NATURE TERRITORY

August 2008

Newsletter of the Northern Territory Field Naturalists Club Inc.
PO Box 39565, Winnellie, NT 0821

Meetings are *generally* held on the second Wednesday of every month, commencing at 7:45 PM, in Blue 1.03 (room 22.03; 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. Part-year discounts are available for new members from January 1 each year.

All recent records of Butler's Dunnart *Sminthopsis butleri* have been on the Tiwi Islands. It is one of three threatened species to feature in this month's meeting report (page 8). Photo: Simon Ward.

Club activities

August meeting. Wednesday Aug. 13, 7:45 PM. Blue 1.03 (=22.03, Business Building), CDU.

Gay Crowley

"Botanical tales from Vietnam"

Travelling through Vietnam, one is struck by how hard the people work, and how much of the country is under cultivation. Before too long, you realise that there are botanical stories underpinning every aspect of life in Vietnam. What did the environment look like before its long human history? How are so many of its plants useful to its people? What are so many Australian trees doing in Vietnam? And what could inspire Ho Chi Minh to take off 4 days from fighting the Vietnam War? Gay Crowley will explore these botanical tales in her talk to the Field Naturalists Club in August.

Gay Crowley is the Biodiversity Information Officer with the Tropical Savannas Cooperative Research Centre. She and her family have traipsed around Australia studying its plants and animals. Before her children grew up and left home, they wanted to experience one holiday without field guides and binoculars. Vietnam looked promising. But even when shopping, eating and boat cruising, Gay couldn't leave plants alone. This talk will give her the chance to revisit her travels in Vietnam from a botanical perspective.

Our Annual General Meeting will be held prior to the main meeting.

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August field trip. *to be advised at the August meeting*

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September field trip. ***Welcoming the Waders***

Sunday 6th September from 8:30 am at Sunset Park, Nightcliff foreshore (between the Nightcliff Jetty and the western end of Aralia Street). A repeat of past year's popular event to mark 'Threatened Species Day'.

At this time of year, international migrants are arriving on the shorelines around Darwin, with no visas and mostly unnoticed by the majority of Territorians. Everyone is invited to come to the Nightcliff foreshore from 8:30 am onwards, to learn about the amazing shorebird species that have travelled from as far as Russia to experience the Territory lifestyle. Spotting scopes and some of the Top End's best bird experts will be on hand to help identify the birds. For more information call Arthur and Sheryl Keates on 8948 1794.

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September 2008 meeting. Wednesday Sept. 10. Mark Ziembicki: *Stuffed mammals*.

October 2008 meeting. Wednesday October 8. Peter Dostine: *The Flock Bronzewing*.

November 2008 meeting. Wednesday Nov. 12. Don Franklin: *Slow boat on the Mekong.*

Top End Native Plant Society activities

General Meeting, Thursday Aug. 21: **Ian Cowie - *Floristics of East Timor***

Field trip, Saturday Aug. 23: **Channel Island**. Meet at the Channel Island bridge at 9am.

Field trip, Saturday Sept. 20: **Fogg Dam**. Guided walk with Friends of Fogg Dam; details later.

Club notices

Welcome to new members:

Mike Lawes; Bernie Ryan (Melbourne); Maria Woodgate & Michael Connard; Victor Gomelyuk; Amelia Trott (Sydney); Susanna Venn & Sam Grover; Piers Barrow & Cate Lynch.

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Thank you

The previous issue was proof-read by Christine Maas, and collated and mailed by Susan Jacups. It was printed by Gay Crowley and Don Franklin using equipment kindly made available by the Biodiversity Unit, Department of Natural Resources, Environment and the Arts, Berrimah and the School for Environmental Research at Charles Darwin University.

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ANNUAL SUBSCRIPTIONS

These are now **overdue**. This will be the last newsletter sent to those who do not renew their membership. If you have renewed your membership or joined in the last few months, please ignore this.

