), boolee-boolee (seed), moorgo (wild onion).

Cue, Weld Range district, etc.

Wallingooa (species of mulga water roots), walgoo (peach, kernel-warraladdee), boolee-boolee, kooaraara (seeds), thardunga (fruit), mungarda, poonamarra (mulga root), boggoorda (tree seed pods), ngaggar (tree with food like koolyoo), burndeejillee (yam), meena ngaia (manna), baggardee, joolabardee, jow-algoo (three species of grub).

Mount View, Murchison

Willingoo (peach)

Northampton

Arnoowarra (roots, many from one runner), googoo (root, one only from plant), innee ammanoo (sweet potato), googany (roots), moorgoo (roots), billeea (seed), gooraara, mungarda, koggara (stinkwood seed), goonma seed), bunjin (red seed from tree).

Gum Creek, via Nannine

Koolyoo, walgoo, womma (manna), bimba (gum), grass seeds, mulga seeds, spinifex seeds.

Annean Station

Koolyoo, bimba, ngoorarra (seed), wagga (edible nuts), walgoo (peach).

Warnan, N.E. Peak Hill

Koolyoo, bilbarra (roots), no'ala (like a carrot), jaaloo (little root), boolojee ("jam" from species of gum tree), wailgooroo (like an apple), jooboo-goo (like a vine), kaagoola (root), ngoodhanoo (jam-wood seed), kalbarree (seed), yeeraga (seed), walgoo, kanjaroo (fungus), yarloo womma (manna).

Illimbirree

Koolyoo, boondawan (carrot), ngalgoo (potato), yallar (like lettuce leaves, cooked in ashes), jeeburda (berries), koorarra (seeds), mungarda, kaggaroo (like pepper seeds).

Nyingarree, S.W. Peak Hill

Boolee-boolee, koolyoo, kalbarree, mungarda, kaggoola, walgoo, thardooga (like bean), gooraara, ngowarla (onion), jeeboorda (little watermelon), bilbula (roots), wailgooroo (like quondong), boonamarra (seed), baggoorda (like peas), warroodha (black beans, growing near rockholes), dandooroo (seeds), mulbarn (seed), mandamillee (mushroom), kowarjee (mushroom), yarloowomma (manna).

Sanford River

Goolyoo, kailbin (like tomato), nyooarree (also like tomato), nyillin (like potato), ngowela (like onion), boondawarrin (like watermelon), nyeergailee (seed), yarloor (jamwood seed), thardoonga, jeeburda, bungara (quondong), nyoodoora (fruit), nyangala (roots), beedin (seeds), kalbarin (seeds), yoodun (roots growing near river), yalgoo (like gum tree roots).

Gascoyne district

Bimba, woggooroo or walgoo (peach), koowooloo (manna), booleeda (yam), nyeeburda (like a cucumber) Before eating these must be rubbed in sand, or else the skin makes the mouth sore.) Kallooree, boorung (seeds), kaggoola, tammarda, nyooa, koolyoo, koondoo, wanyoo (peas, eaten raw), ngaia wardoo, or goombargo (seed), karrabajjoo (ground fig), janga or nyooa ("pig face" weed). The koondoo is a watery vegetable, and is both food and drink.

Ashburton district

Walgoo, toothawarda (tree seeds), tchintabee or tinthabee (grass seeds), winjit (wild white fig tree), pinjakundee (black fig tree), methurn (wild bean, like 7 year bean), boorada (wild jam), koggala or koolya (creeper fruit, containing white milk), tarra-bajja (species of Wild Cape Gooseberry), nyerburra (native watermelon), moolcoowardoo (fruit like orange) talbain or kalbain and neeatoon (yellow berried seeds), yoolerra (pig face fruit), yannam (seeds, harmless if swallowed whole, but if crushed between the teeth, produce violent vomiting, diarrhoea, and pains in limbs), booleeda (yams), koolleejee (gum), neelbo (grubs), koolyoo, waialla (roots), kunkulda (roots), pijjing-oooloora (fungus), kooyedda.

Tableland Tree and plant seeds, roots, bulbs, etc., koondee (seeds), winnerong (native fig), jarnaroo (grub).

Nullagine Ngalgoo (root), wonong (fruit like guava), madda (like large watermelon), yarreenoo (fungus).

Roeburne (In addition to those already enumerated) Ngalloowain (wild grape), yarr kalain (koolyoo), mardoowarree (root), kanjee (seeds), bandoowarra (seeds), kajja-warree (like cocoanut).

Fitzroy Berries, figs, gum, waterlily bulbs, native oranges, white ants, crocodiles. Billa (yam), pinga (manna), koonanga (fig).

Broome district

Kwoobee (wild plum), bandal murda (fruit tree), walagin (like loquat), beelcorn (seed bearing tree), jammai (seed), jarree (water and seed bearing tree), yamdalngooroo (native almond), manbango kamboo (pandanus seed), nallan (tree, bearing gower-gower seeds, also gum, called nallanjoonoo), narrga (root of nallan, like a carrot), noomera goordoo-goordoo, wandai (fruit and seed), jaggal (honey-bearing tree, the drink made from it is called jeerbellee), jarradain (tree flower, makes a stupefying drink called womma-womma), kanbur (tree, the flowers of which are made into drink. Weerabbin - flowers of the kanbur, joon'yan'geree - drink made from the flowers), min'jooroo (grape-like fruit), jeereebie (seeds), mambinjoonoo (seed), (There is a tree resembling the mambinjoonoo whose fruit is poisonous), kandoor (seed), wan'gar (seed), karrangum (seed), joombain or kooyarba (seed), kabbain (seed or fruit, sour), mal'ganing (bean or seed from a runner), joorrngalla (like a banana), loonda or koongarra (vegetable), wan'gara-wangarajoonoo (fruit), bilwan-bilwan (seed of wallagin),

In the Spring (Weeralboo) the following are in season :-

Loonda, goorbee, ne'al'burnoo, arrinjarree, jammai, kaldinjoonoo, jalla-jallara, kaalurdoonjin (fruit), birmangee (fruit) berrilban-berrilban (plum), waljooroo (bean), jimilla (like carrot).

