

Tropical Topics

An interpretive newsletter for the tourism industry



Caring for country

No. 23 October 1994

Notes from the Editor

'Country' is the term given by Aboriginal or Torres Strait Islander people to the clan or tribal area from which they originate. It is not only the home from which they harvest their food and other resources but it also sustains their spirituality. Non-Aboriginal people have only relatively recently begun to appreciate the strength of the bond between indigenous people and their country; the importance of recognising and re-establishing that bond is a fundamental principle behind recent legislation such as the Native Title Act. It has also led to the increasing participation by indigenous people in the management of protected areas such as national parks — 'caring for country'.

Cultural tourism is a growing industry in Australia. Visual arts and crafts, performing arts, cultural centres and guided tours all involve increasing numbers of indigenous Australians as producers, owners, managers and employees. It is appropriate for Aboriginal rangers and guides to not only participate in caring for their country but also help explain it to outsiders. This is not only a good source of employment in remote areas, leading to economic self-sufficiency, but helps to promote interracial understanding — an important step towards reconciliation.

The painting (right) was created with acrylic and natural dyes on fabric. Djangan is a member of the Bama Ngappi Ngappi Corporation specialising in art and artifacts in this style. They can be contacted by phone or fax on (07) 4056 9145.

Past to present, a culture lives on

When Captain Cook sailed up the coast in 1770, the rainforests of north Queensland were home to particularly dense populations of Aboriginal people — a density directly related to the abundance of available food.

Clan or tribal areas were relatively small. Movements of people within them were never random but linked to an intimate knowledge of what food was available where, when and in what quantities. When food was scarce small groups scattered and when abundant they gathered in large groups.

Just as the environment in which they lived was diverse, so were the people who lived in it; the rainforest Aboriginal culture was by no means a homogenous one. The numerous languages used differed as much as, for example, French and German and served to identify members of different groups. Social rules varied as did plant uses and implements.

Aboriginal culture was not an unchanging one, frozen for 40,000 years. Even before the arrival of Europeans, ideas were adopted from outside; for example, the outrigger canoe introduced from Melanesia. European materials were quickly utilised — telegraph wire cut down for spear heads — but the arrival of Europeans, of course, had more profound effects. The removal of people from their tribal areas and the breaking up of families was devastating for Aboriginal culture.

Few Aboriginal people today move according to food sources or build shelters in the forest, but gather their main supplies in the same supermarkets as Australians of more recent origin. However, the old knowledge is far from lost. The concept of 'caring for country' persists; significant sites are looked

after and stories and skills passed on. Hunting, fishing and the gathering and processing of wild food form vital links with the past still exercised by a large number of indigenous people. But adaptation is a feature of all human societies. Metal graters are used on black beans which formerly would have been ground between two stones. Introduced feral animals such as pigs are hunted. Canvas and acrylic paints are used instead of bark and red ochre. Traditional dancing is being revived — often with a microphone placed by the didgeridoo so a wider audience can be reached.

Aboriginal culture is often described in the past tense as if it is dead. However, while 200 years of European influence has undoubtedly changed it radically, it has proved to have tremendous staying power. The link with the past is very strong and should be celebrated.



Yarrabah artist, Djangan, combines traditional and contemporary designs

W E T  T R O P I C S
W O R L D H E R I T A G E A R E A

Community Rangers – caring for their country

In 1987 it was recognised that there was a need in Aboriginal and Torres Strait Island communities for land, sea and resource management training. As a result, the Cairns College of TAFE was approached by the Aboriginal Co-ordinating Council to establish a suite of courses to address their needs.



The first intake was in 1989, with students enrolling in CNJ18 Certificate in Natural and Cultural Management. This course can be completed in one year of part-time study.

CNJ19 (Advanced Certificate) can be completed in the second year, and CNJ20 (Associate Diploma) normally takes a further two years.

Practical skills taught include such things as map reading, site surveys, animal and plant field skills, visitor facility management, first aid and office management. An ecological component includes vegetation management and feral animal control as well as traditional knowledge.

Marine studies include fisheries management while tourism and interpretation is aimed at project related tourism.

Archaeological and anthropological knowledge and techniques are gained in class as well as on sites in the field.

Students from 17 communities in Cape York participated in the initial program. The students were employed as Community Rangers by Community Councils. These councils and elder groups supported rangers with Community Development Employment Program positions and allocated roles and responsibilities. The Community Services Act provided a legislative framework for rangers as authorised officers of the Act.



These roles vary from place to place but can include recording and managing sites of significance, burial places, story sites, recording cultural information from elders and helping teach young people about environment and culture.

Community Rangers can administer campsites and give guided tours that introduce their culture to tourists. They can control feral animals and weeds or soil erosion or work with fisheries management.

While much of the funding comes from the Community Development Employment Program some Rangers are employed through various bodies.

DoE has employed Community Rangers to carry out track and other work while GBRMPA has utilized the services of Rangers along the coast to carry out work such as water quality sampling and turtle and dugong monitoring.

