

## LANDSCOPE Expeditions

Western Australian Department of Conservation and Land Management, PO Box 104, Como, WA 6152

# Birds and Botany of the North Kimberley Expedition Report 1994

#### FROM THE EXPEDITION LEADERS

On behalf of CALM and UWA extension we would like to thank all members for their tremendous support both physically and financially and for making the expedition the success it was. Your willingness in supporting this expedition allowed the scientists to successfully gather essential information required to manage the region. Plants collected from the herbfields have been sent to botanical specialists throughout Australia. Many new species will be described and scientists now have a better understanding of the species richness of these seepage areas. Allen Lowrie will use information gathered on the expedition in volume 3 of his forthcoming book Carnivorous Plants of Australia. The sightings of Purple-crowned Wrens and Gouldian Finches are important for the continuing monitoring of these threatened species. We would particularly acknowledge the assistance of Nigel Jefford, Community Nurse at Kununurra for the professional manner in which he handled the medical evacuation of Nancy Gibson. We trust that expedition members have benefited from the opportunity to return to nature and participate in some hands-on wildlife conservation in a remote area of the State. We hope to have the pleasure of your company on future LANDSCOPE Expeditions.

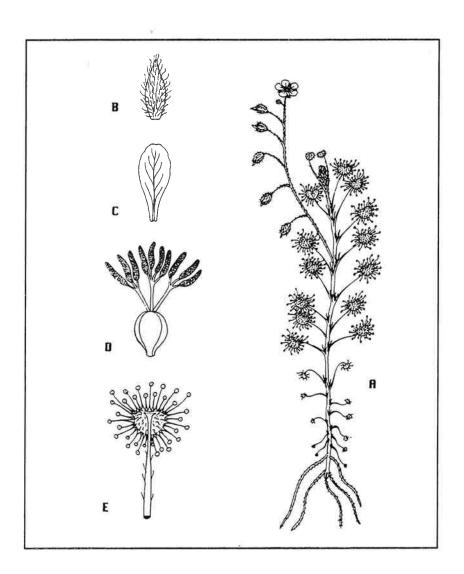
Kevin Kenneally and Kevin Coate



Members of the North Kimberley Birds and Botany LANDSCOPE Expedition 1994

#### **EXPEDITION ACHIEVEMENTS**

- 1. Detailed surveys of herbfields were made for the King Edward River area with over 100 plant collections made. Many of these plants have been sent to botanical experts interstate to assist their research.
- 2. Species of *Mitrasacme* were collected and sent on loan to Clyde Dunlop, Herbarium of the Northern Territory, who is currently revising the genus. He has recently advised that amongst the collections sent were five new species that he will be describing.
- 3. Other undescribed plants collected included species in the genera *Eriocaulon* sp. B Kimb. Flora, *Cartonema* sp. A Kimb. Flora, and a rarely collected *Polygala* with a bizarre fruit.
- 4. Ninety collections of triggerplants (Stylidium spp.) and sundews (Drosera spp.) were made as pressed and spirit material. Good collections were made of the rarely collected Drosera banksii. Investigations confirmed for the first time that this is a fibrous not tuberous rooted species as previously classified.
- 5. Colonies of Purple-crowned Wrens were recorded from *Pandanus* thickets along the banks of the Drysdale and King Edward Rivers.
- 6. A recently fenced rainforest patch on Theda Station was monitored.
- 7. Gouldian Finches were recorded from creeks north-east of Kalumburu.



Drosera banksii - collected from King Edward River herbfields (Drawn by Allen Lowrie).

#### DIARY OF THE NORTH KIMBERLEY BIRDS AND BOTANY LANDSCOPE EXPEDITION JUNE 1994

Monday 20th At 1800H a briefing meeting was held at Quality Inn, Kununurra, followed by the expedition buffet dinner. Members were introduced to the Travelabout expedition drivers Tom Keating and Colin Brindle as well as Gordon Graham, CALM's Regional Ecologist in the Kimberley.