In Summer (Lallurn) there are :-

Gower-gower, beelorn, noomeragoordoo-goordoo, eeragooloo, wan-gai, kandoor, jilboogurdain (like watermelon), yamdalngoor (almond), lallurnjoon (manna, so called because it comes at lallurn time).

In Munjungarree (autumn) the following vegetable foods are found :-

Wan'gar, joombain, jeereeb, malgarning, rang'oo-ran'goo, some yamdalngoor (almond), karrangum (like a turnip).

In Barrgana (winter) the seasonal fruits are :-

Mambinjoona, kowajar, milburn, geerbaijoo (honey), jeemela (like a long turnip), yoologo (tree flower from which honey is

obtained), koolocar (roots), bilgin (roots), weeragalla (root).

All these fruit, seeds, roots, ripen in their respective seasons, and a move is generally made to the locality where they are most abundant. The upper mill-stone, called cobardoo koombara (little stone), is generally carried to the camps where the food of such camp has to be pounded, the lallurnjoonoo (nether mill-stone) will be left at the camps as it is too heavy to transport.

The jammai or jammoy (mangrove fruit) are cooked with hot stones, the process being called raara; loonda (like mulberry) is eaten raw; nealburnoo (grass seed) is pounded and eaten either raw or cooked; jallajallur (like a turnip) is cooked; kaalurdoonjin (fruit) eaten raw; birmangal (fruit) is also eaten raw; wangar (wild grape) is eaten raw, it is called walgajoon when ripe, as the walga (sun) has ripened it; joombain (like a green apple) is eaten uncooked, so also is jeereebee, a fig-like fruit, and malgarning (like white grapes); mahbinjoonoo is a fruit with seeds like a watermelon, The melon part is eaten raw, but the seeds are cooked.

Honey is extracted from various flowers and is eaten or made into a drink. The bilowel, milburn, yeolgoe and jarradin flowers are honey-bearing.

At Sunday Island the following roots, seeds, etc., are found :- Koolngarree (yam), logorr (seeds), kooree (fig), keengoor (grub) karringum (root), koajerr (manna), illarra, korrol, joongina, murdorr, kooie, ranjer (all edible fruits, etc.), white ants, white ant earth (a certain part of the nest, eaten only by men), pandanus nuts, ngoorarra, errelin, koomenan, karrinjen.

The above list evidences no lack of vegetable foods in the districts under review. Every native knew the spot in his own district where the foods were to be obtained, but a Broome native visiting a district in which these roots, etc., were not indigenous would find the same difficulty in procuring a vegetable diet as a strange person would in visiting the Broome district.

CANNIBALISM

Cannibalism is not common, although it is well known to exist, amongst many tribes, both inland and coastal. Its practice may possibly at one time have been almost universal, but if so, the custom in many places has long since died out. There appears to be strong evidence of its introduction having come through the north, spreading southwards, eastwards and westwards with the people who brought it. It may be said that almost all the inland tribes are more or less cannibals, and the practice has been found as far South as Eucla district, and westward to Victoria Plains, and the Lower Murchison.

Bishop Salvado related a case of cannibalism which had occurred in his district shortly after his arrival at New Norcia, and during my visit to Beagle Bay, having heard of a woman eating her own baby, I ventured to appeal to her motherhood in the matter. She replied she "had only eaten one baby, but," pointing to a 'sister' standing some distance away, "she ate yeera-ja-warr (three)" and she held up three fingers in order that no mistake should be made in the number. One of the natives who accompanied me to Disaster Bay had shared in a meal of a woman of his sister stock, a short time before the Mission was established.

In the Murchison and Eastern Goldfields districts, cannibalism is rife at the present day. On the Upper Murchison, two natives decoyed a boy away from the camp, took him into the bush and killed and ate him. The boy belonged to their own tribe, and they had not even the excuse of hunger for the act, as they were well supplied with food, and had been given a sheep and a bag of flour by the owner of the station near which the deed was done. I travelled in the railway carriage with two men, uncle and nephew, who were being brought down from the goldfields for killing and eating a young man from another tribe. They had, together, eaten every portion of their victim, burying the bones after the feast. Many women, in the Murchison district especially, kill their children to rid themselves of the trouble of rearing, and frequently the children are not only killed but eaten. In the Eastern Goldfields district and other places, half-caste

children are generally eaten.

In all the cases discovered it has not been found that any rite was attached to the killing and eating of children. In the case of the adult girl who was killed and eaten in the Beagle Bay district, paucity of food, and a big assemblage of natives, whom the "hosts" were obliged to "entertain" was the main reason for the killing. In the matter of the babies at Disaster Bay, the boy on the Murchison and the young man on the Goldfields, these were all eaten through human flesh hunger. In the last-named case, a desire to become possessed of the strength of the victim, may have been added to the hunger.

