Australian Ethnoecology

By Jim Doyle Presented by Lana Little

What is Australian Ethnoecology?

Australian Ethnoecological research is a relatively old field of study, which is experiencing a degree of popularity once again in recent years. This field has been studied for at least forty thousand years in Australia, (only I don't think it was called Ethnoecology way back then, I think it was called survival,) but the principles were much the same. With a growing interest in indigenous studies there has been a resurgence of interest in Bush Foods and Bush Medicines. Most cities now boast a restaurant, which claims to serve "Bush Tucker", but it could be argued that the food served, has been modified so much that it no longer could be classified as a natural resource. Ethnoecology is basically, the study of indigenous peoples' uses of all natural resources for the purpose of aiding in subsistence and or survival. This in general terms means a study of Bush Foods, Bush Medicines, Survival Aids and Survival Analysis and how and why it is utilised. But the knowledge that can be gained from this field can be utilised in far more ways than just the obvious!

As a starting point though, we can say when talking about "Bush Tucker" we are referring to the natural resources that are utilised for the purpose of subsistence or survival. "Bush Medicine" we are referring to the natural resources that are utilised for maintaining good health and or the relief of sickness or ailments. "Bush Techniques/Survival Aids" refer to the natural resources that are utilised for the purpose of aiding subsistence or survival and "Survival Analysis" being the study of subsistence strategies. There have been many ethnoecological projects undertaken by different people and organisations in Australia in recent years but none would be possible without the knowledge of the Aboriginal people of Australia. Many Aboriginal communities have over the last few years endeavoured to record their own ethnoecological knowledge and many have resulted in small publications going to print. Most people would be familiar with Les Hiddins, AKA "The Bush Tucker Man". Each week he brought us an insight to the use of many of the resources used by aboriginal people and others but few would be aware of the contribution Mr Hiddins made to the Australian Defence Department in cataloguing the resources of Northern Australia.

There are many other people with an interest in bush tucker and other related fields of studies and have initiated a variety of different research projects over the past years. Many early explorers and Anthropologists noted resources used by aboriginal people during their journeys and some even applied this knowledge for their very survival. So we shouldn't forget the contribution they made to our current knowledge and understanding. It was not until our early explorers were exploring the country that any real effort was made to record the use of the natural resources by Aboriginals. Many of the explorers noticed how the Aboriginal people appeared to be in good health, when in many cases they themselves (the non-aboriginals) were sick. Consequently, many explorers began noting in their Journals information about resources used by Aboriginals, what was used, how it was prepared, how it was applied and whether it appeared to work.

In Australia, there appears to be many different uses of natural resources for medicinal purposes by the Australian Aboriginals. Some bush medicines were utilised for the purpose of contraception, childbirth, abortions, fertility, narcotics etc. With the year 2000 approaching rapidly, we as non-Aboriginals know very little about Aboriginal knowledge of medicinal resources eg. Bush Medicine, how it was used, what was used etc. There are a number of possible reasons for this:

Aboriginal people had no use for writing; therefore this knowledge was never documented until recently. Medicinal knowledge was normally only known to a few in the group and handed down as required.
Many of the treatments appear to have no medical reason for working (yet many did), so many non-Aboriginal people believed it was 'a ritual thing' rather than having any real value to science. Because of this belief, there wasn't a lot of interest in the subject and therefore the recording of this knowledge wasn't widespread by early non-Aboriginal people. Aboriginal people having been in this country for at least 40,000 years, and with their Gatherer/Hunter subsistence system, were required to relocate regularly so their use of medicinal resources was quite varied and in doing so were able to treat most illnesses before non-Aboriginal peoples arrival. With the arrival of non-Aboriginal people, there was a huge impact on the way that Aboriginal people utilised the natural resources. Non-Aboriginal people brought with them many new illnesses. They also brought the drugs used to treat the illnesses that arrived with non-Aboriginal people. Until contact with non-Aboriginal people, Aboriginal people had no way of directly boiling water. With the introduction of the 'Billycan', Aboriginal people were able to utilise a whole new range of resources.