Students now come from communities all over Queensland.

The program originally employed trainer/co-ordinators who lived on communities to deliver training to clusters of students. Reduced levels of funding, constraining work place agreements, and high costs have resulted in the adoption of flexible training practices to meet the student demand.

Part-time students currently attend residentials in various locations run by teachers. Students learn theory, then



return home to complete practical assignments. Different support mechanisms are being introduced, including the Internet and video conferencing.

The ideal place to train people doing the suite of courses is at their own community. Here, Council and community co-operation is essential.

To meet the changing demands of the communities on the mainland and within the Torres Strait, new courses are developed as required and students find that they have a much wider choice of electives which more closely mirror the needs of their areas. The courses are nationally credited, so that the qualifications gained will be recognised anywhere in Australia.

People requiring information or wishing to enrol should contact:

The Program Manager
Indigenous Environment Program
Tropical North Queensland Institute of TAFE, PMB 1, Cairns 4870
Ph: (07)40422588
Fax: (07)40422607

Entry is restricted to Indigenous Australians.

Further details from the Aboriginal and Torres Strait Islander Curriculum Consortium, Tropical North Queensland Institute of TAFE.
Ph: (07)40422476,
Fax: (07)40422604



Contributed by Norman Atkinson, Community Ranger Training Program, in 1997

Land Rights — a brief guide to the legislation

The **Aboriginal Land Act** 1991, a Queensland State act, provides for the granting of land as Aboriginal land. It provides several mechanisms for Aboriginal people to claim land on the grounds of traditional affiliation, historical association or economic or cultural viability. These claims are restricted to transferrable land which has been gazetted by government as available for claim; so far 12 national parks in Cape York and two in other parts of Queensland have been gazetted. Once successfully claimed, these parks must be leased back to the government and jointly managed as national parks.

The **Native Title Act** is a Commonwealth Act and is complemented by Queensland legislation. It followed the High Court judgement in the Mabo case which found that Native Title was extant on Murray Island. Eddie Mabo was a member of the Meriam people of Murray Island in Torres Strait. For 10 years he and three other Murray Islanders claimed in the courts that Native Title had not been extinguished when the British assumed sovereignty. In June 1992 the High Court upheld that Native Title had existed and that the doctrine of *terra nullius* (meaning 'land belonging to no one') was not valid. The Meriam people were, therefore, entitled to 'possession, occupation, use and enjoyment of Murray Island'.

The Native Title Act, which came into effect on January 1st 1994, was the legislative follow-up to the Mabo judgement. Apart from its practical effects it was of tremendous symbolic importance, confirming the status of Aboriginal and Torres Strait Islander people's Native Title. Where the Aboriginal Land Act was designed to give back land to indigenous people as an act of goodwill, the Native Title Act recognised their pre-existing rights. It also meant that any unalienated land, not just that specifically gazetted by the government, could be claimed. However, the Native Title Act validates all pre-existing land grants by governments. In many cases, such as freehold land, Native Title is considered to have been 'extinguished'.

Native Title and the High Court Wik decision

When the Native Title Act 1993 was being developed, there was a generally accepted legal opinion that the valid granting of a pastoral lease would have extinguished Native Title. However, although this view was generally accepted, there was also the possibility that this view could be successfully challenged in the courts. Consequently the Native Title Act 1993 was drafted in a way which allowed for the possibility that pastoral leases do not

necessarily extinguish Native Title.

In December 1996 the High Court found that the valid granting of a pastoral lease does not necessarily extinguish Native Title. However, where the interests of pastoralists and the interests of the Native Title holders are in conflict, the rights and interests of pastoralists prevail.

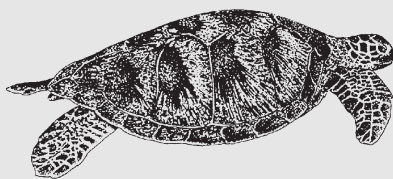
The High Court decision made clear that it was not the intention of the Colonial Governments, or indeed the subsequent State Governments, to make Aboriginal people trespassers on pastoral leases after the lease was granted. Instead, it was always the intention of both the instrument of the lease, and the legislative head of power (the various Land Acts) that the vast range lands across northern Australia would have a different form of tenure to land found in more heavily settled parts of the nation.

The **Nature Conservation Act** provides, among other things, for a system to manage national parks including those

successfully claimed under the Aboriginal Land Act; Aboriginal people only get *title* when a lease and management plan for that park have been accepted by the Queensland Government. The Nature Conservation Act also provides for the recognition of Aboriginal traditional practices, such as traditional use of flora and fauna, where permitted by an Aboriginal traditional authority.

Originally the Mabo claim included the surrounding reefs and waters because in Aboriginal and Torres Strait Islander societies there is no tenure distinction between land and sea. The boundaries of traditional clan countries extend into and include areas of sea which may contain sites of significance as well as traditional resources. However, the European-based Australian attitude is that, while land can be privately owned, there is common access to the sea. Several native title claims, which include areas of sea, are currently being mediated by the National Native Title Tribunal.