For those who receive the newsletter by conventional mail:

You can renew using the membership form which also appears on the back page of the newsletter.

If you'd like your nature photos in colour, consider changing your subscription to newsletter by email.

For those who receive the newsletter by email:

You should have received a membership form with the July email newsletter.

Forgotten / lost your membership renewal form? You can print a copy from the Club's web-site at: http://www.geocities.com/ntfieldnaturalists/subscription.htm.

Note: Issue no. 20 of the *Northern Territory Naturalist* is approaching completion and is expected to be available (free to members) within the next three months.

NOTICE OF ANNUAL GENERAL MEETING

Our 2008 Annual General Meeting will be held as part of the Club's August Meeting - on Wednesday August 13 at 7:45 PM in Blue 1.03 (room 22.03) at Charles Darwin University. The business for the AGM is:

- the election of office-bearers and committee members for 2008-09 (nomination form below); and
- consideration of the Club's annual financial statement – available from the Treasurer from July 30 – email *fiona.douglas@octa4.net.au*.

Please consider joining the Committee – nomination form below – contributing to the success of the Club.

NOMINATION FOR NTFNC COMMITTEE, 2008/09

Name of person being nominated:_____

Position being nominated for (circle):

President Secretary Treasurer Committee Member (up to 7 needed)

Signature of Nominee:_____

Proposer's name:_____and signature:_____

Seconder's name:_____and signature:_____

Under our Constitution, written nominations received prior to the commencement of the Annual General Meeting (AGM) have precedence. Either: (1) mail nominations to NTFNC, PO Box 39565, Winnellie, NT 0821, (2) hand deliver to a current committee member, or (3) bring to the AGM.

A copy of the Club's constitution may be obtained by emailing our Public Officer: *fiona.douglas@octa4.net.au*.

The NT Associations Act can be found at http://www.nt.gov.au/justice/graphpages/cba/clubs_assoc/index.shtml.

Newsletter contributions welcome Please forward material to *eucalypt@octa4.net.au*, or contact the editor on 8948 1293. Deadline for the September newsletter: Friday August 22.

Trees and cyclones

From *Recent literature*, page 11

The work of Garry Cook on the impact of TC Monica in Arnhem Land in April 2006, reported in the February issue of *Nature Territory*, has now been published (Cook & Goyens 2008). They report that the area of severe damage to trees was 50 km wide and 130 km long. Based on field evaluations of damage and estimates of gust speeds based on the known characteristics of cyclones and of TC Monica in particular, the authors identify the relationship between maximum gust speed, distance from the coast and the proportion of trees that were uprooted or had their trunk snapped. The proportion of trees so damaged rose rapidly from less than 10% to about 70% with maximum gust speeds of 40 to 60 metres per second, wind speeds that convert to 145 to 215 km per hour. Gusts of 290 km per hour uprooted or snapped about 90% of trees. They also calculated the probability of windthrow events of varying severity recurring as a function of distance from the coast for savannas in the Darwin region. Regardless of distance from the coast (up to 100 km inland), they estimated that a windthrow event in which 20% of trees were uprooted or snapped was likely to recur every 7 years. This suggests that, in coastal and sub-coastal areas, wind damage is a major contributor to savanna tree dynamics.

Savanna near the northern edge of the Arnhem Land escarpment between Maningrida and Oenpelli 5.5 months after TC Monica passed by. Photo: Deb Bisa.

Cook and Goyens' paper is one of two relating to TC Monica in a special issue of the journal *Austral Ecology* devoted to the impact of cyclones on Australian terrestrial ecosystems (the remaining papers relate to TC Larry which devastated large areas of rainforest in north Queensland in March 2006). In the second paper about TC Monica, Staben & Evans (2008) estimate canopy loss in the Magela Creek catchment near Jabiru 10 days after, and one year after the cyclone, using satellite imagery and the prior year as a baseline. By the time TC Monica reached this catchment (travelling over land from near Maningrida), it had weakened to a category 2 storm with maximum gust speeds of 135 km per hour. For three sub-catchments, they estimated that canopy loss was 23, 28 and 42%, with riparian and floodplain forests suffering greater loss than upland savannas. A year later, canopy cover has increased by 8 to 19% over immediate post-cyclone levels.

