

Meetings are *generally* held on the second Wednesday of every month, commencing at 7:45 PM, in Blue1.1.14 (Business Faculty Building) on the Casuarina Campus of Charles Darwin University.
Subscriptions are on a financial-year basis and are: Families/Institutional - \$30; Singles - \$25; Concessions - \$15. Discounts are available for new members – please contact us.



This Roundface Batfish *Platax teira* was photographed by Victor Gomelyuk.

Victor recorded the species whilst surveying fish on reefs in Port Essington, Cobourg Peninsula - see note on page 6.

# CONTENTSClub activities .. p2Club notices .. p3wader report .. p4-5marine fish .. p6Turkey .. p7–8East Point .. p9bird observations .. p10recent literature .. p11

Disclaimer: The views expressed in Nature Territory are not necessarily those of the NT Field Naturalists Club Inc. or members of its Committee.

# **Club activities**

March meeting. Wednesday March 10, 7:45 PM. Blue1.1.14 (Business Bldg.), CDU.

# **Richard Noske**

# "Birdwatching tourism in two mega-biodiverse regions: Papua and Brazil"



Black-sided Robin, photographed near Jayapura, Papua, by Richard Noske.

Richard will talk about birds and birdwatching tourism in the Arfak Mountains of West Papua (the Vogelkop Peninsula, New Guinea), drawing upon his experiences, his photos of landscapes and birds, and the findings of PhD researcher Sharon Harwood (Richard's student). This will be compared with ecotourism in other parts of Indonesia, as well as that in another mega-biodiverse region – Brazil's Pantanal.

For most, Richard needs little introduction. For any who've not met him, Richard has recently retired from a long-held position as a Senior Lecturer in biology at Charles Darwin University. His research interests include mangrove birds, cooperative breeding species, cuckoos and Indonesian birds.

**March field trip.** Rapid Creek estuary and surrounds: general natural history. Saturday March 27. Meet at 8AM in the carpark by the footbridge (opposite Sergison Cct.) near the mouth of the Creek. We'll seek out the resident family of Grey-crowned Babblers and perhaps a Tawny Frogmouth sleeping in the Casuarinas; walk Rapid Creek to learn about the mangroves and seek out mangrove-specialist birds such as Red-headed Honeyeater, Yellow White-eye, Collared Kingfisher and, if we're very lucky, a Chestnut Rail; listen out for the resident roost of flying foxes; and look for the many woodland bird species that live in the area such as Long-tailed, Double-barred and Crimson Finches, Yellow Oriole, Figbird and Rainbow Bee-eater. For more information, contact Chris Parker of Fisherking Safaris, phone 8985 5972 or email *chris.parker@kingfisherbirdsafaris.com.au*.

**April 2010 meeting.** Wednesday April 14. Steven Reynolds: *Pig-nosed Turtles and the Kikori* region of Papua New Guinea.

May 2010 meeting. Wednesday May 12. Stuart Young: The Kalahari.

November 2010 meeting. Wednesday November 10. Azlan: Mangrove birds.

# **Top End Native Plant Society activities**

**Thursday March 18.** Ben Stuckey will be the speaker at the March meeting. Ben is a technician at the NT Herbarium and will be speaking about his website *Wildflowers of the Darwin Region*. Ben has developed this website to assist people identify native plants using the colour of the flowers.

**Sunday March 21.** The March field trip will be surveying the threatened and cryptic herb *Typhonium taylori* in the Howard River system. Meet at the corner of the Stuart Hwy and Girraween Road near Coolalinga at 8.30 AM for a half-day trip.

General meetings are held on the 3<sup>rd</sup> Thursday of the month at the Marrara Christian College, corner Amy Johnson Ave. and McMillans Road, and commence at 7:30 PM (speaker at 8 PM). For more information, contact Russell Dempster on 8983 2131.

# **Club notices**

### Welcome to new members: Judit Szabo; Chris Parker

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#### Thank you

The previous issue was proof-read by **Fiona Douglas** and collated and mailed by **Susan Jacups**. It was printed by **Stuart Young** and **Don Franklin** using equipment kindly made available by **Collections**, **Biodiversity and Biological Parks** from the Department of Natural Resources, Environment, the Arts & Sport, and the **School for Environmental Research** at Charles Darwin University.

