

## **KIMBERLEY CAMEOS: RIVER WALKS AND NATURAL HISTORY**

At the Society's meeting on 18 January 1995, the audience heard cameo presentations on three individual topics. The first speaker was Dr. Mike Donaldson, a geologist who has been travelling in the Kimberley for ten years—five of those walking with a backpack down rivers looking for Aboriginal cave paintings. He has a special interest in photographing and mapping them, reporting to the Museum any which are not yet catalogued.

He showed wonderful slides of a July walk down the Drysdale River which flows into the sea 45 km North East of Kalumburu. The Solea Falls were only trickling after a dry wet, and 12 Johnston crocodiles were seen in one little pool. The 40 art sites found included dozens of much older "Bradshaw" figures.

Mike's second walk took him and his companions 100 km down the Charnley River (named and explored by his hero, Frank Hann) to the vast Walcott Inlet. This was a hard slog through 60 km of deep gorges, necessitating use of an inflatable dinghy in places where sheer cliffs afforded no foothold. The packs were floated across while the people swam after them. Here, the basalt on one side meets the King Leopold Sandstone on the other and the river runs along the contact point. An unusual rock formation of Columnar Basalt and Pillow lava tubes, formed 1,500 million years ago, was a fascinating find. The group averaged only 10 km per day in this rugged terrain and saw giant boabs, lazy crocs, stick figures and superb scenery all the way. Leaving the Charnley at the confluence of the fresh and tidal water, they walked across country to rendezvous with an aircraft at Munja airstrip. They had had to pay \$1000 to have this mown before the plane could land! An expensive exercise to see such pristine country, and only the second white group to walk the river since Frank Hann saw it in 1898.

The following year Mike took another group back to establish a base camp on the river for 10 days, enabling them to do more research into cave paintings, botany, birds and other animals. This was most productive. Mike's interesting talk was illustrated with excellent slides of this magnificent area.

Our second speaker was the well-known naturalist and tour leader, Kevin Coate. Kevin was in the Kimberley in the 60s working on beef roads that included the famous Gibb River Road. He started life as a forester and is now a leading ornithologist. He spoke about the Seabird Breeding Islands off the Kimberley Coast, the main ones being the Lacepede and Adele Islands.

The Lacepede Islands are four low sandy cays 50 km west of Beagle Bay. They were discovered by the Frenchman Baudin in 1801 and named after a naturalist, Count de Lacepede. Rich guano from countless bird droppings was mined there in the 1870s and in 1877 Lord Carnarvon wrote to Sir George Ord concerned for the welfare of the birds. The rich food in the warm tropical seas support thousands of Brown boobies or gannets which nest on the islands throughout the year. They lay two eggs, but only hatch one, and take 4–5 months to fledge their young. Visitors must be careful not to frighten the birds off the nests for the Silver gulls are very predatory and will eat neglected eggs. Thousands of Least Frigate birds

nest on clumps of Spinifex grass, laying one egg only and taking one year to fledge their young. Also nesting here are Caspian terns, pelicans, noddy terns and cormorants.

These islands are also the main breeding grounds for green-backed turtles which lay their eggs on the sandy beaches and provide an important food for Aboriginal people. The surviving eggs hatch in January to February and the young begin their precarious journey down to the sea, picked off by birds on the beach and fish and sharks in the sea. Very few actually survive this trauma to reach adulthood. The islands also have a bloody history of terror and violence because captured Aboriginal people were held there to be used as pearl divers.

Adele Island is a low, sandy islet of only 200 hectares lying 100 km north of Cape Leveque (both named by Baudin). It encloses a large lagoon used by many migratory waders. There is a sparse vegetation of *Abutilon indicum*, a hibiscus-like straggly shrub, the coastal bean *Canavalia maritima* and the usual coastal Spinifex *longifolius* grass. The island is home to thousands of Brown boobies, Least Frigate birds and three breeding colonies of pelicans. These massive birds lay two eggs and rear two young. There are reef egrets, light and dark phases, and night herons which hide in the spinifex. On recent trips, cormorant colonies numbering a few hundred were discovered and 2,000 Red-necked stints (transitory waders) were counted. The island also houses an automatic weather station and a transmitting mast.

Masked Boobies only breed on Adele and Bedout Islands where, nesting precariously on sand close to the sea, they are occasionally taken by an estuarine or salt water crocodile. Five hundred were estimated to be breeding, and they manoeuvre their young into the shadow of their own bodies to prevent them dying of dehydration.

The Red-footed Booby is the smallest and rarest. It was first discovered here by Kevin, nesting on small Abutilon plants only 1 metre high, and does not breed elsewhere in WA. The Great Frigate bird was also a first nesting discovery on this important island. It develops a bright red gular pouch which balloons out during mating, a most unusual sight. All these birds were illustrated by beautiful slides taken by Kevin.

Kevin Kenneally was the final speaker of the trio. He is a CALM botanist who first visited the Kimberley in 1975 and is now the world authority on the area and its flora. In 1977, he went 450 km offshore, on the Naval craft HMAS *Attack*, to the Ashmore Reef. Less than half that distance separates this atoll or sandy cay from the Indonesian island of Roti, and the Macassans visited it to collect trepang (beche de mer or sea cucumbers) and clam meat for food. They planted coconut palms to help their navigation, mined guano, sunk wells for water, cut firewood, built pens for their poultry and planted corn. They also dried shark and clam meat on racks made of sticks, dried the breast plates of frigate birds and collected sea bird eggs by smashing existing ones to make the birds lay fresh eggs. We saw slides of this destruction and of the Indonesian prahus and Taiwanese stern trawlers whose takings were checked by the Navy patrol boats.

Ashmore Reef is now a National Nature Reserve and the navy is determined to keep Indonesian fishermen off the island. The water was found to contain cholera organisms and,

in the 1940s, Dom Serventy, a famous ornithologist, found rats predated the birds and their eggs, also a mouse plague and cats present. Quarantine is important to protect the fauna which is similar to Adele Island (also the same birds) with some larger shrubs such as *Scaevola sericea*, *Argusia argentea* and *Sesbania cannabina*.

Kevin's illustrated talk also extended to Cape Domett which is on the eastern edge of Cambridge Gulf separated from the mainland by tidal mudflats. The scientists had converged on this isolated place to count flat-backed turtles as they came onto the wide beach to lay their eggs. The careful digging of holes and the covering of the eggs to hide them from marauding dingoes must have been fascinating to watch as evidenced from Kevin's slides.

A sandstone platform used as a landing pad by the party's helicopter consisted of attractive Rainbow stone which is mined, polished and sold to tourists in Kununurra. The track to Cape Domett passes through the Ningbing Range of dark weathered Devonian Limestone, an ancient marine coral reef. This was a geologist's dream of karst eroded into flutes and pipes (rillenkaren) and Aboriginal art was seen in the caves.

Questions and comments followed, and the subsequent applause showed our appreciation for being taken to some little-visited but fascinating areas of the Kimberley.

*Daphne Choules Edinger.*