



# NATURE TERRITORY

December 2010

Newsletter of the Northern Territory Field Naturalists Club Inc.

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Club web-site: <http://ntfieldnaturalists.org.au/>

Meetings are generally held on the second Wednesday of every month, commencing at 7:45 PM, in Blue 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.



Recently-joined member Ruchira Somaweera is studying – and photographing – the Freshwater Crocodile (*Crocodylus johnstoni*). More of Ruchira's photos of the species are on page 6, featuring a sequence from hatching to adulthood.

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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

**December meeting.** Wednesday Dec. 8, 7:45 PM. Blue 1.14 (Business Bldg.), CDU.

### Christmas social

#### A mystery speaker, a quiz with prizes, and nibbles to finish the evening

Join us for this year's final Club meeting. We are going to keep it friendly and casual, we'll be teasing your grey matter (no, not the stuff on the outside of your skull, just the stuff on the inside), and we'll be handing out prizes. There will also be a mystery speaker talking about Siphandone (hint .... it is a sequel to *Slow boat on the Mekong*), so if you don't know what that is, come along and find out.

We'll also be providing nibbles and light refreshments, so do come along, have some fun, meet other members, exchange stories and make it a memorable end to the year.



If "Siphandone" means not much to you, or nothing at all ... then join us at the December meeting to find out ....

.....  
**December field trip.** Natural history walk, Charles Darwin National Park, led by Graham Brown and Don Franklin. Meet at the NP car park immediately after the gates open at **8AM, Sunday Dec. 12**. Bring binoculars, identification guides etc. (no nets). Come prepared for sun, rain and biting insects.

.....  
**January field trip. East Point. Meet at car park outside PeeWees at 8AM, Sunday, Jan. 23.** Peter Holbery will lead a walk through the reserve. It should be a good time for butterflies and other critters; the Rainbow Pitta should be calling, and some of the monsoon forest plants should be in flower and fruit. Come prepared for rain, sun, mosquitoes; bring butterfly net, binoculars, camera, field guides.

.....  
**February 2011 meeting.** Wednesday Feb. 9. Mike Barrett: *Fungi of northern Australia*.

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## Top End Native Plant Society activities

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). Visit <http://www.topendnativeplants.org.au/index.php> or contact Russell Dempster on 8983 2131.

### Pig-nosed Turtle grant

The Club, on behalf of member Dane Trembath, has been successful in obtaining a Community Action Grant of \$11,000 from the Federal Government for the project:

“Population monitoring of the Pig-nosed Turtle in the Daly River – monitoring nest sites and the impacts of feral animals and learn catching techniques for measuring and microchipping”

This project will provide opportunities for Club members to participate in the project and to learn more about the charismatic animals that we first met at Greg Miles' place during the July excursion. Our success was only announced just before going to press, so anticipate more detail in the future ..... Good work, Dane.

# Club notices

**Welcome to new members: Peter & Jude Ebsworth (welcome back); Margaret Landrigan; Jay Evans & Hannah Seward; Jim Smith; Magen Pettit; Louis Elliott & Cassie Newnes.**

**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](mailto:eucalypt@octa4.net.au) or the Club's postal address, or contact him on 8948 1293.

There will be no newsletter in January. Deadline for the February newsletter: Friday January 21.

**Need a Club membership form?** Go to: <http://sites.google.com/site/ntfieldnaturalists/downloads>.

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

**Books, reports and CDs:** 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.

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

## **Northern Territory Naturalist:**

Issue no. 22 is out – a bumper 108 pages with 11 pages in colour; it contains 5 research articles, 5 research notes and 1 book review. The front cover photo (right) is of the rare Giant Sweet Potato (*Ipomoea polpha* subsp. *latzii*) from central Australia, a survey of which is a feature of the issue. Members should have received their copy by now.

The Editorial Committee of the Club's journal, the *Northern Territory Naturalist*, is now calling for manuscripts for issue no. 23. The journal publishes works concerning any aspect of the natural history and ecology of the Northern Territory or adjacent northern Australia. and may include Research Papers (Articles or Short Notes), Reviews, Species Profiles and Book Reviews.