#### Newsletter contributions welcome

Sightings, reports, travelogues, reviews, photographs, sketches, news, comments, opinions, theories ....., anything relevant to natural history. Please forward material to Don at *eucalypt@octa4.net.au* or the Club's postal address, or contact him on 8948 1293.

Deadline for the April newsletter: Friday March 26.

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Need a Club membership form? Go to: http://sites.google.com/site/ntfieldnaturalists/membership-1.

## Club library

Donation to library by **Stephen Garnett**: Dutson G, Garnett S, Gole C. 2009. *Australia's Important Bird Areas. Key sites for bird conservation*. Birds Australia Conservation Statement No. 15: Melbourne. 40 pp.

The Club's journal and book collection is available to members. Lists of holdings can be found on our website: <u>http://sites.google.com/site/ntfieldnaturalists/home/library/</u>. The library is housed in two sections:

<u>Books, reports and CDs</u>: at the medical clinic of Dr. Lyn Reid in the Rapid Creek Business Village. This can be accessed directly between 9 AM and 2:30 PM Tuesday to Thursday, and 4–6 PM on Tuesday, or indirectly by phoning Lyn at work on 8985 3250.

<u>Journals</u>: in the office of Don Franklin at CDU Casuarina (Red 1.2.34 = room 31.2.34). These can be accessed directly during working hours, or by ringing Don on 8946 6976 (w) or 8948 1293 (h).

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## Northern Territory Naturalist

Great news: as a result of a submission driven mainly by Gay Crowley (and presumably as recognition of our journal's quality!), the *Northern Territory Naturalist* has received a Category C classification by the Australian Research Council (<u>http://www.arc.gov.au/era/era\_journal\_list.htm</u>). This means that academics and other researchers will receive official recognition for publishing with us, important in the competitive business of obtaining funding for their work. Thanks very much, Gay.

The Editorial Committee of the Club's journal, the *Northern Territory Naturalist*, is now calling for manuscripts for issue no. 22. The journal publishes works concerning any aspect of the natural history and ecology of the Northern Territory or adjacent areas of northern Australia. and may include Research Papers (Articles or Short Notes), Reviews and Species Profiles.

The *Northern Territory Naturalist* is a registered, peer-reviewed journal (ISSN 0155-4093). Author instructions may be downloaded from <a href="http://sites.google.com/site/ntfieldnaturalists/home/journal">http://sites.google.com/site/ntfieldnaturalists/home/journal</a>. If possible, manuscripts should be submitted in digital form by emailing to *michael.braby@nt.gov.au*. Editors of the journal are Dr Lynda Prior, Dr Michael Braby and Dr Chris Tracy.



## Sewage Pond Keys – Leanyer and Alice Springs

NT Field Naturalists have access to this world-famous bird-watching spot. The key can be collected from Graham Brown (h) 8945 4745. A refundable \$50.00 deposit is required at time of collecting the key, which is available only to members. Conditions imposed by PowerWater Corporation apply to all visitors to the ponds. These are not onerous and are made clear at time of picking up the keys.

# Shorebird counts: Sept. to Dec. 2009

### Gavin O'Brien

September to December is the most exciting period of the year for shorebird watching and counting with the influx of large numbers of birds from the north, many still carrying richly-coloured breeding plumage. A large proportion of these birds pass through Darwin to locations in the south of Australia, stopping on the north coast to rest and forage to regain their strength after a long flight. Many return to the Northern Hemisphere through sites other than Darwin during the Austral autumn. Consequently this is the time of the year when we expect the largest counts. In addition to the shorebirds normally seen on and near the beaches, there are a number of migratory waders which make use of waterholes, lagoons and other inland sites, the numbers of most of which also peak in locations near Darwin at this time of the year.

The tables contain statistics from counts taken by various counters on the regularly counted tide affected locations: East Point, Spot On Marine, Nightcliff, Sandy Creek and Lee Point.