Hollows, tree growth and harvest for didgeridoo production (from *Recent Literature*, page 11)

What effect does hollowing have on tree growth and survival, and what are the implications of this for the sustainability of harvests for didgeridoo production? Werner *et al.* (2008) set out to answer these questions using measurements of 267 trees - a mix of Darwin Stringybark *Eucalyptus tetrodonta* and Darwin Woollybutt *E. miniata*. Larger Stringybarks were more likely to be hollow, but tree size made no difference to rates in Woollybutt. More than 85% of Woollybutts had hollow stems. The larger the proportion of the stem diameter that was hollow (the pipe ratio) the lower the survival rate over four years of monitoring. Survival was also strongly influenced by size, with survival rates much higher in large trees. Higher pipe ratios were associated with lower growth rates in Stringybark but not in Woollybutt. Traditional harvest methods for didgeridoo production focus on small trees that this study shows to have much lower chances of surviving anyway, but current commercial operations focus on the larger trees that are otherwise most likely to contribute to sustainable tree populations.

Top End Bamboo

From *Recent Literature*, page 11

Species such as the Top End Bamboo *Bambusa arnhemica* take a big risk. Though long-lived, they reproduce only once and then die, and do so in large patches. If something goes wrong, an individual and all its relatives may fail in their one opportunity to reproduce. The challenge applies to many annual plants and animals too, though the nature of the risk is somewhat different. One might expect, therefore, that the Top End Bamboo might have seized any alternative evolutionary opportunity to hedge their bets. Bellairs *et al.* (2008) investigated one such bet-hedging possibility, that seeds of the Top End Bamboo might have a dormancy mechanism that delays germination, holding at least some individuals back until later in the wet season (most germinate with the first heavy storms) or even until the following year. Not so! Its seed germinates promptly after wetting, or not at all. And even if kept dry, within 3 months all viability is lost. It really is an "all eggs in the one basket" reproductive strategy. On the up side, about 75% of seeds germinate successfully. A previous study shows that the seedlings of Top End Bamboo are remarkably resilient.

Early in the wet season, new culm (stem) shoots emerge from buds on the side of rhizomes close to or below the ground. Franklin (2008) found that, whether in the presence or absence of feral pigs and humans that harvest and eat the shoots, about 38% of shoots survive to grow and form new culms. In the presence of consumers, most of the remainder are indeed consumed, whereas in their absence, most of the excess fail to develop and eventually rot away. It seems that bamboos produce more shoots than they need and hold many in reserve for accidents - and that this strategy is the basis for the amazing shoot productivity of plantation bamboos. However, this doesn't translate well into a potential harvest of "unmanaged" wild stands for two reasons. Successful shoots in harvested clumps arise later in the wet season and are smaller in diameter. Furthermore, pigs and people harvest the shoots that are most accessible, so the survivors on harvested clumps tend strongly to be in the middle of clumps, whereas those on unharvested clumps are much more likely to be on the outside, allowing the clump to expand. Over a number of years, harvested clumps become dense and congested, with likely negative repercussions for further growth.

Bamboos reproduce clonally and, in the case of the Top End Bamboo, seedlings grow into clumps. Or do they? It is tempting to think that, just as trees tend to be spaced because they're competing with each other, so the spacing of clumps might be the result of competition between genetically distinct individuals. However, genetic analysis of the composition of 10 clumps (Franklin *et al.* 2008) revealed three clumps that contained more than one genetic individual – in one case five individuals. It may be that the benefits of group living are sufficiently great to overcome competition between individuals.

Last chance to see?