By the mid 1800's, the so-called civilised world wanted to know everything about medical practices. This in part was due to the fact that Europeans were no longer of the mind that only Witches etc. could use natural resources for the treatment of sickness. The other reason is that after the American Civil War, medical practitioners of the time wanted to find ways of relieving the pain and suffering of the wounded.

Although humans have and many still do, exploited the natural resources for medicinal purposes for thousands of years, many cultural groups have a strong spiritual or social attachment or belief in the use of many of these resources. This is one area where science is just beginning to recognise when dealing with the subject matter. There wasn't any real scientific or serious study until perhaps Anthropologists began noting and recording the use of resources for medicinal purposes amongst indigenous people. This early work was mainly cataloguing the resources but invaluable all the same.

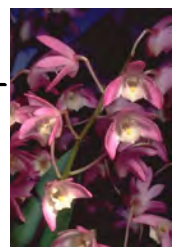
Survival analysis looks at how and why different people adopt different strategies to subsist and how we can use this knowledge to aid our own survival when we find ourselves in an unfavourable situation. Bush techniques cover such things as fish poisons, string making, fire starting, shelter construction, hunting techniques, tool manufacture etc. So what, if anything, would this sort of knowledge be of use to us in the current global environment. Well we know that most, if not all the resources that are used for medicinal purposes do contain trace elements and chemical properties that our modern drugs try to reproduce. The resources that are utilised for food have been found to contain high levels of Vitamins, Proteins, Carbohydrates and other nutrients, which are essential to our very survival. So, this as a scientific understanding of our environment is of immense benefit.

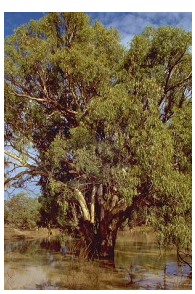
To Anthropologist and Archaeologist, this information is also of immense benefit because the information can tell us a great deal about the social structures, belief systems, survival strategies and how humans adapted to a change in circumstance or environment. Historians also can gain by this knowledge by understanding through the achieves of explorers, anthropologist, archaeologist and missionaries etc what their lives were like at a given time, how hard or how easy they found subsisting in the new land. People, who have an interest in pure survival, also gain from the hard data of what resources can be utilised for the purpose of survival because this very data tell us what you can eat, drink, or utilise. And finally, the Aboriginal people of Australia are given the opportunity to have their knowledge recorded and available for prosperity. This paper has only touched on a very fascinating area of study, which I believe has something for all in understanding the diversity of humankind.

Resources Found in the Rockhampton District

BE WARNED THAT MANY OF THE RESOURCES LISTED REQUIRE DETAILED KNOWLEDGE IN THE PREPERATATION AND ADMINISTRATION:
SOME PLANTS ARE TOXIC TO TOUCH AND SOME DEADLY

Scientific Names	*Common Names*
ACACIA HOLOSERICEA	FISH POISON TREE
AGARICUS CAMPESTRIS	FIELD MUSHROOM
AJUGA AUSTRALIS	AUSTRALIAN BUGLE
ALOCASIA MACRORRHIZAS	CUNJEVOI
ALPHITONIA EXCELSA	SOAP TREE
ARCHONTOPHOENIX ALEXANDRAE	ALEXANDRA PALM
AVICENNIA MARINA	GREY MANGROVE
BRACHYCHITON POPULNEUM	KURRAJONG, BOTTLE TREE
BRACHYCHITON RUPESTRIS	BOTTLE TREE
CAPPARIS ARBOREA	NATIVE POMEGRANATE
CAPPARIS CANESCENS	WILD ORANGE, ORANGEWOOD
CAPPARIS MITCHELLII	WILD ORANGE
CARALIA BRACHIATA	BILLABONG TREE
CASSYTHA FILFORMIS	DEVILS GUTS, DODDER LAURE
CASUARINA EQUISETIFOLIA	SHE OAK
CAYRATIA TRIFOLIA	WILD GRAPES
CHELODINA LONGICOLLIS	EASTERN SNAKE NECKED TURTLE
CHITON SP	CHITON
CISSUS HYPOGLAUCA	NATIVE GRAPE
CLERODENDRUM FLORIBUNDUM	LOLLY BUSH
COCOS NUCIFERA	COCONUT PALM
CYMBIDIUM CANALICULATUM	TREE ORCHID, BLACK ORCHID
CYPERUS ROTUNDUS	NUT GRASS, WILD ONION
DASYATIS	STINGRAY
DENDROBIUM SPECIOSUM	ROCK ORCHID, KING ORCHID DIOSCOREA
TRANSVERSA	LONG YAM
EICHHORNIA CRASSIPES	WATER HYACINTH
ELEOCHARIS DULCIS	SPIKE RUSH, WATER CHESTNUT
EMILA SONCHIFOLIA	THISTLE
ENCHYLAENA TOMENTOSA	RUBY SALTBUSH, RED BERRIES
ERTHRINA VESPERTILIO	BATWING CORAL TREE
EUCALYPTUS CAMMLDULENSIS	RED RIVER GUM
EUCALYPTUS MICROTHECA	RIVER GHOST GUM
EXCOECARIA AGALLOCHA	MILKY MANGROVE, POISON TREE
FICUS OPPOSITA	SANDPAPER FIG
FICUS PLATYPODA	NATIVE ROCK FIG
FICUS RACEMOSA	CLUSTER FIG
FICUS SP	FIG
FLAGELLARIA INDICA	SUPPLE JACK