**Table 1.** Maximum numbers of migratory waders counted at any of the five regularly counted tidal sites for each month. Only the twelve most frequently counted species are presented. SndyC = Sandy Creek Mouth / Casuarina Beach; SOM = Spot On Marine; NRcks = Nightcliff Rocks.

	September		00	October		November		December	
Grey Plover	15	SndyC	26	SOM	27	Lee Pt	25	SOM	
Lesser Sand Plover	16	Lee Pt	50	Lee Pt	25	Lee Pt	22	East Pt	
Greater Sand Plover	890	Lee Pt	1100	Lee Pt	900	Lee Pt	1200	Lee Pt	
Black-tailed Godwit	1	Lee Pt	150	Lee Pt	65	Lee Pt	43	Lee Pt	
Bar-tailed Godwit	33	Lee Pt	100	Lee Pt	112	Lee Pt	80	Lee Pt	
Whimbrel	20	SOM	40	SOM	75	SOM	80	SOM	
Ruddy Turnstone	32	NRcks	31	East Pt	30	East Pt	41	East Pt	
Great Knot	1430	Lee Pt	2800	Lee Pt	3090	Lee Pt	4920	Lee Pt	
Red Knot	300	Lee Pt	200	Lee Pt	350	Lee Pt	410	Lee Pt	
Sanderling	25	Lee Pt	47	SndyC	55	SndyC	64	Lee Pt	
Red-necked Stint	221	Lee Pt	287	Lee Pt	280	Lee Pt	120	Lee Pt	
Grey-tailed Tattler	37	East Pt	21	NRcks	32	East Pt	31	Lee Pt	

**Table 2.** Counts (five sites combined) of migratory waders during spring tide phases for the twelve most frequently counted species (from Table 1) during the period (Sept. - Dec. 2009) including an average of spring tide counts from the table for the prior period (May to August 2009) for contrast.

	Previous	7-8/09	20-21/09	18-20/10	3-4/11	16-17/11	3-4/12	14-16/12
Grey Plover	0	13	17	40	28	36	26	35
Lesser Sand Plover	1	6	22	64	40	38	28	23
Greater Sand Plover	203	1025	956	1359	1009	455	1475	493
Black-tailed Godwit	0	1	0	120	0	7	7	47
Bar-tailed Godwit	0	30	6	45	59	82	27	52
Whimbrel	9	37	11	61	83	5	21	102
Ruddy Turnstone	1	54	0	34	27	25	30	73
Great Knot	14	297	1462	3061	3509	3586	6042	3435
Red Knot	0	0	70	200	385	270	422	160
Sanderling	4	23	16	67	59	55	64	72
Red-necked Stint	9	143	231	335	188	264	170	83
Grey-tailed Tattler	39	26	24	37	15	7	28	31

Table 2 indicates a substantial increase in the numbers of most of the listed shorebirds in September compared to the "winter" period (Table 2), as shorebirds arrive from the north. The general trend has been for a steep increase in numbers for most species from September until late October, a reduction in some species or slowing of the increase during November and another brief peak in early December.



The Red-necked Stint was very much more numerous during the September to December period than the dry season months. Photo: Andrew Bell.

The twelve most frequently seen species for September to December does not include two species listed on the May to August tables (*Nature Territory* Oct. 2009), Eastern Curlew and Common Sandpiper. Although their numbers also increased, the increase was not as great as for many of the species listed in this report.

The Grey-tailed Tattler is an exception to the general trend. No count total during the September to December period exceeded the average of those carried out in the previous four months. The unusual number of "over-wintering" (dry season) Tattlers was referred to in the previous report (*Nature Territory* Oct. 2009).

The statistics for this period are compiled from counts undertaken by a number of counters including the those who regularly contribute statistics to the NTBirds email group and the group of people who attended the "2020 Shorebirds" workshop (*Nature Territory* Nov. 2009). A number of counters also submitted counts for non-tidal areas with shorebirds, most species of which are not well-represented in tidal areas. Maximum counts for these species included 398 Sharp-tailed Sandpiper and 54 Marsh Sandpiper at McMinns Lagoon during October, and 400 Little Curlew at Holmes Jungle. Another notable maximum (at a tidal location) was 100 Oriental Plover at Nightcliff Rocks; these are regularly found here late in the morning from mid-September to mid-November.