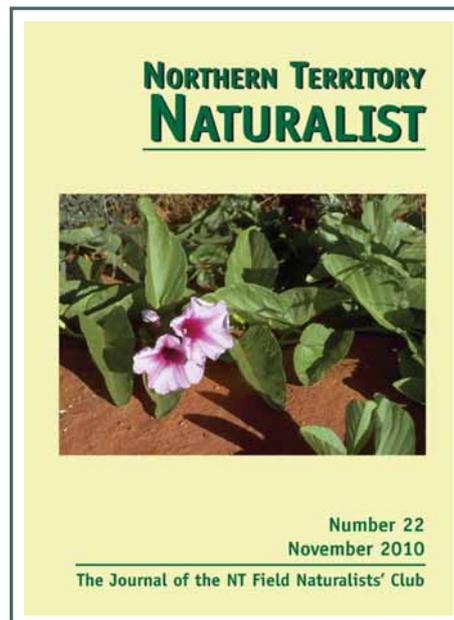
The *Northern Territory Naturalist* is a registered, peer-reviewed journal (ISSN 0155-4093) and is recognised as a Category C publication by the Australian Research Council ([http://www.arc.gov.au/era/era\\_journal\\_list.htm](http://www.arc.gov.au/era/era_journal_list.htm)). Author instructions may be downloaded from our web-site: <http://sites.google.com/site/ntfieldnaturalists/journal>.

If possible, manuscripts should be submitted in digital form by email to [michael.braby@nt.gov.au](mailto:michael.braby@nt.gov.au). Editors of the journal are Dr Michael Braby, Dr Lynda Prior and Dr Chris Tracy.

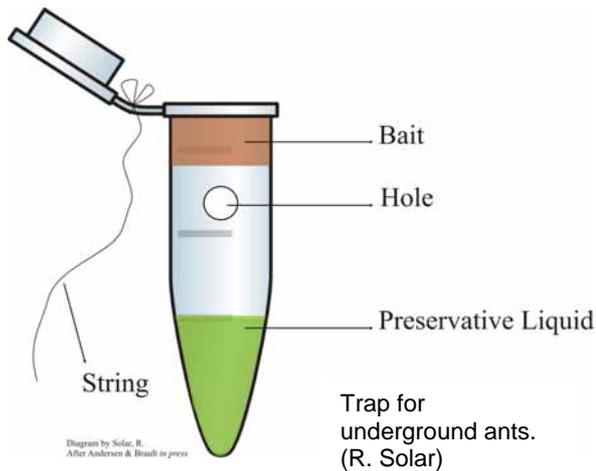
The journal page of the web-site also has an order form for back issues of the *Northern Territory Naturalist*, which are available individually or as a set (some are out of print and available as photocopies only).

**Sewage Pond Keys – Leanyer and Alice Springs:** NT Field Naturalists have access to the world-famous Leanyer bird-watching spot. The key can be collected from Graham Brown, (h) 8945 4745. A refundable \$50-deposit is required upon collecting the key, which is available only to members. Conditions imposed by PowerWater Corporation apply; these will be explained when picking up the keys and include that PWC must be notified during weekday working hours of your intention to visit.

Bryan Baker has keys for the Alice Springs Sewage Ponds, available for collection in Darwin by members before they head south. Bryan can be reached in Darwin on 8948 2196.



# Ants & termites from *Recent Literature*, page 10



## Cryptic ants

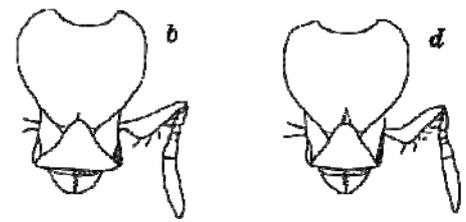
Ants that live underground have been neglected in previous standard ant surveys. Andersen & Brault (2010) tested a trapping procedure to sample them in Stringbark/Woollybutt woodland at Berrimah that had previously been thoroughly surveyed for ants by other means. The traps were vials with holes drilled near the top, the inside smeared with bait – a mixture of honey, peanut butter and fish paste, and half-filled with ethanol/ethylene glycol to collect and preserve any ants that fell in. Vials were variously buried 5, 10 or 15 cm below the soil in holes drilled with a hand auger, and retrieved after 1–4 days. Twenty-nine species were recovered from the traps, of which four had not been detected at the site previously. One of the four, a blind species, was the second most commonly

trapped species. Traps left longer and buried less deeply yielded more ants.