Rights and protection

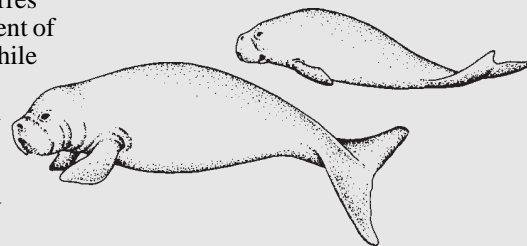


There is much confusion over the issues of indigenous rights and the protection of the environment. The issue, however, can be viewed as one of management. When the future of a protected species is in question the reasons for its decline may be varied and complex. The solution is for all parties concerned, including the appropriate indigenous people, to develop management plans which achieve the recovery of a species while also recognising the traditional rights of Aboriginal people. We have perhaps been slow to recognise the advantages of combining traditional knowledge with contemporary management — but this is changing.

For example there has been growing involvement of Aboriginal and Torres Strait Islander people in management of turtle and dugong populations. While wishing to continue to hunt these animals, they share a concern with conservationists for the species' survival. With indigenous people involved in research projects, data

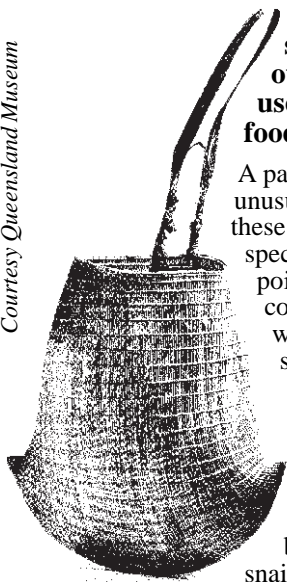
gathering, allocation of traditional hunting permits and development of management plans, decisions on sustainable use can be made in partnership.

Fishing, for most Australians, is a perfectly acceptable activity seen not only as a means of obtaining food but as a form of relaxation, linking people with the natural surroundings, and as a sport, a tradition, a communal activity, a means of expressing basic instincts... the list goes on. For indigenous people the hunting of dugongs and turtles also has an important social function and traditional rules govern how the food is divided and eaten by kin groups. Just as Christmas is a time for turkey so these marine animals are important food for indigenous communities.



Using the plants

Courtesy Queensland Museum



This information about rainforest Aboriginal plant use was gleaned from a number of sources in the Wet Tropics and would not necessarily be applicable to all parts. As pointed out earlier, Aboriginal societies varied considerably within the area and so too did their uses of plants. For example, black bean, while relished in the Tully area, was looked on as a food of last resort around the Bloomfield River.

A particular feature of Aboriginal rainforest food use is the unusually large number of **toxic plants** eaten as staples. Some of these only need to be heated or beaten to become edible but about 15 species also need to be washed with running water to remove the poisons. Two of the most important of these are the black bean (a common rainforest tree) and the cycad (found more in open woodland). The poisons in both these foods are extremely strong, causing vomiting and/or diarrhoea and, in the case of the cycad, containing toxins which can cause cancer.

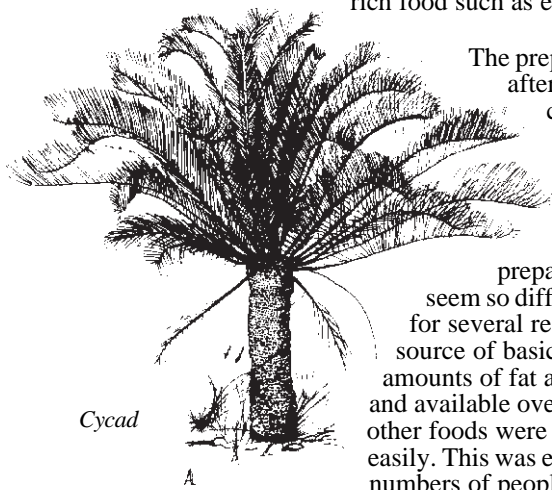
Black bean trees crop in winter but nuts can be gathered at almost any time of year. Traditionally the seeds were steamed, with wet candlenut leaves, in a ground oven for a day.

Nowadays the beans are generally boiled over a large fire. The beans, now black, are sliced finely — traditionally with a sharp snail shell or, these days, with a knife or metal grater. The next step

is to leach away the toxins with running water. A basket full of the black bean fragments is placed in a river in gently flowing water, secured so that turtles or eels cannot tip it over and, nowadays, placed where pigs will not eat the food. After three to five days, when it is suitably soft, the black bean is ready to be eaten. Although bland it can be eaten with rich food such as eels.