## What makes the Gulf of Carpentaria tick? (this and following from *Recent Literature*, page 11)

Many tropical marine areas are relatively poor in nutrients and thus not very productive. One potential source of nutrients is sediment outflow from rivers. The Gulf of Carpentaria is of particular interest in this respect because it is one of the most pristine marine waterbodies on Earth. Burford *et al.* (2009) presented an analysis of nitrogen flows in the Gulf. They found that rivers were *not* major contributors of nitrogen. Instead, during the warm, relatively calm conditions of the wet season, blooms of the blue-green algae (phytoplankton) *Trichodesmium* sp. fix nitrogen, forming the major source of this critical nutrient. Detritus from the *Trichodesmium* blooms also sinks to deeper, darker waters beyond the zone where photosynthesis can occur. In the dry season, windier conditions generate turbulence, mixing water from various depths and returning some of this material to shallow water where it can drive photosynthesis.

## Coral reefs and cyclones

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In a survey along the coast of the Arafura Sea and the Gulf of Carpentaria, Harris & Heap (2009) found deposits of sand and gravel up to 10 m thick adjacent to and on one side of submerged coral reefs. Radiocarbon dating demonstrated that the deposits are less than 12,000 years old. They were aligned along the coast relative to the reef and on the downwind side of the reef relative to the direction of cyclonic winds. Hydrodynamic modelling was used to demonstrate how the interaction of the eye of cyclones and the coast could generate strong currents that they argue are responsible for these talus deposits.

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## New marine species

The Top End coast and nearby waters continue to yield species new to science. Those described in this month's literature are: a segmented worm from "continental shelf depths in the Arafura Sea" (Avery *et al.* 2009), a marine crab from the sea off Arnhemland (Davie 2009), five intestinal parasites from a stingray in the Arafura Sea (Fyler *et al.* 2009), a sand-hopper from Darwin beaches (Lowry & Springthorpe 2009), an anglerfish that is widespread in in-shore waters of northern Australia and Indonesia (Pietsch *et al.* 2009)

# Marine fish (from Recent Literature, page 11)

## Monitoring reef fish at Cobourg Peninsula

Using baited remote underwater videos, Gomelyuk (2009) compared the fish present at three shallow marine sites, a sandy bank, a rocky bank and a dead coral reef, at Port Essington, Garig Gunak Barlu National Park. The three sites had quite different but overlapping fish assemblages, with coral-associated species present even on the sandy bank and soft-bottom associated species present even on the coral reef and rocky bank. Many of the species present were habitat generalists. Species richness was greatest at the rocky bank and least on the sandy bank, but total abundance was greatest at the coral reef and least on the rocky bank.

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#### Fisheries biology & management

Knowledge of the biology of commercially-fished species is critical to achieving sustainability when fishing pressure is substantial. Several recent papers report such information for our region.

Slow-growing, long-lived species such as Red Snapper (*Lutjanus erythropterus* and *L. malabaricus*) are particularly vulnerable to over-fishing. Fry & Milton (2009) report a variety of population parameters for these species in northern Australia and eastern Indonesia, including maximum ages of 42 and 48 years respectively.

It makes a big difference to sustainability whether one is fishing a single larger population of a species or a number of smaller populations. Using chemical (isotope) analysis of otolith bones, Newman *et al.* (2009) showed that the Narrow-barred Spanish Mackerel *Scomberomorus commerson* population in northern Australia including the Gulf of Carpentaria is distinct from those of seas of



Slow growing and long-lived: Red Snapper. Photo: courtesy of Department of Resources.

the north-west and east of Australia (i.e. few individuals move from one population to the other) – and should thus be managed as a discrete fishery.



Discrete populations: Spanish Mackerel. Photo: courtesy of Department of Resources.

Another method to identify fish populations is to determine whether their parasite faunas are spatially discrete or intergradational. This is the approach taken by Charters *et al.* (2010) for the commercially important in-shore fishery of Grey Mackerel *Scomberomorus semifasciatus.* The authors identified four populations in the region.