At a native camp near Mt. Augustus, Gregory found "the bones of a full grown native that had been cooked, the teeth marks on the edges of a blade bone bearing conclusive evidence as to the purpose to which it had been applied; some of the ribs were lying by the huts with a portion of the meat still on them." (Gregory's Journal, p. 47). In many of the settled districts of the Murchison and Eastern Goldfields the consumption of human flesh has only been stopped through the police arresting on a charge of murder, those who were found eating human meat.

In the Ashburton district, the body of a recently buried fat woman was dug up and her thigh cut off and eaten. An old woman on the Wooramel River was killed and partly eaten and a boy of twelve who ran away from a station on the Minilya to an "uncle" (mother's brother) on the Ashburton was killed and eaten by his relations.

Laverton and Menzies district natives liked Nor' West natives to eat, as they said they were "sweet" but although they ate half-castes they did not like their meat, considering it too "sour".

Many native sorcerers in the inland and other districts are supposed to acquire strong magic power by partaking of human flesh and in many places it has been the custom to extract the kidney fat from a dead enemy and smear their bodies with it, sometimes roasting and eating it. Other districts follow the custom of tying up part of the kidney or other fat of an enemy in pieces of bark or other material, and fastening these like buttons to the ends of their beards. In 1875, Messrs. William and Henry Clarkson, with some men, travelled northward from Perth with some cattle. Leaving the men with the cattle at some point, the two brothers went on ahead to find fresh camping ground. They reached Hooley's Well and having rested and filled their water bags, went on some distance further, but finding no water, they were compelled to return. William Clarkson knocked up before they reached Hooley's Well again and his brother went on as fast as he could to get some water and return to his assistance. On his way back from the well he met four natives and stopped to talk with them, sitting down with his back against a tree. While he was talking with three of them, the fourth slipped behind the tree and speared him. After he was dead, they cut off a long slice from his leg, and (presumably) roasted and ate it, covering the rest of the body with bushes.

Mr. W. Clarkson died in the place where he had lain down and the bodies were not found until some considerable time had elapsed. They were brought into Greenough where an inquest was held by Mr. R. Fairbairn, who stated that although the bodies were quite dried up from exposure, the marks of rough incision which the natives had made, were still visible.

In the Balladonia and Fraser Range districts, when an initiated young man died, his scars (worma) were cut off and roasted and eaten by his male relatives, who also sucked the blood from his veins, and sometimes from his cheeks. The eating of the worma and the drinking of blood were supposed to give them increased strength and also to lessen their grief for the dead. All the people of this district are baaduk - blood drinkers, and drink

the blood of the beasts they kill. (Nodee's, Jimmer's and Marra-lea's information, Balladonia.)

Eastwards of the Bridgetown district, the kangaroo totem people drink kangaroo blood, scooping it out with their hands from the inside of the animal.

Cofnally, informant
(Gascoyne district)

Notebook 3b, P. 37

The first thing the Karriarra and Bidung natives do after killing someone is to cut a vein or some parts of the body from which the blood will flow freely. This is then caught in a yandee and all the natives concerned in the killing drink the blood. After drinking the blood they cut open the stomach and extract the caul fat, roast it and divide and eat it. This custom is common amongst the Nor'West natives down to about Roy Hill. South of Roy Hill it is not practised.

PREPARATION AND COOKING OF FOOD

With regard to preparing and cooking their food, they first of all require fire, and that is made in two ways, upright and horizontal.

In the upright method, two pieces of wood, from certain species of shrub or tree (the species varying in different districts) are broken off and trimmed smoothly. One piece is grooved slightly in the middle and a tiny hole made in which some tinder is placed, the tinder, which may be dry grass, fibre, etc., being placed either in the hole or on the edge of the groove. This piece of wood is placed flat on the ground and held in position by the feet of the operator who must squat on the ground to do the work. The other piece of wood is pointed at the end and this end being placed in the groove, the stick is twirled rapidly, the motion being from top to bottom, the operator all the time pressing downwards upon the point. In about two minutes, with rapid and continuous twirling, a fire is lighted.

In the horizontal or sawing method, which is not practised in the Southwest, a somewhat more clumsy piece may be chosen, always of some easily kindled wood, for the bottom piece. This is slit down from the top for about two or three inches and about an inch from the top a small wooden wedge is fixed in the slit. Into the fissure below the wedge, some tinder or inflammable substance is inserted. Then another shorter and thinner piece of wood is sharpened "knife fashion" and the edge of this is sawn quickly across the groove. The wood used in the sawing method is extremely hard, and the friction produces fire in a very quick time. I have myself frequently obtained fire by this means, but only succeeded in "making smoke" by the upright method, as that method requires more endurance and strength than the sawing method. The wedge is not more than an inch in thickness. Fire may also be obtained by sawing the edge of a meero across a spear, or a dry log.

CornallyMETHODS OF MAKING FIRES

The perpendicular or upright method of firemaking was in use amongst all the natives of the Gascoyne and Ashburton and also in the Southern districts and the Eastern portions of the State. The horizontal or sawing method was in use amongst the Pilbara, Tableland and Northwest natives. Both methods were used intermittently by the natives throughout the northern part of the State.

Any soft wood with a pith was chosen for the flat piece which was placed on the ground and held in position by the feet of the native. A small hole was made in the centre, with a tiny groove at one side, at the end of the groove some pieces of dried grass, broken up very fine and anything inflammable were placed. Then the upright stick which had the point rounded off, was placed in the hole and the native twirled the stick downwards always commencing at the top. As soon as his hands worked down towards the point they were swiftly raised and the motion continued until smoke was seen. When this was perceived the stick was at once dropped and the grass, etc. lifted and held towards the wind, when it at once ignited. Sometimes the native pulled a few hairs out of his head and put them in the hole in order to create more friction.