Tuesday 21st Up at 0530H to pack the Oka vehicles and have breakfast. 0700H departed Kununurra via the Gibb River Road. This was to be a long day with some 350 km to be covered. Stopped at Pentecost River Crossing to view the spectacular Cockburn Range and the flowering Kapok Bush (Cochlospermum fraseri). Collected the mistletoe Lysiana spathulata growing on the Caustic Bush (Grevillea pyramidalis). Lunch at Durack River Crossing. Travelled via Rowleys Jumpup where expedition stopped to photograph the Woolybutt (Eucalyptus miniata) and the Yellowjacket (Eucalyptus phoenicia) both species heavy with bright orange flowers. Rainbow and Varied Lorikeets were numerous, the birds feeding on the eucalypt blossom. At Dawn Creek collected the mistletoe Lysiana spathulata on Callitris intratropica, also Acacia nuperrima in flower. Near Russ Creek Crossing collected and photographed a new subspecies of Eucalyptus (Corymbia) cadophora with dark red flowers. At 1700H camp was finally reached at Miners Pool on Drysdale River.

Wednesday 22nd Cold night. Awoken by flocks of noisy sulphur crested cockatoos. At first light a search was made along the *Pandanus* thickets lining the river bank for the elusive purple crowned wrens. Over 1 km of riverbank was explored and we were rewarded with sightings of four groups of wrens. A collared sparrow hawk was observed catching a finch or honeyeater from a perch directly ahead of us. 0900H departed for King Edward River campsite. Lunch opposite entrance to King Edward River Station in woodland of flowering *Eucalyptus tetrodonta* with a dense understorey of the fan palm (*Livistona eastonii*). *Verticordia verticillata* in white bloom. After travelling 220 km we camped upstream from the King Edward River crossing with the Mitchell Plateau track. At the campsite we were quickly adopted by two Pied Butcher birds. From a perch in a *Eucalyptus polycarpa* they demonstrated their aerial flight capabilities by swooping and catching food in mid-air. We were rewarded for our feeding by bursts of their spectacular song. Seven Brolgas seen frequently feeding around the campsite. Ron Middleton caught a number of freshwater Red-faced turtles (*Emydura australis*). These are probably an undescribed pygmy race of Red-faced turtles. Many photos taken and sketches made by the expedition artists. Gordon Graham, CALM's regional ecologist arrived at camp and set up traplines with the help of expedition members.

Thursday 23rd Early morning Gordon Graham and helpers checked traplines, but no success. Collected in the extensive herbfields adjoining the King Edward River. The expeditioners were divided into two groups, one with Allen Lowrie collecting carnivorous plants (including triggerplants) and those with Kevin Kenneally and Daphne Edinger making general collections. Each member was given one particular plant to collect, sufficient for pressing as well as for liquid preserved (spirit) specimens. Some were identified on the spot and others using the keys in the Flora of the Kimberley Region. Expedition members soon came to realise that this type of collecting is slow and tedious but produces interesting results. Thirty three collections were made including a new locality for Trithuria lanterna (Hydatellaceae) and Eriocaulon sp. A Kimb. Flora (Eriocaulaceae), only the second collection for the Kimberley. A good find was Drosera banksii (Droseraceae), previously only known from two other collections, the earliest dating back to 1905 and not recollected till 1993. The triggerplant Stylidium dunlopianum, with dark pink flowers, was a new find for W.A., previously only recorded for the Northern Territory. Kevin Coate reported more colonies of Purplecrowned Wrens from the Pandanus thickets along the river bank. A brush cuckoo was the only unusual bird sighting. Brightly coloured harlequin bugs were collected from the undersurface of leaves. A black whip snake was disturbed in the herbfield and a frog discovered in Ron's sock! A colony of 12 bats were discovered in a cave by the plunge pool on the King Edward River. Spangled perch and gudgeon caught, identified and sketched by Darrel Hick. Good views of a Square-tailed Kite. Gordon and helpers rebaited and reset traplines. Same camp on King Edward River.