The catch of non-target species can be a major conservation concern. In northern Australia, this is particularly so with the prawn fishery. Zhou *et al.* (2009a) developed a new methods for assessing the risk to 456 bony fish species caught as by-catch and for which the amount of data is limited. They found that two species were put at risk by the existing bycatch and a further 21 possibly so. They attribute the relatively low number of species at risk to the presence of most species in non-fished areas. Milton *et al.* (2009) tested three by-catch reduction devices and found that the catch of sea snakes could be reduced by 85% and small (non-target) fish by 48% with negligible reduction in the prawn catch.

# Land and land use in Turkey

#### Reporting back on the talk by Gay Crowley

Flanked by the Black Sea in the north, the Mediterranean Sea in the south, and the Aegean Sea in the west, Turkey is a Eurasian country roughly the size of NSW. It has a small European sector in the north, separated from the Asian continent by the Bosphorus/Turkish Strait. The Asian provinces, known as Anatolia, make up the majority of Turkey's area. It is a country of crazy traffic, but curiously, minus the constant use of car horns common in other parts of Asia.

Gay has visited Turkey a few times, with the first trip in 2002, when she visited the west coast. In 2009 she travelled to Bodrum on the west coast, to Antalya and then across to Kayseri. One of the reasons for her return was to do a walk along the spectacular Mediterranean coastline.

Turkey contains a fault line running across the country which makes it prone to earthquakes. The country contains many fine examples of architecture, mostly made of stone, and some have unfortunately been damaged due to earthquake activity. The southern part of Turkey is dominated by limestone, while the north contains large areas of volcanic rock. The geology of Turkey lends itself to some fascinating uses of the landscape, which will be discussed further below.

Around 30% of the land in Turkey is arable, and 26% is forested. There are extensive areas of rough terrain, unsuitable for agriculture. Picturesque spots, particularly around the coast, are prone to development.

The peak of civilisation in Turkey occurred when Byzantine Romans took over most of the country around 324 BC. The influence of Greek settlement can also be seen in Turkey, with some architecture from Alexander the Great's reign. Byzantine influence can be seen in structures such as aqueducts, which could be built in two years or less. Istanbul (formerly known as Byzantium and Constantinople) is the largest city in Turkey and was the centre of Christianity for centuries. Hagia Sophia, a magnificent building in Istanbul, was originally a Christian church and is considered one of the greatest surviving examples of Byzantine architecture. It features surfaces richly decorated with intricate gold leaf mosaics. Another stunning mosque in Istanbul is the Blue Mosque.

There are many places in Turkey which have served as important sites in world history. Ephesus on the Aegean Sea coast was a major ancient Greek city and served as a port. Siltation and aggregation of the coastline has resulted in coastline 7 km from its original position. The Gallipoli campaign of World War I took place on the Gallipoli peninsula in 1915-16; Australians and Turkish people have a deep respect for each other which continues today.

Gay visited some fascinating geological areas: limestone rich areas where lime-rich water flows off hill slopes, "Yogi bear country" consisting of extensive areas of pine trees on underlying limestone. Lycia, on the south coast, is famous for its intricate rock cut tombs carved into the cliff face, which are dated to around



2000 BC. It was in this area that Gay did some walking along the spectacular coastline, on the Lycian Way. Marked with large yellow signs, the walk follows donkey trails which up until 10 years ago were the only connecting routes between villages. The area is now served by a minibus service which operates on a "when it's full it departs" basis. Locals use the track to collect firewood, as well as rubbish. The walk features stunning views along the Mediterranean coastline.

Stunning landscapes along the Lycian Way: view of Baba Dagi. Photo: Gay Crowley.

Gay showed some photos showing some hill slope areas of Turkey where there are large boulders – many worryingly larger than the houses below, particularly in a country renowned for the considerable activity of its tectonic plates. Passing through Çırali, some other interesting features were encountered. Where the limestone thins there are permanent vents of gas which emit burning methane, known as the fires of chimera.