When travelling, the natives light a piece of corkwood which will keep alight for a whole day and carry this with them in their journeys.

The seeds of the wattle and other trees, were shaken into a kangaroo skin, or flat piece of bark, spread beneath the tree, and were then put into a bark dish, and some coals placed on top of them to roast them. As soon as they were sufficiently cooked, they were again placed on the kangaroo skin and from this they were taken by handful, and put on a flat stone where they were mixed with a little water, pounded into a cake and eaten.

The "ovens" of the Southwest were merely temporary places where a kangaroo or emu might now and then be cooked whole. The same oven might not be used twice. In the Northern districts, especially along the seacoast, numerous ovens served the natives for many periods, the same oven being used each year in certain districts.

A "turtle" oven consists of a hole sunk about a foot and a half in the ground, and about three feet in diameter, lined with flat stones. In the hole a fire is lighted, and the turtle is placed on its back in the oven and covered with some hot embers. When turtles' eggs are cooked they are placed in the embers and covered over with cinders and ashes, a whole heap of eggs being cooked at one time.

All reptiles are cooked by throwing them, just as they are caught, on the hot embers. Iguanas' eggs possess a very delicate flavour, not unlike plovers' eggs.

In the Ginsin district, the heart, liver, kidneys, fat, "chitlings" and a little blood are all put inside the paunch of a kangaroo and the "crop" of the emu, and these are cooked all together. They fasten the opening of the kangaroo paunch with beendees (wooden skewers) and the emu's crop is closed with its own quills. Sometimes the heart of the kangaroo is left in its place and the whole side with the heart is given to a moerurt (relative). Marr'gergur, this custom was called.

In the Eucla district all food was cooked on the embers. The Eucla natives prepared the bark of the mallee by baking it in hot ashes and afterwards pounding it between hot stones. There appear to be no ovens in the Eucla district, as in this tribe, meat food, however small it may be in quantity, must always be shared. If a rock wallaby is killed and there are seven or eight men present, each one must receive a share of the animal, and consequently the portions thus distributed are easily cooked on the embers.

In the Southwest, all roots are roasted, except boorn, and one or two others, which can be eaten raw anywhere. Boorn can also be pounded and made into cakes when it is then slightly baked. The kwardain and meena are not generally roasted, the meena being mixed with koolber (earth) and eaten raw. When taken as a purgative the meena is eaten without the addition of koolber.

Seeds are usually dried or baked in the embers, either to separate the husks, or to render them easy for pounding between the millstones. Grass seeds are made into a kind of cake, and baked or eaten raw. No definite rule applies to the cooking of the natives any more than to others of their customs. What they cook today they will eat raw tomorrow. In the Southwest, small fish were generally wrapped in bark and placed in the embers, and left there until thoroughly cooked. The larger fish were simply placed on the embers as they were caught and cooked without any further preparation.

In the Northern coastal region fish, crabs, crayfish, dugong, iguanas, lizards, snakes and birds are all roasted over the coals. Turtle is generally roasted whole in the oven before mentioned. What is not eaten is cut into strips and dried in the sun. This turtle meat is then carried by the natives on their journey inland and before it is eaten it is moistened with water, and pounded on a millstone.

Large game, like kangaroo, emu, turkey, have their entrails taken out, and the space filled with stones, and cooked whole by being covered up with ashes and hot coals.

The inland natives of the Upper Ashburton and Gascoyne depend largely upon "tchinterbee" and other grass seeds during certain parts of the year, and a native may often be seen sitting at a mill and pounding the seeds, licking them off the stone as he works. When he is satisfied, the women and children will feed themselves in the same way. Sometimes these seeds were made into a "damper" and cooked in the ashes, but the natives were generally satisfied to grind the seed, and lick it off the stone.

Although there is plenty of salt lying about in the marshes, the natives never use it with their food, and when working on stations where, during a certain time of the year, the meat is salted down at once after killing, it is some time before the natives get accustomed to it, and they never eat it with relish.

In the East Murchison district, the natives preserved surplus food in the following manner :- The flesh was shaved off the bone by a cutting flint, or torn off with the fingers, It was then dried and pounded between two stones and carried in a kangaroo skin, or a piece of bark, until required. Another method was to pound the dried strips into a very fine mince, which was then slightly moistened, and rolled into balls, which were sometimes made to bind together with crushed seed. These balls were again dried and could be carried about for some time before they were eaten.

Carpet snakes were rolled round and the tail placed in their mouth. They were then placed in a circular hollow where a fire had been made and covered with hot sand and ashes.

If the kangaroo skin was not taken off, the fur was generally singed before the animal was cooked.

Turkeys were wrapped in wet clay or grass, and cooked just as they were caught, the feathers, etc., being left on the birds. These were also cooked in an impromptu oven, and when cooked, feathers and skin peeled off easily. All birds were cooked whole.

The yanjedee is first roasted, and then pounded between stones, before being eaten, as it is rather hard.

Bishop Gibney described one method which he observed of snake cooking in the Bisaster Bay district. The natives drew the snake, which was about four and a half feet long, across the cinders a few times, and then rubbed off the skin. The snake was then coiled round and a wooden skewer run through it. It was then placed on the embers and cooked, or rather heated, and eaten.

In some districts a carpet snake is cooked as follows :-
The snake is first stretched out to its full length on the ground, and hammered with a club until most of the bones are well crushed. Then the fire that had been placed in a circular hollow, is removed and the snake coiled up and placed in the oven and covered over with the hot sand and cinders until cooked.