Black bean



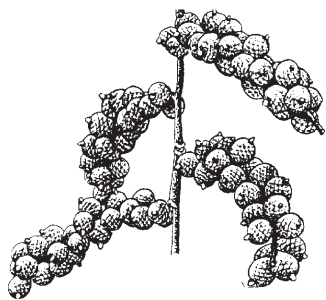
Cycad

A

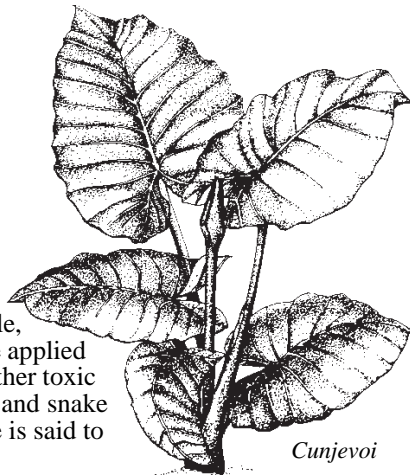
The preparation of cycads is similar. The fruits, after the roasting or boiling stage, are cracked open and the kernels removed. It is these which are ground and leached.

Why bother with this long process? Well, if we compare it to the preparation of bread from wheat it doesn't seem so difficult. Toxic foods were worth the effort for several reasons. They tended to be a good source of basic carbohydrates and contain moderate amounts of fat and protein. They were often abundant and available over extended periods, perhaps when other foods were scarce, and they could be stored easily. This was especially important when large numbers of people gathered together.

Of course many foods are not poisonous and can be eaten without preparation. Numerous fruits such as *Syzygium* and lawyer cane berries are eaten raw. The soft heart of most palms is a tasty type of 'cabbage' while the young fronds of tree ferns can be eaten raw or cooked. Roots, shoots, nuts, seeds, leaves, stems — the forest has abundant food for those who know what can be eaten!



Lawyer cane berries

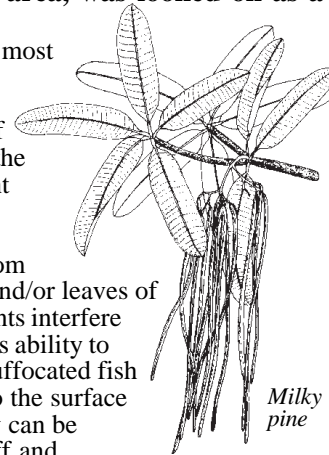


Cunjevoi

Numerous plants have **medicinal uses**. For example, sap from heated leaves of the cordyline lily can be applied to cuts while the large leaves of the cunjevoi (another toxic food plant) can be pounded and applied to insect and snake bites and to stingray stings. The sap of milky pine is said to sooth the pain of stings from the stinging tree.

One of the most intriguing traditional methods of **fishing** is the use of plant poisons. Chemicals released from bark, sap and/or leaves of certain plants interfere with a fish's ability to breathe. Suffocated fish then rise to the surface where they can be scooped off and eaten. Over thirty different plants can be

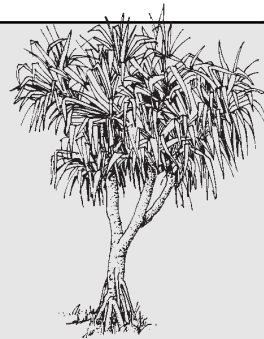
used for this, including cocky apple, milky pine, beach almond and certain vines — matchbox bean and *Derris* species.



Milky pine

BEWARE

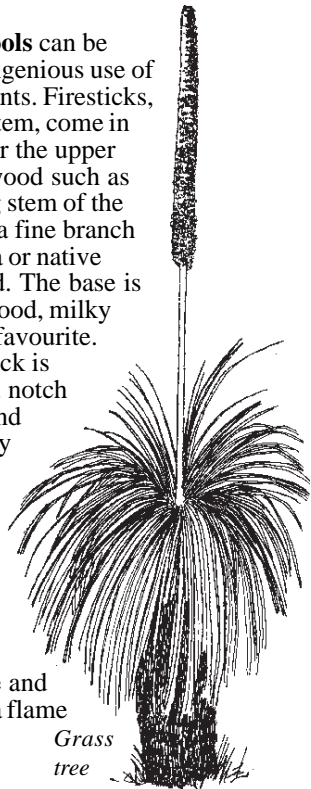
There are many poisonous plants in the rainforest. It is extremely foolish to sample wild food unless you are completely certain of what you are eating. Even scientists with an extensive knowledge of bush tucker have ended up in hospital. It is also extremely irresponsible to invite tourists to sample bush 'foods' — in at least one case a whole party has fallen very ill as a result of this. To avoid mistakes err on the side of caution — look but don't taste.



Pandanus plants provide leaves used extensively for thatching, bags, baskets, mats and so on. The 'cabbage heart' can be eaten as can the fruit, although it is called 'old persons' food' because the picking away of fibres requires so much patience. A white liquid from crushed stem and roots is applied to wounds or used as a mouthwash for sore throats and toothache.