Nature Territory, March 2010

#### Tida Nou

The chimera is a Greek mythic figure with the body of a lion and the head of a goat, which breathes fire; the area of gas vents is associated with this myth.

Göreme is a town of modern buildings in an ancient landscape. The town features mushroom-like peaks of rock, formed by natural erosion processes. The area was heavily populated in the time of Alexander the Great. Thousands of people lived in homes carved into the rock formations. Today, they are no longer lived in, but open to visitors (but not recommended for the claustrophobic). Modern Turkey is encroaching on some archaeological sites; the Göreme area is a UNESCO heritage site which protects the significant values of the area.

Derinkuyu, in the Central Anatolia region of Turkey, is famous for its underground villages. Carved into the rock, the villages have previously supported as many as 20,000 people. The villages are open to visitors, who can go as many as 6 levels underground (some villages extend for 9 levels underground). People lived there when under siege by pirates. The underground villages include churches, living rooms, waiting areas carved into volcanic ash and lock-off chambers which could be blocked off with large boulders.



Mushroom peaks of naturally eroded volcanic ash (tuff). Photo: Gay Crowley.

Gay didn't encounter much wildlife, which is not a prominent feature of Turkey (but managed to tick off the Yellow-vented

Bulbul). She visited Dalyan, a beach where loggerhead turtles nest, and showed a photo of the bounty of turtle souvenirs which could be purchased in the area. Gay found that there seems to be a growing awareness of the environment in Turkey, with increased use of initiatives such as solar power being used, including in tourism operations. Some of the vegetation was familiar, with many of the weed species found in south eastern Australia growing in Turkey, including thistles, heliotropes, Pittosporum and Verbena. Some edible plants were also encountered, including Caper Berries, Oregano and Olives. Crops included Carob, Pomegranates and Grapes. Turkey is famous for its pine honey. Pine honey is produced by aphids which feed on the sap of certain pine species when there is little in flower. The aphids spread the honeydew on tree trunks, which is then collected by bees. Beehives dot the landscape in these areas and the pine honey produced in these areas is famous throughout Europe. A popular tradition involves Turkish couples purchasing land in steppe areas. The land is used to grow poplars when the couple has a child; the trees are harvested after a significant milestone such as a graduation or marriage.

Many thanks to Gay for providing a whirlwind tour of this fascinating country. No doubt you have inspired members to add Turkey to their list of places to visit.

#### Advance notice: Fogg Dam Field Day, Sunday April 11 from 8 AM.

A free fun filled day with activities for the whole family including guided walks, talks and childrens' activities including a treasure hunt. Discover more about Fogg Dam and why it's a centre of significant scientific research. For more information <u>www.foggdamfriends.org</u> or contact Leisa Baldwin 0418811932.



The Fogg Dam wetland, one of many habitats in the Fogg Dam Nature Reserve.

The large-leaved waterlily in the foreground is the Lotus Lily *Nelumbo nucifer*, the grass in the foreground is Spiny Mud-grass *Pseudoraphis spinescens*; the fern mid-left is the Creeping Swamp-fern *Cyclosorus interruptus*; and the erect sedge in the middle is the Tall Spike-rush *Eleocharis sphacelata*. Photo: Don Franklin.

Nature Territory, March 2010

# The East Point monsoon forest

#### Reporting back on the February 2010 excursion

#### Louise Finch

On Sunday 14 February around 15 people met at 9am in the 'Pee Wee's at the Point' car park. The site was full of birdsong and butterflies, accompanied by the occasional air-raid siren or waft of brass-band music from the open day at the nearby East Point Military Museum, and with a back ground of high-revving micro-engine noise from the nearby East Point Aeromodellers Club. We were promised Rainbow Pittas (*Pitta iris*); once we were inside the forest, three or more birds obliged with calling but not everyone managed a sighting. Not to worry. There was enough butterfly and bird action – not to mention plant ID-ing to keep us occupied until midday. Fiona Douglas and Don Franklin took us on a gentle ramble along the tracks through the



Attracting butterflies: Lime Berry *Micromelum minutum.* Photo: Deb Bisa.

monsoon vine forest.