Friday 24th Gordon Graham checked the Elliott traps, but again no luck. Visited a herbfield 4 km from campsite, surrounded by sandstone outcrops containing numerous caves with interesting examples of Aboriginal Bradshaw style rock art. Twelve plant species were collected from around the sandstone outcrops and more from herbfields adjoining our campsite. Good collections of the rock fig Ficus subpuberula and an undescribed species of Mitrasacme growing in the shelter of a rock overhang. Allen Lowrie's group found more Drosera banksii, Drosera petiolaris, Stylidium claytonoides and S. longicornu. Some 40 - 50 plant collections were made. It was observed that some triggerplants close up when the sun goes down, why? No one knows. Many Brolgas seen. Fellow campers returning from the Mitchell Plateau reported counting 14 head of cattle during their journey into Mitchell Falls. Beside their impact on the vegetation they damage the Aboriginal art sites by rubbing against them and occasionally defecating on them. Gordon and helpers reset the traplines. Hot day, 37°C in shade.

Saturday 25th Success with the trapline with a specimen of Rattus tunneyi in one of the Elliotts. Many photos as the animal was released. 0800H broke camp and departed for Kalumburu. Visited fenced rainforest monitoring patch on Theda Station with Gordon Graham. The area is regenerating after extensive cattle damage. Large trees of Melicope elleryana with their white, corky bark as well as Cryptocarya cunninghamii, Terminalia sericocarpa, Sesbania formosa (Dragon Tree) and a dense ground storey of Taro (Colocasia esculenta) and the fern Cyclosorus interruptus. Birds seen here included a Yellow Oriole and a female Goshawk. A short eared rock wallaby (Petrogale brachyotis) also seen. The expedition moved on, collecting (spotted by the eagle eyes of Sue G. and Ron M.) good specimens of an undescribed Polygala in a herbfield at a creek crossing. Lunch at Carson River. We left Nancy Gibson at Kalumburu in the care of community nurse Nigel Jefford before being flown out to Derby for medical attention. Made camp at Honeymoon beach, 25 km north of Kalumburu Aboriginal Community. Plenty of mosquitoes and sandflies! Beautiful blue water and white beaches but a sighting of a 2 metre saltwater crocodile just 3 m from shore deterred expedition members from getting too close to the water's edge.

Sunday 26th Sue Giesen collected black lipped oysters for breakfast! The crocodile was again observed close to shore. A quick excursion to examine six different mangrove species growing on beach with rain forest patches directly behind. Then on to Pago Mission ruins. Along the track botanised at Domenic and Unamon Creeks. Collected a new species of mauve flowered *Cartonema*, only the fourth collection and a new locality. Allen Lowrie said these were the best stands of insectivorous plants he had seen in the Kimberley. He found *Drosera ordensis* in a new locality and extended the range of two other species, an excellent result. We confirmed that the waterlily *Ondinea purpurea* did not occur in these streams. Lunch at Pago. Visited lonely grave of Gunner Davies taken by a crocodile in 1920. Very hot walk to sea to explore mangroves and extensive sandstone pavements. Started our return to basecamp. Kevin Coate and helpers sat for an hour counting Gouldian Finches at pools on Unamon Creek. They were rewarded with over twenty sightings included fully coloured red-headed and black-headed adult birds. Other finches recorded included Pictorella, Chestnut-breasted Mannikin, Long-tailed Finch and Double Bars. That evening Kevin K. and Daphne Edinger had a close encounter with a Childrens Python. Some people badly affected by sandfly bites. John Bowler collected mussels for evening meal. Campfire meeting to discuss day's events.

Monday 27th 0730H broke camp. Groups swapped buses so the ornithologists went ahead in the faster, trailer-less OKA. Stopped at Kalumburu Community and watched Damien Karadada etching slate, bought by Maurice O'Connor and a didgeridoo by Liz Hastings. Father Anscar of Kalumburu entertained everyone in the museum. Lunch under Eucalyptus polycarpa in a burnt patch with large ant mounds. Discovered the trailer wheel was loose when opposite the entrance to King Edward River Station. Refuelled at Drysdale Station. Another stop to repair wheel with a spare nut obtained at Drysdale. Expeditioners played football on the road as the sun was setting. Arrived in dark at Russ Creek - others been there for 2 hours! Had just repacked to look for us - a hurried meal prepared in the dark. With the temperature rapidly dropping, members went off to bed in full marching order!