Fresh water turtles were cooked by being placed in their shells on the hot coals. When they were done, a slight pull removed the bottom shell, and the animal was eaten off the upper shell which served as a dish.

The dugong is rarely cooked whole, being too unwieldy. It is generally cut into strips and cooked on the coals. Whale was also cooked in the same manner. Smaller pieces of whale, porpoise, kangaroo and other large animals, may be wrapped in a species of bark and cooked, but this is quite a personal taste and is not general.

Frogs are placed on the hot ashes and left for some little time. The native then holds them by the hind legs, removes the lower portion of the intestines and swallows the rest of the frog almost whole. The Broome natives generally squeeze the water out of the frog before throwing it on the fire.

Fresh water shellfish may be eaten raw or cooked.

Crocodiles are cooked whole in large ovens or broiled, according to circumstances.

If hunger inspires the native there is not much attention paid to cooking. An opossum may be caught, the fur singed off, an incision made in its stomach, from whence the entrails are drawn, the animal is put on the coals and occasionally merely warmed through. The skin will be given to the dogs or the women.

In the Waiawonga district the natives will sometimes make a triangle of sticks, against which hot ashes will be piled. The bird is placed within the sticks, hot stones are placed inside it, the entrails having been extracted, and the feathers singed or plucked off. When ready, the skin is pulled off, leaving the flesh clean and free from ashes.

When the natives require the sinews of a kangaroo, they make an incision round the base of the tail to the bone, and another round the tip, the skin being pulled off with all the sinews of the tail attached, and these are drawn out, and rolled on the digging or other stick, in order to keep them stretched. In the South, the strings are used for cloak making, bag making, etc.; in the North they are mainly used for fastening spear heads, fixing the points in the meeros (throwing boards) and for various other purposes.

In cooking the bandicoot, the fur is first singed off, and when this is done a small pointed stick is inserted in the stomach and an opening made through which the contents of the stomach are drawn out. The bandicoot is then put in the hot ashes and left to cook. When cooked it is cut open with a dabba (native saw or knife) from front of neck to tail, and is eaten out of its own skin, which, when cooked, peels off easily. Sometimes when the animal is young and fat the skin is also eaten.

Emu legs were cut off. In some parts of the South, the skin was taken off after the feathers had been plucked out, and pegged over the coals and cooked separately. If the bird was divided before being cooked, each person attended to his own portion, but if the bird was cooked whole, it was placed on the hot coals which had been prepared for it, ashes, coals, and hot stones being placed round it, and on top of the bird. The "gizzard" was taken out, cleaned and cooked separately, but the heart, liver, etc., were cooked with the bird. The legs also were put beside the body of the emu and cooked with it.

The "koomba" or gall of bird or beast is always extracted and thrown away. Sometimes the kangaroo was not divided until after it was cooked. But, whether before or after cooking, game must always be divided, otherwise a fight will ensue.

Kangaroo "steak" was sometimes cooked in a hollowed out waterworn stone. It was placed in the hollow of the stone, and other stones were put on top, a fire was lighted, or rather embers were placed round and partly on top of the "stone oven" and when ready, the top stones were taken off and the steak was ready for eating.

Temporary ovens were always made to correspond in size with the meat to be cooked. Large ovens were generally lined with stones to retain the heat, stones being also placed inside the stomach of the animal. Sometimes a few leaves or a bundle of grass will be placed in the oven, or the meat will be wrapped up in bark or clay to prevent the heat escaping, but these customs more often represent individual taste amongst certain tribes, and are not general.

Eggs are eaten fresh, stale, half addled, or any state in which they are found. Particularly is this the case when hunger presses. They are baked hard in the ashes, the natives always taking care to break a portion of the outer shell, which, leaving the integument intact, ensures that the egg will not burst when being cooked.

A few hot stones will often be placed in a bark or wooden vessel containing white ants, the stones being rolled about amongst the little creatures. There is no other preparation, except in mixing them with the bark before mentioned, otherwise they are eaten raw.

The various edible fungi are roasted or eaten raw according to the species.

Nearly all vegetables are cooked, some are roasted, others baked, while some again are steamed. In some districts, the steaming process consisted in putting wet grass on heated stones, tying the vegetables up in small bundles, and then putting layers of wet and dry grass alternately over them, and covering all up with earth. When the earth is being built up, a sharp pointed stick is stuck through the heap in two or three places, and withdrawn quickly. As soon as it is withdrawn the native pours in a little water, and then quickly covers up the holes. The steam is kept in by the covering of earth, and in about twenty minutes the vegetables are cooked. Several people may cook in the same oven, but their respective bundles never appear to get mixed, each person taking out his or her portion as soon as the earth is taken off.

In Eyre's account of his journey from Adelaide to Western Australia, he furnishes an account of a meal made by Wylie, the native who accompanied him. After a considerable time of privation, Wylie shot a young kangaroo. "Upon this we feasted at night, and for once Wylie admitted that his belly was full, He commenced by eating a pound and a half of horseflesh, and a little bread; he then ate the entrails, paunch, liver, lights, and the two hind legs of the young kangaroo. Next followed a penguin that he had found dead upon the beach. Upon this he forced down the whole of the hide of the kangaroo after singeing the hair off, and wound up the meal by swallowing the tough skin of the penguin. He then made a little fire and lay down to sleep."