GAHNIA ASPERA	SAW-EDGE
GREVILLEA PTERIDIFOLIA	GOLDEN GREVILLEA
GREWIA LATIFOLIA	GIANT EMU BERRIES
GREWIA RETUSIFOLIA	EMU BERRIES
HAKEA LOREA	
HAKEA SP	CORKWOOD TREE
HETEROPOGON TRILICEUS	GIANT SPEAR GRASS
HETEROPOGON TRITICEUS	GIANT SPEAR GRASS
HIBISCUS HETEROPHYLLUS	NATIVE ROSELLA, ROSELLA BUSH
HIMANTURA	
IPOMOEA PES-CAPRAE	GOATS FOOT
LANTANA CAMARA	LANTANA
LATES CALCARIFER	BARRAMUNDI
LIASIS FUSCUS	WATER PYTHON
LIVISTONA AUSTRALIS	CABBAGE TREE PALM
MACROZAMIA SP	ZAMIA PALM
MARSILEA DRUMMONDII	NARDOO
MELALEUCA LEUCADENDRON	PAPERBARK, TEA TREE
MYOPORUM SP	BOOBIALLA
OECOPHYLLA SMARAGDINA	GREEN ANTS
OPUNTIA SP	PRICKLY PEAR
PANULIRUS ORATUS	PAINTED CORAL CRAYFISH,
PASSIFLORA FOETIDA	BUSH PASSIONFRUIT
PLANCHONIA CAREYA	COCKY APPLE, NATIVE PEAR
PLEIOGYNIUM CERASIFERUM	BURDEKIN PLUM
PODOCARPUS ELATUS	PLUM PINE, BROWN PINE
POLMESODA COAXANS	MUD MUSSEL
PORTULACA OLERACAE	PIGWEED, PURSLANE
PSIDIUM GUAJAVA	GUAVA
PSYLLA EUCALYPTI	LERP SCALE
PTERIDIUM ESCULENTUM	BRACKEN FERN
PTEROCAULON SPHACELATUM	
SACCOSTREA SP	ROCK OYSTER
SANTALUM LANCEOLATUM	QUANDONG
SARCOSTEMMA AUSTRALE	CAUSTIC VINE
SCYLLA SERRATA	MUD CRAB
SECURINEGA MELANTHESOIDES	RAGAH
STERCULIA QUADRIFIDA	PEANUT TREE, MONKEY NUT TREE
TEPHROSEA PURPUREA	WILD INDIGO
TEREBRALIA SP	MUD WHELK
TEREDO SP	MANGROVE WORM
TRIGONA SP	NATIVE BEE / SUGAR BAG
VARANUS GOULDII	GOULDS GOANNA
VIGNA LANCEOLATA	MALOGA BEAN,
VIGNA RADIATA	GULAKA
XANTHORRHOEA PREISSII	BLACKBOY
XANTHORRHOEA SP	GRASSTREE, BLACKBOY
ZIZYPHUS MAURITIANA	CHINESE APPLE, INDIAN JUJUBE

PRODUCED BY SRMS VERSION 4.16