At just 1.5 mm long and living cryptically in the soil and leaf litter, the ant *Pyramica membranifera* (it apparently doesn't have a common name) can easily be overlooked. Widespread in tropical and warmer temperate regions of the world, it is regarded as a “tramp” – a species that moves around with people. Nevertheless, early Australian records – from monsoon rainforest at Berry Springs and in the mound of an Orange-footed Scrubfowl at Fogg Dam – have led to the suggestion that it could be native to Australia. That idea may now need revision, as Burwell *et al.* (2010) report 5 locations in Queensland, four of which are in disturbed agricultural or urban environments.



*Pyramica membranifera*. (WM Wheeler)



## Green Tree-ant

The Green Tree-ant (*Oecophylla smaragdina*) is of considerable interest as a potential biocontrol agent. Its biology is therefore of particular interest, and was reviewed by Crozier *et al.* (2010). “Workers draw leaves together, often forming long chains, and glue them together with larval silk.” Colonies are large and often occupy many nests.

Although most colonies elsewhere have one queen, in the Northern Territory they mostly have more than one. Worker ants are highly variable, with forms specialised to different tasks. Colonies are territorial and have a range of unique odours, derived partly from that of individual workers and varying between nests, which are recognised antagonistically by neighbouring colonies. A commensal spider lives in colonies, mimicking the colony odour to escape detection.



Member of a complex and territorial society: the Green Tree-ant. (Tracey Dixon)

## Termite wars

In an experiment designed to shed light on the role of cooperation in dealing with conflict, Korb & Foster (2010) manipulated colonies (cooperative societies) of two ecologically-similar termite species collected from mangroves in Darwin Harbour. In colonies of *Cryptotermes secundus*, when a king or queen dies, they are replaced by a single worker that develops into a replacement, so the process is relatively peaceful. In contrast, when a king or queen of *Cryptotermes domesticus* dies, about 40% of workers develop into kings or queens and these fight to the death until just one pair remains. The experimental manipulations were: to remove a king or queen, to introduce a colony of the same or the other species, or both an introduction and loss of a king or queen. Almost all colonies of both species survived the loss of a king or queen, but few survived conflicts with other colonies, whether of their own or the other species. When faced with both loss of a king or queen and conflict with another colony, colonies of *C. domesticus* died much quicker than those of *C. secundus*. The authors suggest “that ecological competition among species can greatly exacerbate the impact of internal conflicts, thereby promoting the evolution of within-species cooperation”.

# Butterflies and moths from *Recent Literature*, page 10

## White Albatross: a mystery solved

The White Albatross (*Appias albina*) has long been something of a mystery butterfly in the Top End. Widespread in tropical and sub-tropical Asia, it was known in Australia only from the vicinity of Darwin, Cobourg Peninsula, one island off the coast of Arnhem Land, and at least four islands in the Torres Strait, Queensland. Records were so infrequent that it was uncertain whether it was resident or a rare straggler from overseas. Michael Braby *et al.* (2010) have now set the record straight. The White Albatross is resident, caterpillars feeding on the shoots of the common vine-thicket tree Grey Boxwood *Drypetes deplanchei*. Adults emerge and fly when Grey Boxwood produces new shoots in the wet season, mostly from January to March. The life cycle is completed in about 4 weeks, but it is unclear whether there is more than one generation in a wet season. Adult males are distinctive, but there are three colour morphs of females – white, yellow and intermediate. Only the white morph has previously been illustrated for Australia. The yellow and intermediate morphs could readily be confused, in the field though not in the hand, with the Yellow Albatross (*A. paulina*) or even the Caper Gull (*Cepora perimale*).