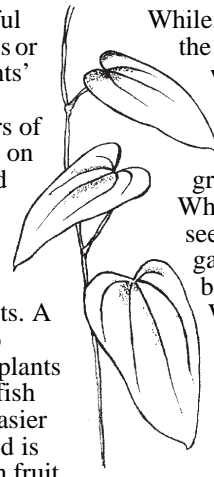
In order to understand the plants of a particular area it is best to be guided by a local Aboriginal inhabitant. Not only is this important for correct plant identification (especially if bush tucker is to be sampled) but avoids the potential problem of infringing 'cultural and intellectual copyright'. Access to knowledge is strictly controlled within Aboriginal societies. A local guide will know what can, and what cannot, be communicated to outsiders. As interest in indigenous cultures grows, the inclusion of a local guide on tours is often welcomed by tourists who appreciate the chance for genuine interaction.

A range of **tools** can be made from ingenious use of rainforest plants. Firesticks, an essential item, come in two parts. For the upper stick a soft wood such as the flowering stem of the grass tree or a fine branch of macaranga or native guava is used. The base is of less soft wood, milky pine being a favourite. The upper stick is slotted into a notch in the base and twirled rapidly between the palms of the hand. The resulting spark is caught on a soft material such as coconut fibre and fanned until a flame appears.



Grass tree

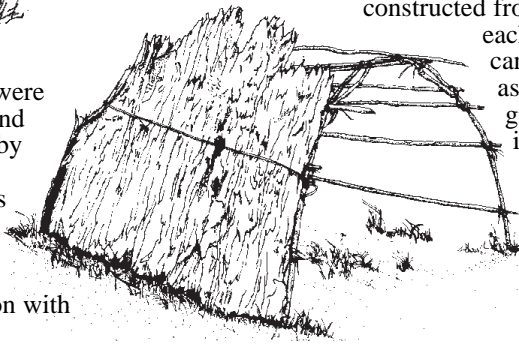
Plants and animals can provide useful **seasonal cues**. Particular animal calls or developments among 'calendar plants' indicate the time to hunt or collect certain things. When the tail feathers of the willy wagtail turn white, cycads, on coastal hills, are ripe so groups used to move down from the Tablelands on this cue. When the black locust first sang they knew it was time to go back to the Tablelands to harvest black pine nuts. A rush grass flowers when it is time to collect scrub fowl eggs while other plants signal the best time for building up fish traps. This is very logical; fish are easier to catch in the dry season when food is scarce than later on in the year when fruit falling into the rivers provides them with abundant alternatives.



Native yam

While, traditionally, men did most of the hunting of larger animals like wallabies, possums and snakes, the women and children collected the '**reliable food**' such as plants, eggs, witchetty grubs, honey and smaller animals. While 'farming' is generally not seen as part of a hunting and gathering culture, some plants can be manipulated to produce food. When yams are gathered, part of the plant is replanted to grow again. Ring-barked candlenut trees encourage beetles to lay eggs — which hatch into tasty grubs.

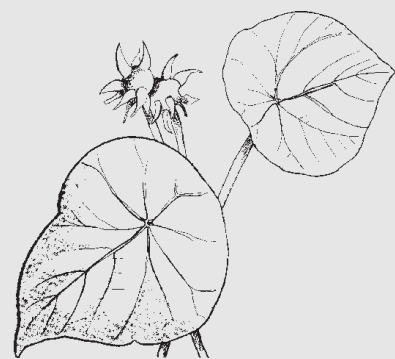
The buttresses of rainforest trees were often cut, in the past, for shields and boomerangs. Spears can be made by cutting the end of a straight long stick into four and inserting stones or sand for weight. The pointed wood or bone end can then be glued on with the softened sap of trees such as the euodia and tied on with macaranga fibre.



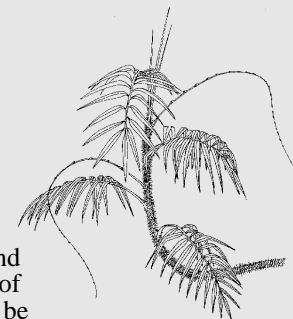
Shelters built in the past ranged from semi-permanent shelters designed to give protection through the wet season to basic shade or overnight shelters. They are still occasionally built. Materials depend on availability. The basic framework is usually constructed from saplings stuck in the ground and bent towards each other to be tied together with vines or lawyer cane in a series of arches. A variety of materials such as fan palm fronds, blade grass, lawyer cane and ginger leaves can be used for thatching. An important waterproof material is paperbark, sheets of which are cut from the trunks — traditionally with a stone axe, but now with metal tools. Starting from the bottom, sections of bark are built up, overlapping so rain will run off. Lawyer cane over the top prevents the bark from being blown off.



Gingers have long leaves which are commonly used to wrap fish and meat cooking in a ground oven, as thatching on shelters or to make spouts to direct water through baskets during the leaching of toxic foods. The rhizome tips and berries are edible, the latter making a good bait for bush turkeys.



Macaranga, a very common tree, has soft timber which provides light spears for fishing and fire sticks. The bark fibres can be used for string and the large leaves for plates and cups and for wrapping food, such as snake segments, when being cooked in the fire.