G.F. Moore describes in the "Perth Gazette" of May 14, 1836, the supper of one of the natives who accompanied him on one of his expeditions to the northward. A bandicoot, an opossum, two kangaroo rats, a young swan, and a musk duck. Scarcely any part of these inside or outside were rejected. After all these the native baked himself a good sized damper of flour, and then came over to Moore's fire to pick up scraps.

WATER SUPPLY

The inhabitants of the inland districts have many resources with regard to their water supply, of which white travellers are unaware. Every rock, soakhole, spring or catchment of any kind on his hunting ground is known to the native. Every water-bearing tree is familiar to him and he knows the habitat of every root which will quench his thirst as well as his hunger. If rain falls, he knows where it will lie longest. He sinks wells, or more properly soaks, in likely places, and is wise enough to fashion these wells in such manner as will allow of the least evaporation taking place. He will collect the heavy dews which gather with some absorbent grass or fibre, and will note the activity of certain ants or other insects in the neighbourhood of hollow trees which will probably contain a small storage of rain water. No native on his own ground need die of thirst.

In the most arid districts, trees will be found whose roots contain a pint or more of water. From the bole of a tree, a species of gum, growing near Disaster Bay, we obtained nearly two quarts of water, the fluid having a decidedly gummy taste, but still being drinkable. The natives have a certain method of cutting into the boles and reaching the water. They chop at the bole with their flint tomahawks at right and left angles, alternately, graduating their strokes to a nicety. The last stroke, which touches the water, is given in such a manner as to allow the water to come out like a small spout, and the tomahawk being left in the opening until the thirst of those present has been satisfied, a piece of bark or fibre closes up the hole, and retains the remainder of the water until it is next required.

A certain species of mallee (*Eucalyptus dumosa*) contains water in its lateral roots, which lie just below the surface of the ground. It requires a practised eye to detect the particular tree in a mallee scrub but the native is rarely mistaken in his selection of a likely water-bearing mallee. When he has chosen the special tree, he digs round it with wanna or tomahawk a few feet from the trunk, in order to find the water roots. When he

has found the root he is in search of, he breaks the end next to the trunk, and lifts the root, which sometimes may run to a length of twenty or thirty feet; the bark is then peeled off, and the roots broken in pieces about five or six inches long. If they are thick roots, they are generally split again after having been broken. They are then either sucked, or stood, ends up, in a bark or wooden vessel, when about a pint or more of good water runs from them. I have obtained a little over half a pint from one of these mallee roots. The best roots are those measuring about an inch and a half in diameter and about thirty feet in length. I have seen roots over three inches in diameter, but these are always split before being sucked or drained. When a portion of the root is shaken the water comes out like very fine rain.

Almost all kinds of eucalyptus store a certain amount of water, and also several species of mulga, acacia and other trees, the water being contained either in their roots or stored in the gnarls and excrescences on their trunks.

Several travellers, in their journey through the inland districts, have observed stones placed in trees, at some distance from the ground, and have frequently expressed wonder as to why they had been placed there. In the inland districts I found that the stones were put there to show that water was in the vicinity, either in a small rockhole, or soak, not far from the tree where the stone was fixed, or in the tree itself.

The dew falls very heavily in many parts of the North West and this is frequently collected in the early mornigg by the natives. They will sometimes absorb the dew in a bunch of fine grass, and suck the fluid from it, repeating the process until their thirst is saitsfied; or a small bark or other vessel may be held underneath each branch of the tree, and the dew brushed lightly into it with a little grass. In this way nearly a quart of water may be collected in a short time. One has to proceed very carefully in collecting the dew, as an inadvertent grasp of a brach is liable to spill every drop resting on the tree. I have obtained a pint of water off one of these trees.

Only temporary vessels are used in the South West. Kool-yung and yorla, two species of bark, are made into vessels for drinking. They are tied up at each end with some fibrous string, used at the camping place, and left when moving camp. Shells, small boles, and wooden scoops are also used as water vessels. Wardaruk was the name given by the Swan district people to a tube of bamboo grass, which they used when drinking "mungaitch water" (water in which the banksia flowers were soaked.)

The white gum invariably holds water, the presence of the fluid being proclaimed either by ants, or by a rusty kind of track which has formed on the trunk, through the oozing of the water from some small orifice. The tree will be tapped where the discoloration begins, and a small jet of water gushes out. The hole is always plugged up after the natives have quenched their thirst, thus reserving a supply for future use.

Rockholes are found in granite hills, either at the foot of hills or on a slope, or even on top of some of the hills. To prevent animals, birds, etc., from getting at these holes, the natives sometimes fill them with sticks or branches, which not infrequently spoil the water, or give it a fetid taste, and smell.

Many species of paperbark trees contain water, which the Southern natives generally obtained through a tube after they had tapped the tree and found the water "vein". No water appears to have been obtained from roots in the Southwestern district.

Native wells of varying depth have been found all over the State. Some of these have been dug with a sort of native shovel called by the Gingin natives, walbai. In others the wanna or woman's digging stick first loosened the ground, and the earth was then thrown out either with the hands, or, if near the sea-coast, with a shell. These sea shells are often carried far inland by wandering tribes, or by tribes travelling to some distant place to hold initiation ceremonies, the shells being bartered from tribe to tribe. Warburton found a seashell used as a water vessel at a spot three days' journey inland from the Oakover River. Wooden "shovels" have been found near the De Grey River, similar to those used in the Gingin and Swan districts. These shovels have no handles.