We are now in the 13th year of a flowering wave in the Top End Bamboo, and most stands have now flowered and died. Indeed, many have since regenerated from seed to a quite substantial size. Bamboo on the Mary River at the Arnhem Highway crossing and nearby areas such as at Mary River Park is one of the last "remaining" stands, and has started mass-flowering in the last month or so. You've until perhaps October to see this event in full fury; by Christmas, most of the clumps will be dead or dying and a new generation should have begun *en masse* below.

Top End Bamboo in flower. Photo: Don Franklin.

Are there any other stands of the Top End Bamboo that have not yet flowered? Much (all remaining?) of the stands on the South Alligator River in Kakadu National Park have flowered and died in the last few years whilst those around Corroboree Billabong and along Mt Bundy Creek flowered in 2005. Several years ago, a stand on the lower Daly River around the Crossing and Woolliana remained to flower, but I don't know its current state. If anyone knows of stands (more than the odd clump) that have not yet flowered, I'd love to know about them (phone 8946 6976, email *don.franklin@cdu.edu.au*).

If you miss the event on the lower Mary River this year .... you might have to wait 30 years for a repeat of the action. For more on the strange phenomenon of bamboo flowering waves and the Top End Bamboo, see:

Franklin DC. 2004. Synchrony and asynchrony: observations and hypotheses for the flowering wave in a long-lived semelparous bamboo. *Journal of Biogeography* 31: 773-786. [pdf available; contact as above]

Three (cute) threatened species of the NT

Reporting back on the talk by Simon Ward, Threatened Species Unit, Biodiversity Conservation Division ***Stephen Reynolds***

There are a fair variety of threatened species in the NT, both in the desert and in the Top End, but Simon spoke about only three of them, for which he has been carrying out single species studies. These species are all listed as Vulnerable under the EPBC Act and in the NT, and there is a recovery plan for each.

Butler's Dunnart *Sminthopsis butleri*

This dasyurid (photo on page 1; similar in size to our local representative, the Red-cheeked Dunnart *S. virginiae*) was initially collected by its namesake, Harry, from Kalumburu in the Kimberley of Western Australia. This was back in the 1960s, and it has not been collected in the Kimberley since, but there were a total of 10 records from the Tiwi Islands up until 2005. Simon and his team tried to trap this species using pitfalls, and found that deep traps are the way to go, because these animals are particularly jumpy. Using these kinds of techniques most individuals have been trapped from *Eucalyptus tetrodonta* / *E. miniata*/ *Corymbia nesophila* woodland, which is unfortunately also the kind of habitat that is being cleared on the Tiwis for forestry. A 500 m buffer zone has been suggested as a conservation measure around each record of the species.

Northern Hopping Mouse *Notomys aquilo*

Hidden burrows in sand: the Northern Hopping Mouse Notomys aquilo. *Photo: Simon Ward.*

This species has been recorded only from Groote Eylandt and coastal eastern Arnhem Land (but see Strahan 1983). There were a number of early records, particularly in the 1940s, but few since, and relatively little was known about the species. Like quite a few rare animals, these mice proved exceedingly difficult to catch, and only a few were observed during nocturnal spotlighting, and none went into traps. Along with rangers from the Anindilyakwa Land Council, Simon set up transects to look for sign, including tracks and burrows. Most records were from habitats with sandy substrates, but this included not only dunes but also some woodland areas. Nearing the end of the survey, when things looked fairly hopeless, one of the rangers scraped away some surface soil and leaf litter to expose pop-holes, the vertical escape shafts used by *Notomys*. What followed was an extensive burrow excavation operation, during which three mice were found, and two of these were captured. It appears that the spoil heaps made by the hopping mice when they dig their burrows may be the most useful evidence for locating individuals of this highly secretive species.