## Gove Crow: endangered?

Michael Braby (2010) has also reported on his investigations into the habitat and status of The Gove Crow butterfly (*Euploea alcatheae enastri*). The subspecies “is restricted to Gove Peninsula of north-eastern Arnhem Land, . . . . The subspecies has been listed as an Endangered taxon under federal and Northern Territory legislation, and represents one of only a few cases in the Australian Region in which a tropical butterfly has been targeted for species-orientated conservation. However, accurate status evaluation and conservation management have been hampered by lack of detailed information on spatial distribution, critical habitat, and the extent and severity of threatening processes. Surveys carried out during 2006–2008 indicate that the subspecies has a limited geographical range (extent of occurrence approximately 6,700 km<sup>2</sup>) within which it is recorded from 11 locations or subpopulations embracing a total of 21 sites. Most sites comprise discrete habitat patches that are relatively small in area (<10 ha) within which adults are localised and occur in low abundance (<15 h<sup>-1</sup>). Of the four major habitat types in which *E. alcatheae enastri* was detected, only mixed paperbark tall open forest with rainforest elements in the understorey and rainforest edge (i.e. the ecotone between evergreen monsoon vine-forest and eucalypt/paperbark woodland) comprise breeding habitats. These habitat patches were always associated with permanent creeks or perennial groundwater seepages or springs that form swamplands, usually along drainage lines or flood plains in coastal or near coastal lowland areas. Major threats identified at the site level are habitat modification through altered fire regime and habitat disturbance by feral animals (buffalo, pig); potential threats at the landscape level include habitat loss through invasive species (grassy weeds, tramp ants) and global climate change. However, since critical breeding areas are subject to natural disturbance by both fire and flood, and occasionally cyclonic events, an optimal balance in disturbance regime is probably required to sustain breeding populations. Although *E. alcatheae enastri* is a narrow-range endemic that is ecologically specialised, there is no evidence of decline. Accordingly, the conservation status of the subspecies should be regarded as Near Threatened (‘Conservation Dependent’) under IUCN criteria.”



## Atlas Moth: endangered?

With a wingspan of 17 cm, the Atlas Moth (*Attacus wardii*) is exceptionally large. The species is endemic to the Top End of the Northern Territory, where it is known only from the Darwin, Gunn Point, Cobourg Peninsula and the Tiwi Islands. It is rated as Endangered by the NT government. Lane *et al.* (2010) have provided the first detailed description of the life history of the species, with photos of the eggs, caterpillars and chrysalis. The only known food plant of the caterpillars is *Croton habrophyllus* (no common name), a small tree of monsoon vine-thickets and watercourses, but other food plants may well remain to be detected. The life cycle takes about 3 months, but pupae may remain dormant for a year. “On Melville Island adult moths are often taken by Boobook Owls . . . after they have been attracted to street lights.” The authors have found the species to be locally common but adults are highly seasonal in occurrence, flying during the wet season. However, they have been unable to locate the population around Darwin from which the species was described following collection by F.P. Dodd in 1909. The authors suggest that the species could be reintroduced to locations such as East Point with a suitable planting program (*Ed.: this needs a local naturalist to drive the program – any volunteers?*). They also suggest that a classification of Data Deficient would be more appropriate than Endangered.

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## Photograph a magical moment in the Botanic Gardens

Sydney-based Friends of The Gardens is running a photo competition featuring Australian botanic gardens. Prizes total \$12,000. Entries must be in by 12 Dec. 2010. For more information, go to [www.gardensinfocus.com.au](http://www.gardensinfocus.com.au).

# Freshwater Crocodiles

A photo feature by Ruchira Somaweera



# Mangrove birds – mangrove health

Report on the talk at the November meeting

Andrew Bell; photos by Azlan

After a brief roundup of interesting sightings, including Gavin O'Brien's record of an Asian Dowitcher at Sandy Creek, Azlan, a PhD candidate at CDU, gave a very stimulating talk to a packed room on his thesis work on bird diversity in the Darwin mangroves, and the use of indicator species to study the impact of the size of mangrove remnants on species diversity.



Mangroves: forest of the Stilt-rooted Mangrove (*Rhizophora stylosa*).

mangrove patches to small remnants. He has identified key indicator species whose presence correlates with the size of the mangrove patches.

Bird species diversity is very much related to the integrity of habitat bordering the mangroves, which should be an important consideration in development planning near Darwin's mangroves. The most species-rich mangroves around Darwin are at Buffalo Creek with its extensive bordering vine thickets and monsoon forest on land controlled by the Department of Defence.

Size too is important, and if I recall Azlan's many facts correctly, to maintain maximum bird diversity, intact mangrove patches need to be 600 hectares or greater in size. However mangrove-specialist species also utilise small remnants and any remnant is useful and worth preserving, especially if its surrounding habitat can also be kept intact.