Cornally, informant
Gascoyne district

WELL MAKING

Notebook 3b, P. 67

They dig the sand out with a thaaga (wooden vessel) or meega, as far down as onecanago, then steps are cut in the sides and the natives hand the vessel up to each other, as they stand along the sides. If the sand is too loose to admit of steps being cut, they place a big pole down the well and climb up and down by this. The deepest wells have not been more than 16 feet. Cornally states that the natives very rarely made a mistake in choosing a well site, and whenever a native had told him that water would be found by digging in such and such a spot, he invariably found their statements correct.

(The rubbing method (perpendicular) of making fire is used by the Gascoyne, the sawing by the Pilbara natives.)

of these holes contain hundreds of gallons of water, the quantity varying with the size of the hole.

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The wells are never very deep and are generally of irregular shape, although I have come upon some native wells which were circular in shape at the top. They may be dug near the base of a hill, where a good soakage may be expected, or, as in the Broome district, they are merely opened up springs, which were forcing their way through some porous substance to the surface of the ground. Other soaks will be sunk in some likely place near, or in, a watercourse.

The wells are generally made narrower at the top, to prevent too much evaporation, and sand may be placed in the soaks and some of the rockholes to preserve the water both from the heat and also from animals. What are called "ngamma holes" are circular hollows in a sandstone formation found principally in the Eucla division, and east of the Coolgardie goldfields district. Every ngamma hole in his district is known to the native. Many of these holes contain hundreds of gallons of water, the quantity varying with the size of the hole.

In the Mindoola district, Weld Range, I found several of these holes, called by the natives "meela" in a sort of conglomerate. One of the holes was sixteen feet in depth, the shallowest being four or five feet deep. All of them contained water at the time

of my visit (October). The meela were not more than three feet in diameter at the top, but they appeared to widen out somewhat towards the bottom. They were probably formed through the action of water loosening the cement and freeing the pebbles and larger stones embedded in it. These holes retained the water for a considerable time and were the "stand-by" of the Mindoola natives in summer.

Clay pans are numerous all over the State, but in some districts they become brackish or quite salt shortly after the rainy season is over and are then of little use to the natives. Most of the trees, however, which grow in the vicinity of these clay pans, hold water, and if the native finds the waters of the clay pan too brackish for his taste he transfers his attention to some species of casuarina or acacia growing in the vicinity and soon satisfies his thirst.

The natives will often cover up some small but deep rock holes in order to preserve the water from evaporation or to prevent it from being used by the birds or animals of the district. In the legend of the Crow and Eaglehawk, the latter bird covers up the fresh water, leaving the crows to drink the brackish water (of the clay pans). The fact that certain rock soakages are covered at the present day in some districts, gives some confirmation to the legend.

In the Yuin district the natives obtain water from the lateral roots of the peeawa tree (probably a species of mallee) which is always found in the watercourses. The tree bears a long white flower. The natives dig up the root and trace it towards the tree; they then lift it out of the ground and cutting or breaking it into lengths, drain it into a thagga (wooden vessel).

Many natives will not drink from a running stream, but make a soak beside it, from which they drink.

When drinking water from a clay pan, they first gather some fine grass or brushwood, and placing these on top of the water, they drink through the improvised filter. Sometimes they make a scoop of their hands and throw the water into their mouths. This practice is common also to some South African natives, and may also be observed amongst the Scotch and Irish peasantry at the present day.

The water totem people of the South and Southwest sing for an increase of their totem. In the Broome district, wola jalnga (water totem) people dream its increase. A wola jalnga womba dreams he goes to his ngargalula booroo where the water is and taking a mouthful of water, he spits it out all around him and soon the ngoombal (clouds) come and rain soon follows. Water conserved in tree boles is called balleejoonoo in the Broome district.

FOOD RESTRICTIONS

Many of their food restrictions are universal throughout the State. In every district where bandicoots are found, young girls are forbidden to eat these until they have been handed over to their husbands, which ensures that a girl can never eat bandicoot during all her girlhood, in her own district. Boys are also forbidden to eat bandicoot, but I do not find the prohibition as regards the boys general in this respect. In the Vasse district, turtle and bandicoot were woolga (forbidden) to young people of both sexes. It appears that in some Southwestern districts, Bunbury, Augusta, etc., the girls are told that their children will be light coloured and not "clean and bright coloured" like true natives, if they eat kweenda (bandicoot), and so, in order that their children may be "true black", they refrain from the forbidden food. In other districts the young girls are told they will become "boyar" (lustful, or wanton) if they break this particular law, and in other districts again, some other calamity befalls them.

In the Swan district the eaglehawk, crow and white cockatoo were eaten, the eaglehawk being however forbidden to young people.

A pregnant woman will not eat kweenda until after the birth of her child. Her husband may bring her a kweenda to eat some time after her baby is born, and she can then eat of the hitherto forbidden food. There were no physical punishments for breaches of this law, but if a young boy or a young girl showed wanton attributes, it was known at once that they had eaten forbidden food.

Restrictions connected with the game caught by men on a visit to their wife's people have already been dealt with. Half the game caught must always go to the kalleepgur (home people).

During the singing for the increase of fish totems, the totemist will not eat his totem fish until all the visitors have been satisfied, but at all other times he eats it without

restriction. The various foods forbidden to boys and girls were very seldom their personal totems, therefore the restriction of these foods had no totemic significance.

In the Williams district, if girls eat bandicoot, they become excessively prolific and if boys eat emu they cannot run.

Nyammareet was a Minninhp native who had never tasted emu and could not be induced to eat it. It was not his totem. His personal totem was the yakkan (turtle) which he ate whenever he caught it. There were many natives who would not touch certain bush foods, because they had not eaten them when young, not because they were woolga (forbidden).