Crested Shrike-tit (northern subspecies) *Falcunculus frontatus whitei*

Lastly, Simon spoke about a subspecies of bird that few people have seen (including yours truly). Most NT records are from the general Katherine region, and Simon has been studying a population at sites along the Arnhem Road. The habitat is primarily *Eucalyptus tectifica* / *Corymbia latifolia* / *C. confertiflora* woodland with Ironwood, and the area is a seasonally inundated flat with a grassy understorey. The Shrike-tit is truly a bird of the treetops, with most observations of birds above 5m, as they forage amongst the fine branches for various kinds of invertebrates. Nesting is also in the tree tops, at least for the few nests that have been observed. There is some conjecture that because of their bark-tearing habits, Shrike-tits may be restricted to areas with eucalypts that have peeling, flaky bark. In the southeast of Australia there are many such species, and in the southwest trees such as the Karri and Wandoo probably have suitably flaky bark, but in northern Australia there may only be a few species of eucalypt with appropriate foraging substrates. The birds appear to breed in the wet season, so may be more vocal at this time or in the Build-up. Either way, if they only call

seasonally, are restricted to a relatively sparsely populated region, and spend most of their life in the tree tops, it may be unsurprising that they are observed so infrequently. Simon mentioned that if there were any keen naturalists who would like to take him up on the offer, that a playback tape, with speakers, can be supplied upon request.

Oh yes, and all three species are cute.

Reference: Strahan R (ed.) 1983 and subsequent editions. The Australian Museum complete book of Australian mammals. Angus & Robertson: London.

The Crested (Northern) Shrike-tit has a formidable bill used for tearing off and into bark to obtain large insects to eat. Photo: Trevor Collins.

Grasshopper ID

Graham Brown has identified the cryptic grasshopper on page 5 of the last newsletter as "*Coryphistes* or something similar, anyway the subtribe Coryphistina, ... a typical grasshopper (Acrididae)". Graham also stated that "these are mostly arid/semiarid species and I have no confirmed records for the Top End".

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Northern Territory Naturalist

The editors now have enough material to go ahead with publication of issue no. 20 and hope to take it to the printer by the end of August.

The Editorial Committee welcomes manuscripts for issue no. 21. These may relate to any aspect of natural history or ecology relevant to the Northern Territory, and may include reviews, papers, research reports, species profiles and thesis abstracts. Email manuscripts to *lynda.prior@cdu.edu.au.*

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Mammal conference in Darwin

The annual conference of the Australian Mammal Society will be in Darwin from 29 September – 1 October this year, at Kormilda College, Berrimah. More details including the registration form are available on the Society's website at www.australianmammals.org.au.

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Deciduous roots (from *Recent Literature*, page 11)

Some plants shed their leaves during the dry season. But roots? In a study conducted in (an evergreen) Darwin Stringybark (*Eucalyptus tetrodonta*) savanna at Berry Springs, Janos *et al.* (2008) documented seasonal variation in the abundance of roots of less than 5 mm diameter in the top metre of soil using "rhizotrons" - a pit with glass sides. Fine roots proliferated after the onset of wet season rains, but at the end of the wet season they disappeared rapidly, with only 6% remaining 2½ months later. Evergreen species at the site are evidently tapping water at depth during the dry season.

Natting in the Mt Bundy Hills

Report on the field trip to Mary River National Park ***Lyn and Brian Reid***

Fifteen field naturalists and two guides, Ian Cowie and Ben Stuckey from Parks and Wildlife, gathered at the Mount Bundy information kiosk on the Arnhem Highway at 8.30am on Saturday 19 July 2008. It was a mixed group, with botanists, artists, lepidopterists and other entomologists, birders and more all keen to visit this part of the proposed Mary River National Park. Many had skills in more than one discipline. We were supplied with a map of the area and a rather daunting list of some 280 recorded species of flora.