Tuesday 28th A cold, cold night, -0°C when we rose. Ice in the water bucket! Some members had sought solace around the campfire. Left camp at 0845H for El Questro Station. Near Campbell Creek five Ground Cuckoo-shrikes observed. We met a band of horsemen and women riding around Australia to raise money for cancer research for children. Lunch in another burnt field to avoid fire. Good views of Black-breasted Buzzard near Pentecost Ranges. Much photographing as vehicles crossed the Pentecost River. Good views of Pictorella Finches ±100. Arrived El Questro Station at 1615H and set up camp at Jackeroos Waterhole. Sightings of Black Bitterns and Barking Owls.

Wednesday 29th Chamberlain Gorge boat trip in four dinghies with electric motors to reduce pollution. Magnificent trip up river to collect plant specimens and view cave paintings above the landing. Plant collecting in seepage area below cliff resulted in *Mitrasacme nummularia*, *Eriocaulon* sp. B Kimb. Flora and *Drosera burmanni* only. Picnic lunch at El Questro visitor centre. 1445H a Barking Owl was observed carrying, then eating a Little Friarbird. The owl was followed and observed for some time. Zebedee Springs for a soak and wallow in warm artesian water, surrounded by a grove of undescribed fan palms (*Livistona* sp.) creating a humid microclimate for ferns and native coleus. Collected *Stylidium lobuliferum* which extends its range west from Kununurra. Sue and Maurice cooked bread in a camp oven for the evening meal. Farewell dinner and speeches.

Thursday 30th Broke camp at 0730H to drive to El Questro Gorge. A walk up the gorge revealed massive fern banks and dense stands of fan palms. Collected specimens of Acacia tumida and Grevillea refracta. 1000H departed El Questro Station heading for Parry Lagoons Nature Reserve. Stopped at sandstone rock outcrop along way opposite Mt Rob. Group photograph with cave paintings as backdrop. Onto Marlgu Billabong in Parry Lagoons Nature Reserve to collect aquatic plants and make bird observations. Numerous birds recorded (see bird lists) including good views of Horsefield's Bronze Cuckoo. Arrived in Kununurra at 1540H. Although expedition had finished many members met at Gullivers Tavern for a final farewell dinner.

### Bird List North Kimberley Birds and Botany Expedition

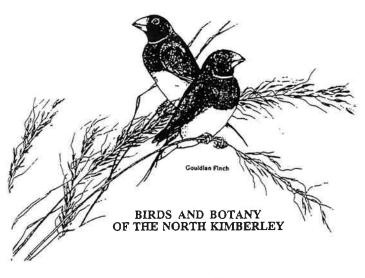
#### Locations:

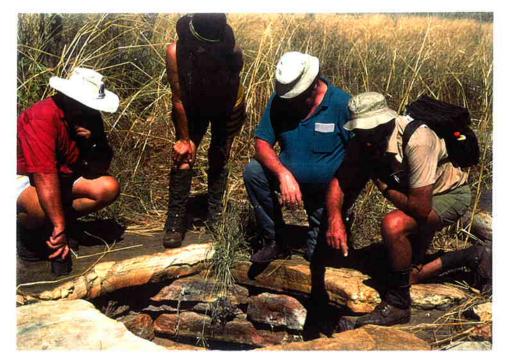
- 1 Kununurra and Drysdale 21/6/94
- 2 Drysdale to King Edward River 22/6/94
- 3 King Edward River 23/6/94
- 4 King Edward River 24/6/94
- 5 King Edward River to Honeymoon Beach 25/6/94
- 6 Honeymoon Beach Pago 26/6/94
- 7 Honeymoon Russ Creek 27/6/94
- 8 Russ Creek El Questro 28/6/94
- 9 El Questro Station 29/6/94
- 10 El Questro Station and Parry Lagoons 30/6/94

