

ECOTOURISM AND BOTANY IN THE KIMBERLEY

The August 1995 speaker, Kevin Kenneally, described ecotourism as a term that embraces such things as getting back to nature, recreation and serious study; and he pointed out that the upgrading of the Gibb River Road will mean more people tramping around a fragile region.

Kevin, who leads some of the Landscape tours, presented these tours as one of the purest forms of ecotourism—where participants pay to become volunteers and help scientists collect and interpret data, thus becoming involved intimately in nature conservation. Work in these remote areas is very expensive because it involves hiring boats and helicopters. The tours are non-profit, self-supporting expeditions, with any surplus money used for further research. CALM scientists lead them and UWA Extension Service administers the logistics and organisational side. Anybody can join so long as they are fit and healthy and their ages range from 15 to 72. The expeditioners get a full briefing beforehand and a full report on achievements afterwards. They benefit by being able to visit remote and exciting places they would not otherwise see, while the community and future generations benefit from the work that is carried out.

Kevin had prepared overheads to show us the National Parks and Nature Reserves (an area 51% of the size of Japan) that CALM manages in the Kimberley. National Parks are created more for their recreational aspect whereas the Nature Reserves are formed to protect plants and animals living there. There are CALM offices in Kununurra and Broome but none in the far north west Kimberley. In 1992, about 143,000 people visited the Kimberley. The number is rising, especially in the popular Purnululu National Park and on the Ibis Aerial Highway which was created by the Kimberley Shires and CALM utilising existing airstrips for tourism.

We saw wonderful slides illustrating a broad cross section of the Kimberley area, from the Derby tidal flats (shot out of a helicopter) to cultural aspects of Aboriginal life. There was a didgeridoo made out of a small gum tree stem piped out by termites and decorated by etching with fire. Aboriginal cave paintings showing Wandjinas were featured and Kevin noted that evidence of earlier occupation in the form of "Bradshaw" figures (thin elongated silhouettes) are less easy to find.

The slides showed how heavy rain of a late wet caused much damage to unsealed roads and, with vehicles then compounding this damage, how an expedition's OKA got bogged on Beverley Springs Station and never reached Bachsten Creek. Instead the group happily explored Grevillea Gorge and camped at Grevillea Creek. Insectivorous plants were plentiful in this area especially *Stylidium claytonoides* and *Utricularia chrysantha*. These trigger plants may give us a clue to speciation in the Kimberley. They are pre-Gondwanan with a highly specialised pollination mechanism. *Banksia dentata* is an attractive tree and is the only *Banksia* found in this region. It occurs as far north as New Guinea and the nearby islands, and grows in damp swampy ground in groves. *Lindernia cleistandra* is an unusual plant growing high up on cliff faces. When it flowers, and after pollination, the seed case grows

back into a crevice and so gradually moves up the cliff face. It has large, deep blue flowers—most showy.

The braid fern, *Platyzoma microphyllum* is like a resurrection plant as it is dry and dormant in the dry season and comes to life with the first rains. The leaf unrolls from the tip in the typical fern manner, and the plant grows in an ever-widening circle. Another resurrection plant is *Borya subulata*. The Kimberley Rose, a Kurrajong, *Brachychiton viscidulus*, has huge pink flowers scattered over the leafless branches, much photographed. The seeds of this tree are important to the Aboriginal people as they roast them like peanuts (just as tasty).

Mangroves were featured showing their aerial roots, or pneumatophores, which are knee roots in *Bruguiera* and prop roots in *Rhizophora*. At low tide these special roots absorb atmospheric oxygen which is important for a plant whose roots are permanently inundated.

Eucalypts and Acacias dominate the Kimberley flora. They are the remnants of the wetter rainforests. *Eucalyptus miniata*, the Woollybutt, is outstanding with its bright orange flowers, and *E. cadophora* has red flowers equally attractive. Cycads and palms are also prevalent and much sought after by collectors. *Livistona eastoni* is common on Mitchell Plateau, and the fruits and young stems are eaten by the Aboriginals. On El Questro station is an undescribed palm that also occurs in Japan and China.

Mucuna gigantea is called the match box bean and is a liane in the rainforest patches. It has large pale green pea flowers which had not been collected before. It also has irritant hairs on the pods. *Abrus precatorius* is the crabs eye bean and has bright red and black seeds, very poisonous and much used in decorations. A mistletoe, *Decaisnina biangulata* is rarely found and is quite restricted. It was on a new host in Grevillea Gorge, *Syzygium eucalyptoides*. An introduced hibiscus, *H. sabdariffa*, or rosella, is now a pest spread by wild pigs. It was brought in by Asian people who use its fleshy epicalyx for making jams or preserves.

Other slides showed that Marlgu Billabong in Parry Lagoons Nature Reserve is a wonderful bird-watching place. It was covered with large blue water lilies and other aquatic plants, a naturalist's paradise. Flat-backed turtles were sought at Cape Domett and camp was made at the Needles, a fascinating sandstone outcrop. Turtles were tagged and counted at night and predation of their eggs by crocodiles and dingoes was observed.

Kevin spoke of forthcoming ecotours to Gibson Desert, Great Victoria Desert and Batalling Forest (this year) and four more to the Kimberley (next year). He then took questions from the audience, and there were many.

Daphne Choules Edinger