Weebills and a Northern Rosella were noticed at the car park as was a Scarlet Jezebel *Delias argenthona* (a butterfly). Not long after setting off we were shown some wild rice and then found a Dutchman's Pipe plant *Aristolochia holtzei*, a small herb of the family *Aristolochiaceae.* The multi-disciplinary team produced the information that this is the larval food plant of the Clearwing Swallowtail butterfly, *Cressida cressida*. Meantime, the butterfliers netted and identified a Purple Line Blue *Prosotas dubiosa*, and a dead jewel beetle *Cyphogastra* sp. (Buprestidae) was found which will be lodged in the insect collection of the Museum and Art Gallery of the Northern Territory.

We examined a tree named *Vitex glabrata* , with domatia between the veins on the underside of the leaf. A close relative *V. acuminata* does not have these. A similar discussion identified the Gardenia we found as *Gardenia schwarzii* not *G. megasperma* as that species has hairy leaves. A Dusky Honeyeater, was seen feeding, as was a Little Friarbird. The growth habit of *Terminalia* trees was explained but other trees also produce upward curving branches.

Gardenia schwarzii. *Photo: Brian Reid.*

It was suggested that a good common name for *Grevillea pyramidalis* would be Graveyard Grevillea because of its strange shape. In these Hills, this tree is at the most northerly edge of its range.

The shrub known as *Ficus aculeata* (Sandpaper Fig , formerly *F. opposita*) had many small figs on its branches. A strangling Banyan *Ficus virens* was growing both up and down from a fork in an Ironwood *Erythrophleum chlorostachys*. Large numbers of orange-red stipules surrounded the Banyan for some distance but none remained on the tree – these surround leaf buds and are shed as the new growth develops. Some Varied Lorikeets flew over and a Spotted Pea-blue *Euchrysops cnejus*, another butterfly, was identified – the first of several.

In the vine thicket at the base of the climb we found *Senna occidentalis* with its sickle shaped seed pods, a noxious weed, growing near *Senna timorensis*, a native member of the same family, Caesalpiniaceae. Near the vine thicket was a magnificent bower of the Great Bowerbird with some green objects among his large collection of whitish snail shells. A male and female Painted Grasshawk *Neurothemis stigmatizans* were noted and notable as being the only dragonflies seen on the walk. There was some confusion when the butterfliers remarked on the large numbers of 'crows' around the thicket – a newcomer was looking for the feathered variety rather than the Common Crow *Euploea core.*

I (Lyn) and a companion elected not to climb what looked like a series of very large boulders and instead took a rock seat in the shade from which we watched more butterflies – Blue-banded Eggfly *Hypolimnas alimena*, Orange Lacewing *Cethosia penthesilea* and a single Orange Ringlet *Hypocysta adiante*, a Grass-yellow *Eurema* sp., and a female Clearwing Swallowtail, mostly feeding on the flowers of the Rusty Pittosporum *Pittosporum ferrugineum*. A White-bellied Cuckoo-shrike and a Nankeen Kestrel flew over.

Most of the group headed up the hill in search of the threatened plant *Schoutenia ovata.* The hill quickly turned to a steep climb over boulder clad with dense vine forest. We (includes Brian) scrambled past a large, beautiful Kurrajong *Bombax ceiba* in flower and between the vines our botanist guide Ian spotted *Stenocarpus cunninghamii*, a tree in the Proteaceae family, whilst Ben spotted the shrub *Rhodamnia australis* (Myrtaceae) – they both spotted many more, of course, but we can't remember them all. We

continued up, not always elegantly, finding several different bracket fungi on dead branches. Near the summit, Ian found the species we were looking for; a straggly shrub with distinctively lobed, discolourous, juvenile leaves. Whilst we admired the views and complained about the vines, Ian scoured the area and found quite a few more specimens of *S. ovata*. Feeling rather pleased with ourselves we slithered back down the hill.

With the group reassembled, lunch was eaten in the shade of the information kiosk. A total of 17 species of butterfly and 37 species of birds were seen or heard by the group (lists below). Many plants were identified and discussed – the above mentioned being only a small sample.

At rest after a tough climb. Photo: Brian Reid.