Bird	1	2	3	4	5	6	7	8	9	10
Australian Grebe										X
Australian Pelican	X									x
Darter	X							X	х	x
Little Pied Cormorant	X	х	x	x	x		x	X	x	x
Pacific Heron				x			х	X		х
White-faced Heron	X	X	X	x	x	x	x	x	x	х
Pied Heron										X
Great Egret	X	x						x	x	х
Eastern Reef Egret					x					
Rufous Night-heron	х									
Black Bittern									x	
Black-necked Stork							х			X
Glossy Ibis										X
Sacred Ibis										х
Straw-necked Ibis	х	x		x	x		x	X		x
Royal Spoonbill								х		
Yellow-billed Spoonbill								X		
Magpie Goose							X			
Plumed Whistling-Duck										х
Radjah Shelduck										х
Pacific Black Duck	х							X		x
Hardhead										x
Osprey						X	х			
Black Kite	x	X		x	x		x	x	x	x
Square-tailed Kite				x						
Black-breasted Buzzard	X							x		
Brahminy Kite						X				
Whistling Kite	X	X	x	x	x		X	X	x	x
Brown Goshawk			x	x	x	X	X	x	X	x
Collared Sparrowhawk		X								
Grey Goshawk				X						
White-bellied Sea-Eagle						X	X			
Wedge-tailed Eagle		X	x	X	x		X		X	
Little Eagle						X				
Spotted Harrier	X							X		х
Brown Falcon	X	X		X		x	x	X	X	X
Australian Kestrel	X					X	x	X		X
Brown Quail								Х	х	X
Eurasian Coot										X
Brolgas	x	X	x	X		X		X	X	X
Australian Bustard	x	X					X			
Comb-crested Jacana	x									х

Bird	1	2	3	4	5	6	7	8	9	10
Masked Lapwing					х		х			x
Red-kneed Dotterel					^		Α.			X
Red-capped Plover						х				Α
Black-fronted Plover	X					X	X	х		X
White-headed Stilt	•					^•	520	350		X
Australian Pratincole					х	х	X			X
Silver Gull	х				200	177	5.5%			
Whiskered Tern	200									x
Gull-billed Tern								X		
Peaceful Dove	x	х	x	X		x	х	Х	х	х
Diamond Dovc	x					х	х	х	х	X
Bar-shouldered Dove		х		X	х	х	x	х	х	X
Common Bronzewing		1070					х			
Crested Pigeon								х	X	
Spinifex Pigeon	x								х	
White-quilled Rock-pigeon									Х	
Red-tailed Black Cockatoo	х	х	х	x	Х	X	X	X	x	X
Galah	х	X	х	x	X	х		х		X
Little Corella	х	Х	х	х	х	х	x	X	X	X
Sulphur-crested Cockatoo	х	х	х	х	х		x	x	x	X
Rainbow Lorikeet	х	х	x	x	Х	x	x	x	x	X
Varied Lorikeet	х	X	x		х		x	X	X	X
Red-winged Parrot						x		x		
Cockatiel	X	X					X	X		
Budgerigar	x	х			х	X	X	x		x
Northern Rosella		Х	x		X	x	X	x	x	
Pallid Cuckoo						x				
Brush Cuckoo			X							
Horsfield's Bronze-cuckoo										x
Pheasant Coucal									X	
Southern Boobook					X					
Barking Owl								X	X	X
Spotted Nightjar					X					
Azure Kingfisher	X			X	X				X	X
Blue-winged Kookaburra		X	x	X	X	X	x	x	x	X
Red-backed Kingfisher										X
Sacred Kingfisher		X								
Rainbow Bee-eater	X	x	x	x	X	x	x	x	X	X
Singing Bushlark	$\mathbf{X}_{\mathbb{S}^{1}}$						x	X		X
Tree Martin	X					x				X
Fairy Martin								X	X	X
Richard's Pipit			X							X
Black-faced Cuckoo-shrike	х	X	X	x	X	X	x	X	X	X
White-bellied Cuckoo-shrike	x	Х	X			x	x		X	X
Ground Cuckoo-shrike							х			
White-winged Triller	х	X	X	х		x		X	X	X
Jacky Winter	х	X	X	x		х	X	x		
White-browed Robin					x					
Rufous Whistler	x	X		X		X		X		
Restless Flycatcher	x	X	x	X	x	X	X	X	X	
Mangrove Fantail						X				
Northern Fantail		х	x	X	х		X		x	X
Willie Wagtail	x	X	_ X	X	х	X	X	X	х	X
Grey-crowned Babbler	х	X				Х	X			
Golden-headed Cisticola	х		x							
Purple-crowned Fairy Wren		X	x	X						
Red-backed Fairy-wren	x	X	X	X	x	X			x	X
Weebill									x	