More facts: tropical Australia has a greater area of mangroves than it does tropical rainforest, and mangroves by area comprise 1% of the NT's vegetation. Thirty-six mangrove species grow around Darwin – I must get to grips with their identification – the mangroves I fossicked in as a child at Corner Inlet in Victoria comprised a single species, *Avicennia marina* (Grey Mangrove), which is also present in Darwin. (The Corner Inlet mangroves are however the highest latitude mangroves in the world reaching 38°45' S).

The fate of too much of Darwin's mangroves?

I came away inspired to spend more time in the mangroves – I'm still trying to see a Mangrove Grey Fantail. Why don't mangroves occur in cooler climes? Do shrubs need heat to cope with saline environments, and if so why?

More information on Azlan's work can be found on line at:

<http://www.cdu.edu.au/ser/profiles/MohdAzlanJayasilanAbdulGulamAzadProfile.htm>,

and here is a good mangrove starter site: [http://www.nt.gov.au/nreta/wildlife/nature/pdf/mangroves/2\\_mangrove\\_ecosystem.pdf](http://www.nt.gov.au/nreta/wildlife/nature/pdf/mangroves/2_mangrove_ecosystem.pdf).

A few facts and figures: north-west Australian mangroves have a higher number of mangrove-dependant bird species than any other mangrove ecosystem in the world (Noske), and 12 of the 15 Australian mangrove bird species occur around Darwin. Azlan has recorded 115 bird species utilising the mangroves representing 43 families; about 70 species are regulars, predominantly insectivores and pollinators. 11 were mangrove-dependant.

Azlan estimates that he has trudged 480 km through the Darwin mangroves counting birds by sight or call along variable-width transects perpendicular to the mangrove zones, at 13 sites around Darwin – twice per month at each site for 14 months. The sites vary from large



Mangrove specialist: the Yellow White-eye.



# Leanyer hinterland

## Report on the November 14 field trip

Jan Allen; photos by Tissa Ratnayake

Despite the heat of a sunny Build-up morning, 13 NTFNC members met at the end of Hodgson St for an amble with Ian Hance through a variety of habitats.

Initial sightings were of a variety of finches (Masked, Double-barred, Crimson and Long-tailed, along with Chestnut-breasted Mannikins) flitting between the seeding grasses, high boundary fences, and trees behind Leanyer houses. From here we then followed a watercourse where various reptiles and butterflies were appreciating the moisture.

Finches in abundance: Crimson Finches.

The pandanus and tall grassland areas provided perfect habitat for more finches, but with the bonus of a single Yellow-rumped Mannikin – much to Paul’s delight it appeared several times though not long enough to be captured on camera. Here we also saw Australia’s smallest bird, the Weebill. Sheryl was able to point out several times the “demented donkey”-like call of the Pale-vented Bush Hen – a call more familiar to her back in Queensland, and not such a common occurrence here in the Territory.

The wetland area harboured a few Common Greenshanks, while the draining creek adjacent to the dry mudflats contained a collection of Radjah Shelducks and a Royal Spoonbill.



The sewage ponds were a myriad of birds – mainly terns, both types of Whistling-Ducks and Pied Herons with a Brahminy Kite overhead.

On our returning amble we had a showy view of a Golden-headed Cisticola then vivid Red-backed Fairy-wrens and a pair of raucous Dollarbirds (possibly in a courting display).

Many thanks to Ian for leading this short and very rewarding sortie to investigate the surprising variety of habitats that occur in this fairly small area.

Birdwatchers led by Ian Hance (second from left).