Lawyer cane has edible berries and sections of cane can be roasted and eaten. The sap is drunk to relieve colds and the young tips chewed and swallowed to stop dysentery while water can be obtained by cutting and draining the cane. The strong flexible cane itself is used to make baskets, traps, shelters, handles and for binding axe heads and so on. The infamous thorns can be made into fish hooks and the seeds can be used as beads.

Questions & Answers

Q What are the conditions governing commercial collection of the reef of sea cucumbers (beche-de-mer)?

A Commercial beche-de-mer collectors first require a licence from Queensland Department of Primary Industries to operate; currently 18 of these have been issued. Once this has been obtained, collectors apply to Marine Parks for a permit - which is usually issued automatically. Each regional office receives a copy of the application and the permit is issued from Head Office once all regional office assessments have been completed.

Collecting of beche-de-mer is permitted by Marine Parks throughout the whole of the GBRMP, in areas which are suitably zoned. For example, in the Cairns Section and Cairns Marine Park collecting can be undertaken in Habitat Protection Zone and General Use Zones. Collectors are restricted in the amount they may collect. There is a total wet weight limit of 500 tonnes for the east coast of Australia, each collector being limited to either five, ten or 20 tonnes wet weight. Operators may apply to QDPI to increase their quota.

Beche-de-mer are collected by hand using hookah equipment (surface air supply). The processing involves cleaning the animal, boiling, smoking, drying and packing for export. There are several processing factories operating in Cairns and exporting to

Asia, particularly China, where it is considered a food delicacy.

The key species targeted is the black teat fish (*Microthela nobilis*). It has a thick body wall which remains more or less intact during the boiling stage; other species, with thinner body walls, virtually fall apart. However, numbers of this species are dwindling and members of the industry agree there is a problem.

Management of the industry is currently being transferred to the Queensland Fish Management Authority. There is no management plan for the industry, but one is expected to be developed with the QFMA.

Further information: South Pacific Commission, Noumea, New Caledonia (1979). Beche-de-mer of the Tropical Pacific. A handbook for fishermen. Handbook No. 18. Acknowledgments to Jenni Le Cussan QDEH

Q Why don't shallow areas of mangrove creeks become colonised by mangroves?

A Presumably this refers to unvegetated mud creek banks above water level at low tide. When the tide comes in, however, these areas are probably covered with water too deep, for too long a period, for mangrove seedlings to be able to survive.



Black teat fish

Illustration courtesy Queensland Museum

Tourist talk

ENGLISH	GERMAN	JAPANESE	
Aborigine	Ureinwohner	genjumin	原住民
indigenous	einheimisch	dochaku no	土着の
traditional	traditionell	dentou teki na	伝統的な
culture	Kultur	bunka	文化
language	Sprache	gengo	言語
community	Gemeinschaft	shya kai	社会
toxic	giftig	doku no	毒の
cook	kochen	riyori suru	料理する
leach	auslaugen	kosu	漉す
medicine	Medizin	kusuri	薬

Facts and stats

on Aboriginal traditions

A century before European contact, north of the 16th parallel there were about 45 distinct Aboriginal languages with several hundred dialects. In the Wet Tropics there are two main language groups; Jirrbal south of Innisfail, Yidinji, including Kuku Yalanji and Djabugay, to the north. Each has different grammatical structures and many dialects.

An intriguing feature of Jirrbal is the use of four genders. For example, French words are divided into two genders, masculine and feminine. In Jirrbal there are masculine, feminine, neuter and edible plant genders; edible plants being identified by having the word *balam* in the name.

Black bean is known as *mirrayn* in the Jirrbal language, *junggurra* in Yidinji and *baway* in Kuku Yalanji.

Aboriginal populations in north Queensland were among the densest in Australia. An estimated two square kilometres were required to support one person compared with up to 100 square kilometres per person in the deserts of Western Australia.

Whereas 'Koori' is the term which Aboriginal people use when referring to themselves in New South Wales and Victoria, the term 'Murri' is commonly used in Queensland. 'Bama' is used particularly in the rainforest region west and north of Cairns.

Termites can be used to catch fish. The mounds are broken open and the termites thrown into the water as bait. Long narrow baskets made from lawyer cane are placed in rivers to catch eels. The eel swims in — but being unable to swim backwards cannot retreat from the basket's confines.

Stone fish traps are a feature on Hinchinbrook Island and other parts of the Queensland coast. Built by hand, semi-circular rock walls formed weirs into which broken oysters attracted fish at high tide. When the tide retreated the fish were stranded and easily collected.