Kurrajong (also known as Kapok Tree), Bombax ceiba. *Photo: Brian Reid.*

As several members had not been to the Mary River/Mount Bundy 'scrape' where Gouldian Finches have been seen for the last 2 – 3 years, a sub-group added a visit to this site at about 1.00pm. Given the time of day we did not expect to find the Gouldians but there they were together with other finches and several species of small honeyeater. Those who stayed a while were treated to flocks of finches coming in to drink. This was a first sighting of this species for at least one member.

A day enjoyed by all participants made great by the shared expertise of Ian and Ben. Many thanks to both.

List of birds observed (compiled by Sheryl Keates):
Peaceful Dove, Bar-shouldered Dove, Whistling Kite, Black Kite, Brown Goshawk, Collared Sparrowhawk, Nankeen Kestrel, Red-tailed Black-cockatoo, Rainbow Lorikeet, Varied Lorikeet, Northern Rosella, Forest Kingfisher, Blue-winged Kookaburra, Great Bowerbird, Red-backed Fairy-wren, Weebill, White-throated Gerygone, Striated Pardalote, White-gaped Honeyeater, Dusky Honeyeater, Brown Honeyeater, White-throated Honeyeater, Black-faced Cuckoo-shrike, White-bellied Cuckoo-shrike, Varied Triller, Rufous Whistler, Figbird, White-breasted Woodswallow, Grey Butcherbird, Spangled Drongo, Northern Fantail, Willie Wagtail, Torresian Crow, Leaden Flycatcher, Magpie Lark, Buff-sided Robin, Mistletoebird.

List of butterflies recorded (compiled by Don Franklin):
Clearwing Swallowtail, Lemon Migrant, Pink Grass-yellow, Scarlet Jezebel, Dusky Knight, Orange Ringlet, Orange Lacewing, Blue-banded Eggfly, Blue Argus, Chocolate Argus, Blue Tiger, Australasian Lesser Wanderer, Common Crow, Purple Line-blue, Black-spotted Grass-blue, Spotted Pea-blue.

The object of the expedition, Schoutenia ovata *occurs in Asia but is known from only two locations in Australia – the Mt Bundy Hills and Tipperary. Photo: Don Franklin.*