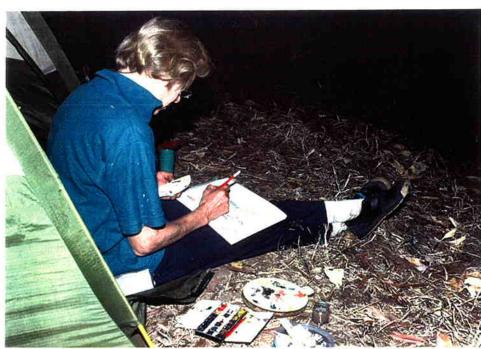
Bird	1	2	3	4	5	6	7	8	9	10
Varied Sittella				x	х	х				
Black-tailed Treecreeper	х									
Silver-crowned Friarbird			х	x	х	x	x	х	X	x
Little Friarbird	x	х	x	x	X	X	X	x	x	X
Blue-faced Honeyeater	x		х			x			х	X
Yellow-throated Miner							x	x		x
White-gaped Honeyeater	x	х	Х	х	х	x	х		х	х
Yellow-tinted Honeyeater	x	X	x	х	х	x	x	x	x	Х
Black-chinned Honeyeater		х		х						
White-throated Honeyeater		х	х	х				X		
Brown Honeyeater		x	x	x	x	x		x	х	x
Bar-breasted Honeyeater			X	x		x	x	x	x	x
Rufous-throated Honeyeater		Х		x		x		x	x	
Banded Honeyeater	X	х				x				
Red-headed Honeyeater						x				
Mistletoebird					х	x				
Striated Pardalote	x	x	x	X	x	x	X	X	X	X
Crimson Finch	X	x	X	x	х			x	x	х
Zebra Finch	х	x						x	x	X
Double-barred Finch	X	x	х	x	x	x	x	x	X	X
Masked Finch	x	X						x		
Long-tailed Finch	X	x		x	x	x		x		X
Pictorella Mannikin								x		
Chestnut-breasted Mannikin						X				
Gouldian Finch						X				
Yellow Oriole					x					
Olive-backed Oriole									x	
Great Bowerbird	X					x	X		x	
Australian Magpie-lark	X	x	X		x	x	X	X	X	X
White-breasted Woodswallow		X			X			X		
Masked Woodswallow	X							X		
Black-faced Woodswallow	X	x	X	x			x	x	X	X
Little Woodswallow	Х	x	X	x	x	x	x	x	X	Х
Grey Butcherbird										X
Pied Butcherbird	X	x	x	x	x	x	x	x	x	X
Australian Magpie	X	X	X							
Little Crow	X	X					X			
Torresian Crow	X	X	X	x	X	x	X	x	x	x

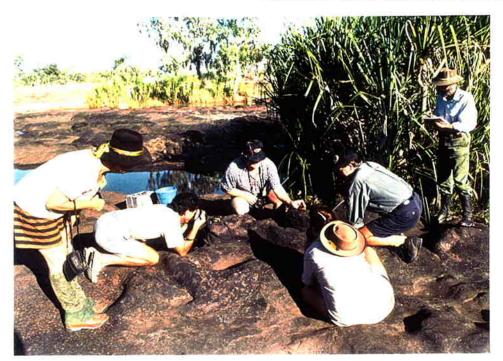




Examining one of the Wells at abandoned Pago Mission site.

Dr Jocelyn Farnsworth sketching.





Photographing Red-necked Turtles at King Edward River.