**List of birds observed (compiled by Ian Hance):** Australasian Grebe, Azure Kingfisher, Bar-shouldered Dove, Black Butcherbird, Black Kite, Brahminy Kite, Brown Honeyeater, Brown Quail, Brush Cuckoo, Chestnut-breasted Mannikin, Common Greenshank, Common Sandpiper, Crimson Finch, Dollarbird, Double-barred Finch, Forest Kingfisher, Galah, Golden-headed Cisticola, Green-backed Gerygone, Grey Whistler, Gull-billed Tern, Helmeted Friarbird, Eastern Koel, Leaden Flycatcher, Lemon-bellied Flycatcher, Little Bronze-Cuckoo, Little Corella, Little Friarbird, Long-tailed Finch, Magpie Goose, Magpie-lark, Mangrove Gerygone, Masked Lapwing, Mistletoebird, Northern Fantail, Pale-vented Bush-hen (2 heard), Peaceful Dove,



Pheasant Coucal, Pied Heron, Pied Imperial-Pigeon, Plumed Whistling-Duck, Radjah Shelduck, Rainbow Bee-eater, Rainbow Lorikeet, Red-backed Fairy-wren, Red-winged Parrot, Restless Flycatcher, Royal Spoonbill, Rufous-banded Honeyeater, Sulphur-crested Cockatoo, Torresian Crow, Varied Triller, Wandering Whistling-Duck, Weebill, Whistling Kite, White-bellied Cuckooshrike, White-gaped Honeyeater, Australian White Ibis, White throated Honeyeater, White-winged Black Tern, Yellow Oriole, Yellow White-eye, Yellow-rumped Mannikin (63 species – and a Peacock!)

Left: wildman Graham Brown.  
Right: egg sac of Huntsman Spider.



# Interesting bird sightings

To 19 November 2010

Compiled by Ian Hance

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

Species	Date	Location	Observer/s	Nos./comments
<b>Seabirds, waterbirds &amp; waders</b>				
Arabian Shearwater	c. 22/10	100 nautical miles west of Darwin	Simon Mustoe	several flocks
Buff-banded Rail	23/10	South Alligator River floodplain	Marc Gardner	1
White-browed Crake	21/09	Bamarru Plains (lower Mary R.)	Richard Noske	4+
Pale-vented Bush-hen	14/11	Leanyer	NT Field Nats	2 heard
Little Curlew	30/10	South Alligator River floodplain	Marc Gardner	120+
~	10/11	Knuckeyes Lagoon	Peter Kyne & Micha Jackson	25
Asian Dowitcher	23/10	Sandy Creek	Gavin O'Brien	1
Broad-billed Sandpiper	23/10	Lee Point	Arthur & Sheryl Keates & Gavin O'Brien	1
Oriental Pratincole	31/10	South Alligator River floodplain	Niven McCrie	a few
~	13/11	Victoria H'way	Peter Kyne <i>et al.</i>	c. 15
<b>Birds of prey</b>				
Pacific Baza	1/11	CSIRO Berrimah	Magen Petit	1
Grey Goshawk	20/09	Lee Point	Richard Noske	both grey and white morphs
~	5/11	Pine Creek	Steve Burns	1
Spotted Harrier	23/10	South Alligator River floodplain	Marc Gardner	1
~	23/10	Adelaide River floodplain	Marc Gardner	1
Little Eagle	5/11	Douglas-Daly Nature Park	Ian Hance	1
Black Falcon	2/11	Anzac Parade	Steve Burns	1
~	5/11	Douglas-Daly	Ian Hance	1
Australian Hobby	21/09	Swim Creek (lower Mary)	Richard Noske	sitting on nest
Peregrine Falcon	11/11	Yarrowonga	Mike Jarvis	1 juv.
Grass Owl	1/11	Anzac Parade	Steve Burns	2
<b>Other non-passerines</b>				
Emu	6/11	Cnr. Daly R. & Tipperary Stn Rds	Ian Hance	2
King Quail	1/11	Anzac Parade	Steve Burns	1
Australian Owlet-nightjar	13/11	Dundee Beach Rd,	Ian Hance	2
Fork-tailed Swift	6/11	East Point	Arthur & Sheryl Keates	12
~	20&22/10	Ooloo Crossing	Peter Kyne & Micha Jackson	5+
Australian Bustard	21/09	Swim Creek (Mary River area)	Richard Noske	10+; male displaying
Chestnut-backed Button-quail	c.14/11	Copperfield Dam	Peter Kyne <i>et al.</i>	2
<b>Passerines</b>				
Varied (White-winged) Sittella	26/09	Gorrie Road, Mataranka area	Richard Noske	sitting on nest
Crested Shrike-tit	14/11	Central Arnhem H'way	Mick Jerram <i>et al.</i>	7
Hooded Robin	14/11	Buchanan H'way	Peter Kyne <i>et al.</i>	2 adults + 2 juveniles
Zitting Cisticola	23/10	South Alligator River floodplain	Marc Gardner	2
Star Finch	25/09	Waterhouse Ck, Central Arnhem Rd	Richard Noske	2 juveniles
~	25/09	Warloch Ponds nr Mataranka	Richard Noske	15 (incl. juveniles)
~	13-14/11	Vic. H'way 25 K west Vic. River	Peter Kyne <i>et al.</i>	4
Gouldian Finch	5/11	Copperfield Dam	Steve Burns	100+
~	10/11	Katherine	Mick Jerram	4
~	c. 16/11	Sandy Creek, Vic. H'way	Sean Webster	100+; other sightings & observers
Yellow-rumped Mannikin	24/10	Humpty Doo	Darryel Binns	2; & other sightings & observers
~	14/11	Leanyer Swamp	NT Field Nats	1
Yellow Wagtail sp.	23/10	South Alligator River floodplain	Marc Gardner	1