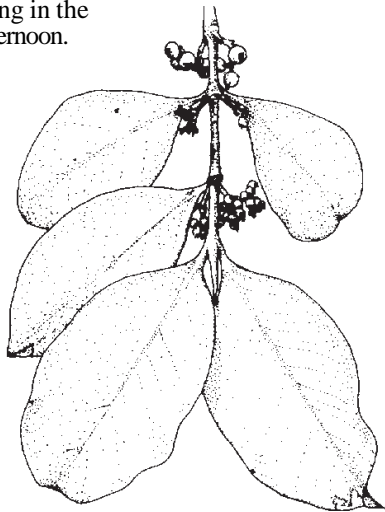
The oldest archaeological remains found in north-eastern Queensland rainforests have been dated at about 5000 years old but the rainforests were probably inhabited much earlier.

Nature notes

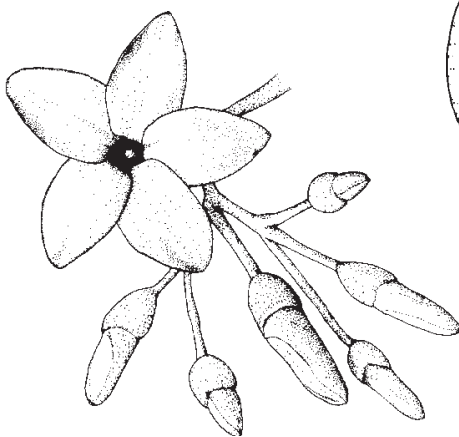
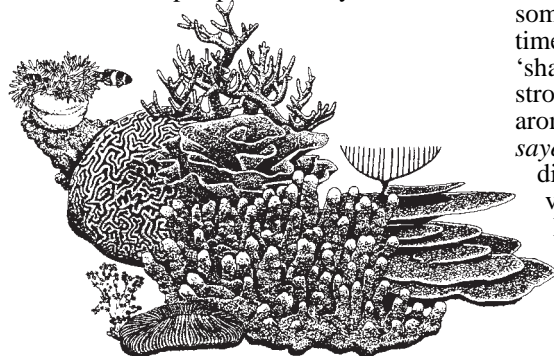
A diary of natural events creates a pleasing journal which grows richer with the passage of time. Watching for the recurrence of an event after noting it in a previous year, and trying to understand what could have caused changes in timing, is intriguing.

These notes are from the author's own notebook, or were offered by researchers and fellow naturalists. Readers will, inevitably, note variations between their observations and those appearing here. If you do not keep a nature diary perhaps this will inspire you to begin one.

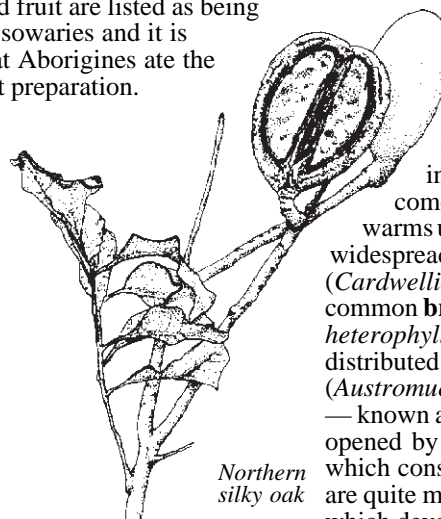
Palatable orange fruit of a tree sometimes called **corky bark** (below) will be ripening in October, to the satisfaction of many frugivorous birds. This tree (*Carallia brachiata*) is a member of the Rhizophoraceae family of mangroves but one which adapted to rainforest habitats and even makes a good street or garden specimen. The glossy leaves of corky bark are food for the caterpillar of the attractive four o'clock moth, so named because it is often seen on the wing in the afternoon.



Corals will be preparing to spawn as water temperatures rise. This usually happens three full days after the full moon in early summer, the event continuing over the following three nights. Predicted dates for reefs around Magnetic Island (where the water warms faster) are 22nd-23rd October while the rest of the reef is expected (hypothetically) to perform on the 21st-22nd November. It is important to bear in mind that many factors, other than the moon, influence the exact timing. It is notoriously difficult to pin-point exactly.

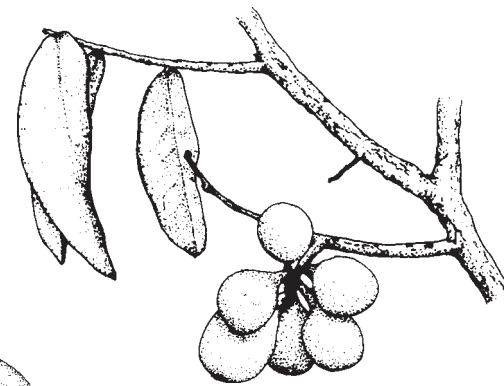


Brown gardenia (above) is a common tree in the coffee and gardenia family (Rubiaceae) which will probably gain attention as its sweet scented white blossom is often prolific in October. This small tree (*Randia fitzalanii*) has distinctive, spiky green stipules sheathing each set of leaf buds. The many-seeded fruit are listed as being eaten by cassowaries and it is recorded that Aborigines ate the pulp without preparation.