I hadn't used the tracks inside the forest for years and was really impressed with the lack of weedy plants inside and along the sunny edges. Darwin City Council and its helpers have created a great natural history resource. *Delonix regia* aka Poinciana, originally from Madagascar, is the most obvious weedy plant on the roadside, having the potential to form a dense canopy and exclude native species and with young trees already into the edges of the forest. We saw hardly any of the old foe, *Leucaena leucocephala* aka Coffee Bush.

Don pointed out butterfly food plants *Capparis sepiara* and *Ziziphus oenopolia* at the beginning of the walk and lots of butterflies were making good use of the flowers of *Micromelum minutum* found along sunny edges.

Most of the plants that caught our attention were familiar but their names were elusive on a Sunday morning. This exchange gives the general flavour:

> Louise: *What's this plant?* Fiona: *If I could remember the name, that'd help!*

The Field Key for Monsoon Rainforest Flora of the Darwin Region (Booth R, Harwood RK & Mangion CP. 2001) therefore proved invaluable. Still, we identified Strychnos lucida, Antiaris toxicaria, Diospyros compacta, Cordia dichotoma, Drypetes deplanchei, Cupaniopsis anacardioides, Pachygone ovata, Polyalthia australis, Litsea glutinosa, Wrightia pubescens, Exocarpos latifolius, Tabernaemontana orientalis (previously Ervatamia orientalis), Albizia lebbeck, Antidesma ghesaembilla and lots of Amorphophallus

*paeoniifolius* many of which were approaching 2 m in height. Common names and more information on the majority of these plants are, reassuringly 'in Brock' (*Native Plants of Northern Australia* Brock J. 1993 and later editions). Very few tall trees or non-flowering or fruiting plants attracted our attention. We were drawn more to the colour and movement of butterflies and birds and to a large variety of fungi on the forest floor. The ramble took



Sheryl Keates, Chris Parker and Arthur Keates (hiding) in the forest. Photo: Tissa Ratnayeke.

an enjoyable three hours. Thank you to the leaders. [more on next page]

One of many fungi (right). Photo: Tissa Ratnayeke.



Nature Territory, March 2010

# **Interesting bird sightings**

## 23 January to 18 February 2010

#### Compiled by lan Hance

Sightings are as reported (unvetted, unconfirmed) and have been mostly compiled from the e-mail digest of the NT birder website (<u>http://groups.yahoo.com/group/ntbirds</u>) moderated by Niven McCrie.

Species	Date	Location	Observer/s	Nos./comments
Waterbirds & seabirds				
Tahiti Petrel	<i>c.</i> 25 Jan.	Groote Eylandt	Braden McDonald	2
Great Frigatebird	<i>c.</i> 25 Jan.	Groote Eylandt	Braden McDonald	some nos.
Great-billed Heron	31 Jan.	Wickham Point	Arthur & Sheryl Keates	1 adult & 1 immature
Chestnut Rail	21 Jan.	Liverpool River & tributary	Marc Gardner	3&2
Black-headed Gull	28 Jan.	between Buffalo Ck. & Lee Point	Peter Kyne, Micha Jackson	<i>et al.</i> 1
Waders				
Aust. Pied Oystercatcher	30 Jan.	Spot On Marine & East Point	Fiona Douglas, Ian Hance	16 – large no.
Sooty Oystercatcher	23 Jan.	East Point western rocks	Fiona Douglas, Ian Hance	2
Little Ringed Plover	23 Jan.	Leanyer Sewage Ponds	Peter Kyne& Micha Jackson	า 2
Swinhoe's Snipe	30 Jan.	McMinns Lagoon	Darryel Binns	21
Birds Of Prey				
Black-breasted Buzzard	11 Feb.	Gunbalunya	Marc Gardner	1
Pacific Baza	23 Jan.	near Palmerston Sewage Ponds	Mike Jarvis	1
Boobook Owl	2 Feb.	Croker Island	Marc Gardner	1
Passerines				
White-breasted Whistler	17 Jan.	Walker R. (mainland adj. Groote B	Eylandt) Braden McDonald	1 male
~	<i>c.</i> 6 Feb.	Kulaluk Bay	Fiona Douglas et al	1 male & 1 female
Zitting Cisticola	11 Feb.	Croker Island	Marc Gardner	1
Australasian Pipit 6 we	eeks up to 1	Feb. Maningrida	Johnny Estbergs	large nos. – Influx

A migratory visitor to the Top End in very small numbers only, the Little Ringed Plover was seen again during January at the Leanyer Sewerage Ponds, where this individual was photographed by Andrew Bell.