In the York district boys were not allowed to eat female bandicoot, and girls were forbidden to eat male bandicoot, and neither boys nor girls were allowed to eat the tail of the warra or "brush" kangaroo. Pregnant women did not eat emu. When a woman's "uncle", father or brother died, she refrained from eating male animals for some time, but female animals were eaten. If some female relative died, an "aunt" or mother, female animals were not eaten for a period.

In the Swan district, girls were also forbidden to eat big iguana. If they violated this law their children were born bandy legged. Before the boys had been initiated they could not eat bandicoot, nor big male kangaroo rat. Should they eat of this forbidden food, when they went out kangaroo hunting, a rat or a bandicoot rushed out from the bush and startled the kangaroo and so lost them their game. This was the punishment for having eaten forbidden food.

If young men eat black eagle before they are fully initiated they will never have any beards.

Each tribe has its own special restrictions regarding certain foods. It is supposed by some that these food restrictions were instituted by the older men in order that a plentiful supply of their delicacies might be always ensured to them, as nearly all the forbidden foods are the favourite foods of the older people and also, that as in their declining years they would be unable to procure these foods for themselves, the law must compel the young people who catch them to bring them to their older relatives.

It has also been suggested that the food restrictions were due to a desire to preserve certain animals, which tended, through their being a native delicacy, to become extinct.

There is some little foundation for the first supposition, in the fact that most, if not all of the forbidden foods, are those that in the eyes of the natives are the greatest delicacies, such as the young bandicoot, young emu, opossum, nganneep (young kangaroo), ngow (native pheasant), young eaglehawk, certain species of fungus, almost resembling breadfruit, fish, etc. etc. All these foods are special dainties to the native palate, and the older men, being incapacitated through age from obtaining any of these foods for themselves, it is quite feasible to imagine that they would develop some method of securing these delectable foods for their own consumption.

The second suggestion postulates too great forethought by a people in the very retarded state of mental development in which our aborigines are, which makes it improbable for them to formulate laws which would be so nearly akin to the English Game laws.

The natives can give no other reason for these laws than that "their fathers did so and therefore they must follow them." Their firm belief in the doctrines and restrictions handed down to them by their elders and sorcerers, is sufficient to render the young people obedient to laws which deprive them, during the best part of their lives, of all the most succulent native foods.

In the Southwest, restrictive totemism was confined to the death of a person, whose totem would not be eaten for a season.

Red kangaroo, long tailed iguana, oysters, crayfish and shellfish were among the "jajjee" (forbidden) foods of the Ashburton and N.W. Cape natives. Young men could not eat eaglehawk until they had got beards. Eyre enumerates a long list of forbidden foods which both males and females were disallowed, amongst them being the red kangaroo, which even "married men from thirty-five to forty years of age" could not eat.

In some parts of the South, if a young man or woman partakes of an emu, before they are allowed to partake of such food, it is believed that an eruption of violent boils, sores, will break out all over their bodies and that they will very soon die.

In the Ashburton district unmarried boys and girls cannot eat green turtles or their eggs, only hawksbill and loggerhead turtles and their eggs.

In the Roeburne district, the youths of both sexes were forbidden to eat emu, turkey, young opossum, bandicoot and other animals. They were also restricted from eating honey, and other succulent foods, the embargo being removed only when the girls had been handed over to their husbands and the boys fully initiated.

In the Broome district, if young men eat the milgin-ngooroo (white eaglehawk), the warragunna (eaglehawk), boorool (mopoke) beeree nyangool (like salmon), winninee (emu), waicoloo (like salmon), jooka (mudfish), jeerrwal (species of fish), etc. etc. they will become grey and also great rain will come.

Women cannot eat meat food of any kind at weerrganjoo time, nor can the young men taking active part in the weerrganjoo eat mai (vegetable food) at that time. Each must abstain from the food gathered by the other.

Jammunungur are neam (abstinent) from walga-walga (like mullet), jirowel (like skipjack), beeree nyangool (like salmon), ngaiarra (like schnapper), lammardee (another kind of schnapper), yowalillee (like skipjack) and other fish; mungar (iguana), winarra (black iguana), bilera murdee (stump-tailed iguana), karringboo or deerrga (bandicoot), langoor (opossum), parrjanning (kangaroo), wallaja (honey), balleet (carpet snake), woolgardain (whipsnake). During a certain period jammunungur eat and drink nothing but blood, but after this period is passed, the above restrictions are in force, some only being removed at the next stage of their initiation (larrabarree jammunungur).

Other fish foods forbidden to the young people but eaten by the married men and elders were :- Certain species of shark, won-gooman (resembling a shark), ngabalbigga (like a cobbler), karrajin (green rock fish), barrumbarra (big rock fish), mulleejul (another big rockfish), weerdee-nganga (big headed fish), malalla (big headed fish), koormurnin and joo-gurdoordoo. (If the last two are eaten by young men, great rain will fall.)

Old men and women can eat anything and everything. That superstition has a great hold upon the native is evidenced by the fact of the young men abstaining from all these foods which they themselves have in so many cases procured, and bringing them to the old and incompetent men and women of their tribe, while they have to be content with a coarser and less palatable diet.

Whatever the catch of the day's hunt, the young man has to share it with his elders. If he is married, he must reserve the best part for his parents-in-law. The vegetable foods that his wives have procured must also be divided amongst his relations-in-law. His father-in-law can come over to his camp and take whatever portion he desires, or the young man's wife or wives will take the portion over to their fathers or mothers.

These are some of the general laws relating to food restriction.