Interesting bird sightings

20 June to 24 July 2008

Compiled by Sheryl Keates

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
Partridge Pigeon	1/07/08	Copperfield Dam	R Gardner	3
Diamond Dove	19/07/08	Mary River excavation pits	S Keates *et al.*	1 adult + 1 juvenile
Australian Owlet-nightjar	26/06/08	Marlow Lagoon	N McCrie	1
Australian Little Bittern	22/06/08	Fogg Dam	A & S Keates	1 heard in reeds
Black Bittern	1/07/08	Ferguson River	R Gardner	1
Eastern Osprey	13/07/08	Channel 9 TV tower	A & S Keates	pair nesting
Square-tailed Kite	19/07/08	Mary River excavation pits	S Keates *et al*.	1
Pacific Baza	25/06/08	Parap Rd	M Gardner	1 flying over road
	29/06/08	Sandy Ck, Cas. Coastal Res	A & S Keates	1 flying and calling
Grey Goshawk	23/07/08	Lyons housing estate	S Keates	pair flying over
Spotted Harrier	10/07/08	Stuart H'way near Tom Finlay's	D Binns	1
Black Falcon	13/07/08	Harrison Dam	D Binns, A & S Keates	1
Buff-banded Rail	29/06/08	Lilly Lane, McMinn's Lagoon	A & S Keates	1
	13/07/08	Harrison Dam	D Binns, A & S Keates	2
Spotless Crake	26/06/08	Fogg Dam	D Binns	2
	13/07/08	Fogg Dam	D Binns, A & S Keates	1 or 2
White-browed Crake	13/07/08	Harrison Dam	A Keates	1
Little Ringed Plover	23/07/08	Leanyer sewage ponds	N McCrie	2, early arrival
Common Tern	29/06/08	Bing Bong, north of Borroloola	R Gardner	*c.* 500
Hooded Parrot	12/07/08	Gorrie Rd, Sth of Mataranka	R Noske *et al*.	2 immature
Channel-billed Cuckoo	6/07/08	Spitfire Crt, McMinn's Lagoon	D Binns	1
Horsefield's Bronze-cuckoo	13/07/08	Harrison Dam	D Binns, A & S Keates	1 on wall
Rufous Owl	21/06/08	Darwin Botanic Gardens	A & S Keates *et al*.	pair, rainforest
	10/07/08	Darwin Botanic Gardens	D Binns *et al*.	1 in rainforest
Red-backed Kingfisher	12/07/08	McMillan's Rd, Knuckey Lag'n	A & S Keates	1 on power lines
Rainbow Pitta	20/07/08	Coomalie Ck camping ground	P Steele	1
Grey-fronted Honeyeater	30/06/08	30k West of Heartbreak Hotel	R Gardner	*c.* 30 at water tank
Orange Chat	Jun '08	Borroloola sewage ponds	R Gardner	6
Black-chinned Honeyeater	12/07/08	north of Warlock Ponds	R Noske *et al*.	2-3 adults + 2 fledg's
Painted Honeyeater	12/07/08	Gorrie Rd, near Stuart Hwy	R Noske *et al*.	1
Cicadabird	26/06/08	Howard Springs	N McCrie	1
	15/07/08	Lily Lane, McMinn's Lagoon	B Reid	1 female
Mangrove Golden Whistler	29/06/08	Bing Bong, north of Borroloola	R Gardner	1 female
White-breasted Whistler	22/06/08	Bing Bong, north of Borroloola	R Gardner	1 male
	29/09/08	Bing Bong, north of Borroloola	R Gardner	1 female
Masked Woodswallow	5/07/08	Tracey Village oval	G & M O'Brien	3
	11/07/08	Gunlom	R Noske *et al.*	many
White-browed W'swallow	26/06/08	western side of Darwin hospital	G & M O'Brien	2
	5/07/08	Tracey Village oval	G & M O'Brien	2
	11/07/08	Gunlom	R Noske *et al*.	few
Arafura Fantail	10/07/08	Palmerston sewage ponds	D Binns	2 at back of ponds
	20/07/08	Coomalie Ck camping ground	P Steele	several
Magpie Lark	4/07/08	opp Mobil servo, Jabiru	M Gardner	*c.* 250 roosting
Fairy Martin	13/07/08	Harrison Dam	D Binns, A & S Keates	100s
Gouldian Finch	1/07/08	Copperfield Dam	R Gardner	1 red-faced
	19/7/08	Mary River excavation pits	S Keates *et al.*	red&bl'k faced+ juvs.
Pictorella Mannikin	Jun '08	Borroloola sewage ponds	R Gardner	6

The dry season is progressing and the Gouldian Finches are back at Mary River excavation pits with this season's dull-coloured young in tow. Photo: Brian Thistleton.

Recent literature about Top End natural history

PLANTS & VEGETATION

Compiled by Don Franklin

Not so technical

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Over a 40-year period, the cover of Stringybark Eucalyptus tetrodonta *savannas changed markedly in response to fire (Lehmann* et al. *2008). Photo: Don Franklin.*

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Cypress-pine rings tell story of the weather

Baker *et al.* (2008) studied rings in the trunks of Tropical Cypress-pine *Callitris intratropica* of known age from the plantation at Howards Springs and of unknown age growing naturally near Pine Creek. Their aim was to see whether the record is consistent enough to decipher stories about past weather. It is. Rings represent annual patterns of growth with occasional aberrations. Furthermore, the size of rings and thus rate of growth in these cypress-pines was clearly related to weather patterns. They found that Tropical Cypress-pine grows most rapidly when the dry season is relatively warm, the wet season relatively cool, and wet season rains commence early and finish late.