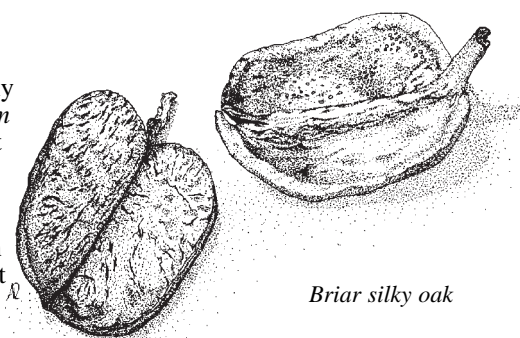
Northern silky oak

Honeyeaters will be busy among the flowers of **pink satinash** which sometimes blossoms heavily at this time of year. The creamy white 'shaving brush' flowers are quite strongly scented, leading to pleasantly aromatic fruit. Pink satinash (*Syzygium sayeri*) has a very distinctive leaf as it displays large oil glands easily visible with the naked eye. Buttresses are prominent in this species, each plank being whitish in colour and looking as though it was built up in layers.



Xylopiacacoe (above), an Australian member of the custard apple family, will be carrying globular brownish fruit about the size of a bantam egg. When ripe these follicles usually split open, revealing a brilliant orange-red interior set with a few black seeds. The seeds are not flattened for wind dispersal but may be carried by birds attracted to the red and black display.

Fruit of some 'oak' species in the Proteaceae family will come to maturity as the weather warms up. Examples are the widespread **northern silky oak** (*Cardwellia sublimis*) moderately common **briar silky oak** (*Musgravea heterophylla*) and quite narrowly distributed **Mueller's silky oak** (*Austromuelleria trinervia*). The fruits — known as follicles — are often opened by sulphur-crested cockatoos, which consume the seeds before they are quite mature. However, those which develop to maturity split open to expose flattened seeds for wind dispersal.



Briar silky oak

Bookshelf

Aboriginal Life in the Rainforest

The Aboriginal people of Jumbun and Helen Pedley
Dept of Education, Queensland
(1992)

This lovely book, illustrated with abundant photographs, looks at plant and animal use by the Jirrbal people of Jumbun at Murray Upper, north of Cardwell. An introduction is followed by chapters on the making of baskets, the processing of black bean and cycad food, the making of a traditional shelter and smoking an eel.

Cairns Botanical Gardens

There is plenty of reading matter on the subject of Aboriginal traditional plant use on the fifty-plus signs in the Aboriginal Garden section of the Gardens. There is also a good display in the Great Barrier Reef Aquarium in Townsville.

Aborigines and Toxic North-eastern Queensland Rainforest Plants

Nicky Horsfall
Chapter in: **Toxic Plants and Animals, A Guide for Australia**
Queensland Museum (1987)

A very interesting look at this subject.

Invasion and Resistance: Aboriginal-European Relations on the North Queensland Frontier 1861-1897

Noel Loos
Australian National University Press
(c1982)

Understanding Country: the importance of land and sea in Aboriginal and Torres Strait Islander societies (Dermot Smyth) — Key Issue Paper No. 1

Valuing Cultures — Key Issue Paper No. 3
Council for Aboriginal Reconciliation
Commonwealth of Australia (1994)

These are two of a series of Key Issue Papers which are very well worth reading for a deeper understanding of these Aboriginal issues.

Information Kit on Native Title

Aboriginal and Torres Strait Islander
Commission (1994)

This is one of many informative and useful sources of information available from ATSIC. There are regional offices in Brisbane, Rockhampton, Townsville and Cairns.

A Plain English Guide to the Wik Case

Aboriginal and Torres Strait Islander
Commission (1997)

The Little Red, Yellow and Black (and Green and Blue and White) Book

A Short Guide to Indigenous Australia
Australian Institute for Aboriginal and
Torres Strait Islander Studies (1994) on
behalf of the Council for Aboriginal
Reconciliation.

Film:

Mabo: Life of an Island Man

This moving film looks at the man behind the famous Mabo case and his fight to establish ownership to his traditional land in Murray (Mer) Island.



This newsletter was produced by the Queensland Department of Environment and Heritage (now The Environmental Protection Agency) with funding from the Wet Tropics Management Authority.

Opinions expressed in *Tropical Topics* are not necessarily those of the Department of Environment and Heritage (EPA).

While all efforts have been made to verify facts, the Department of Environment and Heritage (EPA) takes no responsibility for the accuracy of information supplied in *Tropical Topics*.

For further information contact...

Stella Martin
The Editor
Tropical Topics
Environmental Protection Agency
PO Box 2066
CAIRNS QLD 4870

Ph: (07) 4046 6674
Fax: (07) 4046 6751
e-mail: Stella.Martin@epa.qld.gov.au

Wet Tropics Management Agency
(For general information on the Wet Tropics World Heritage Area only.)
PO Box 2050
CAIRNS QLD 4870
Ph: (07) 4052 0555
Fax: (07) 4031 1364
Website: www.wettropics.gov.au