Mystery bird:  
 most (?all) sightings of the  
 Yellow-rumped Mannikin (above)  
 around Darwin are of one or two  
 with Chestnut-breasted Mannikins  
 in the second half of the year.  
 Where do they come from?  
 Where do they go?  
 (Photo: Bruce Doran)



# Recent literature about Top End natural history

Back listings and summaries may be viewed at <http://www.cdu.edu.au/ser/profiles/ecologyintopend.htm>.

## INSECTS & SPIDERS

Compiled by Don Franklin

### Ants & termites

- Andersen AN, Brault A. 2010. Exploring a new biodiversity frontier: subterranean ants in northern Australia. *Biodiversity and Conservation* 19: 2741-2750.
- Burwell CJ, Nakamura A, Andersen AN. 2010. Records of the tramp ant *Pyramica membranifera* (Emery) (Hymenoptera: Formicidae: Myrmicinae) from Australia. *Australian Entomologist* 37: 7-10.
- Crozier RH, Newey PS, Schluens EA, Robson SKA. 2010. A masterpiece of evolution - *Oecophylla* weaver ants (Hymenoptera: Formicidae). *Myrmecological News* 13: 57-71. [Green Tree-ant and one other species]
- Dawes TZ. 2010. Impacts of habitat disturbance on termites and soil water storage in a tropical Australian savanna. *Pedobiologia* 53: 241-246.
- Korb J, Foster KR. 2010. Ecological competition favours cooperation in termite societies. *Ecology Letters* 13: 754-760.

### Butterflies & moths

- Braby MF. 2010. Conservation status and management of the Gove Crow *Euploea alcatheae enastri* (Lepidoptera: Nymphalidae), a threatened tropical butterfly from the indigenous Aboriginal lands of north-eastern Arnhem Land, Australia *Journal of Insect Conservation* 14: 535-554.
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### Miscellaneous

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### New species

- a goblin or dwarf hunting spider (*Ischnothyreus darwini*) from leaf litter at Bryans Creek rainforest, Mary River National Park (Edward & Harvey 2009); it was also recorded from Howard Springs, Litchfield, Umbrawarra Gorge, Gungarre and various locations in the Mary River area of Kakadu National Park, in monsoon rainforest or vine-thicket. The body is about 1¼ mm long and the legs are a similar length.
- an orb-weaving spider (*Cyrtobill darwini*) from Western Australia but also found at Edith Falls in the NT (Framenau & Scharff 2009). Body length is about 5 mm. It occurs in spinifex hummock grassland.
- two species of katydid in the new genus *Kapalgagraecia* (Rentz *et al.* 2010). One species is “apparently widespread in the Northern Territory, the other from Groote Eylandt”.

### Wasps parasitising wasps

Matthews & Matthews (2010) reported, from observations at Katherine, that females of the large solitary wasp *Pseudabispa paragioides* attach and kill female mason wasps (*Abispa ephippium*) “and usurp their nests, then appropriate cells, mass provision them with caterpillars acquired by theft from still other nests, and close them with mud taken from the host nest.” The species of mason wasp “displays some of the most highly developed parental care known in any solitary eumenid”. The authors suggest that parasitism may explain why nests of the mason wasp species “are spaced widely from one another.”