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#### East Point field trip report *continued*

Birds observed, list compiled by Chris Parker (32 species): Orange-footed Scrubfowl, Magpie Goose, Bush Stone-curlew, Emerald Dove, Peaceful Dove, Bar-shouldered Dove, Rose-crowned Fruit-Dove, Pied Imperial-Pigeon, Red-tailed Black-Cockatoo, Little Corella, Little Bronze-Cuckoo, Rainbow Bee-eater, Rainbow



Pitta, Green-backed Gerygone, White-gaped Honeyeater, Rufous-banded Honeyeater, Dusky Honeyeater, Red-headed Honeyeater, Brown Honeyeater, Helmeted Friarbird, Little Friarbird, White-bellied Cuckoo-shrike, Varied Triller, Grey Whistler, Australasian Figbird, Yellow Oriole, Northern Fantail, Shining Flycatcher, Magpie-lark, Mistletoebird, Double-barred Finch, Crimson Finch.



Butterflies observed, list compiled by Don Franklin (18 species): Bright-orange Darter, Pale Triangle, Fuscous Swallowtail, Lemon Migrant, Large Grass-yellow, Small Pearl-white, Caper Gull, Yellow Albatross, Orange Lacewing, Spotted Rustic, Blue Argus, Meadow Argus, Small Brown Crow, Common Crow, Purple Oak-blue, Purple Line-blue, Speckled Line-blue, Black-spotted Grassblue.

By far the most abundant butterfly on the day was the Small Pearl-white, seen here feeding at the flowers of Lime Berry *Micromelum minutum*. The caterpillars of this butterfly feed on the foliage of the thorny scrambler *Capparis separia*. Photo: Deb Bisa.

Nature Territory, March 2010

# **Recent literature about Top End natural history**

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#### MARINE & COASTAL

## Compiled by Don Franklin

#### Marine environment

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- Gomelyuk VE. 2009. Fish assemblages composition and structure in three shallow habitats in north Australian tropical bay, Garig Gunak Barlu National Park, Northern Territory, Australia. *J. Marine Biologic. Assoc. UK* 89: 449-460.
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#### Coastal environment

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- Fry GC, Milton DA. 2009. Age, growth and mortality estimates for populations of red snappers *Lutjanus erythropterus* and *L. malabaricus* from northern Australia and eastern Indonesia. *Fisheries Science* 75: 1219-1229.
- Milton DA, Fry GC, Dell Q. 2009. Reducing impacts of trawling on protected sea snakes: by-catch reduction devices improve escapement and survival. *Marine and Freshwater Research* 60: 824-832.
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- Zhou S, Griffiths SP, Miller M. 2009. Sustainability assessment for fishing effects (SAFE) on highly diverse and datalimited fish bycatch in a tropical prawn trawl fishery. *Marine and Freshwater Research* 60: 563-570.
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- Davie PJF. 2009. A new genus and species of Macrophthalmidae (Brachyura, Ocypodoidea) from the Northern Territory, Australia. *Crustaceana* 82: 815-827. [marine crab; Arnhemland]
- Fyler CA, Caira JN, Jensen K. 2009. Five new species of *Acanthobothrium* (Cestoda: Tetraphyllidea) from an unusual species of *Himantura* (Rajiformes: Dasyatidae) from northern Australia. *Folia Parasitologica* 56: 107-128. [intestinal parasites on stingray, Arafura Sea]
- Jacobsen IP, Bennett MB. 2009. A taxonomic review of the Australian Butterfly Ray *Gymnura australis* (Ramsay & Ogilby, 1886) and other members of the family Gymnuridae (order Rajiformes) from the Indo-West Pacific. *Zootaxa* 2228: 1-28.
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