



NATURE TERRITORY

February 2008

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

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Club web-site: <http://www.geocities.com/ntfieldnaturalists>

Meetings are generally held on the second Wednesday of every month, commencing at 7:45 PM, in the Seminar Room of the School of Australian Indigenous Knowledge Systems (Building 30) 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.



In the eye of the storm: devastated savanna where the eye of Tropical Cyclone Monica crossed the coast west of Maningrida in Arnhem Land. Photo: Bill Milne, Bureau of Meteorology.

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cyclones .. p6-7; shrike-tits .. p8; day-flying moths .. p9;
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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

February meeting. Wednesday February 13, 7:45 PM. S.A.I.K.S. Seminar Room, CDU.

Mike Lawes

"Unexpected effect of logging – Elephants and herbs in Kibale Forest, Uganda"

Assoc. Prof. Michael Lawes has recently taken up the position of theme leader, Wildlife & Landscape Science, with the School for Environmental Research at CDU, arriving from South Africa. Most recently, he has been studying vegetation dynamics in South African coastal forests and mountains, and in the Ugandan rainforest. His background included geology and ornithology, and Mike is also a keen photographer. Don't miss a part of the world we don't hear much about.

Important note: there *may* be a problem with our room booking for this talk.

If there is, we will arrange an alternative room at CDU Casuarina – please arrive on time to be directed to the alternative.

February field trip. Frog spotting with Graeme Sawyer. Saturday Feb. 16.

Meet at 7PM at the traffic lights at the intersection of the Stuart Highway and the road to Howard Springs. From there we will proceed to the Howard River sandsheet and perhaps also to behind Mickett's Creek. If four-wheel drives are needed (a distinct possibility at this time of year), we will pool cars at the traffic lights.

Bring a torch. Come prepared for wet weather and wet feet; gumboots are recommended. As frogs are sensitive to insect repellent, please keep your hands clean of repellent.

March 2008 meeting. Wednesday March 12. Emma Woodward:

Community values of the Howard River.

April 2008 meeting. Wednesday April 9. Carol Palmer: *Coastal dolphin research in the NT.*

May 2008 meeting. Note non-standard date and location: Friday May 16 at Mary River Park.

This will be a combined evening meeting with the Australian Naturalists Network.

There will be four speakers:

- Bob Wasson: *Geomorphic development of the Alligator Rivers floodplain.*
- Stephen Garnett: *Climate change and tropical birds.*
- Peter Jacklyn: *Termites.*
- Don Franklin: *Life history of bamboo.*

Top End Native Plant Society activities

Meeting: Thursday 21 February, 7.30 pm - talk by Mike Braby: Day moths and Night butterflies.

Field Trip: Saturday or Sunday - 23/24 February - Lee Point plant identification excursion

Meeting: Thursday 20 March at 7.30 pm - a talk by Kristin Metcalfe on mangrove floristics and recovery from disturbance. (to be confirmed)

Field Trip: Saturday or Sunday - 22/23 March - the site in Charles Darwin National Park where Kristin has been working on mangroves. (to be confirmed)

Open Garden: Dale Dixon will again open his garden, this time late in the Wet - on the weekend of 15-16 March and TENPS will be holding a plant sale there.

Club notices

Thank you

The previous issue was edited and proofed by Fiona Douglas. It was printed by Gay Crowley using equipment kindly made available by the Biodiversity Unit, Department of Natural Resources, Environment and the Arts, Berrimah, and collated and mailed by Lyn Reid.

Newsletter contributions welcome

Sightings, reports, travelogues, reviews, photographs, sketches, news, comments, opinions, theories , anything relevant to natural history. Please forward material to don.franklin@cdu.edu.au or the Club's postal address, or contact the editor on 8948 1293.

Deadline for the March newsletter: Friday February 22.

Club library

The Club's journal, magazine and reference collection is available to members. Lists of books, reports, CDs and journals held can be found on our web-site: <http://www.geocities.com/ntfieldnaturalists>. 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 4–6PM on Tuesday, or indirectly by phoning Lyn at work on 8985 3250.

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

Northern Territory Naturalist

The Editorial Committee of the *Northern Territory Naturalist* is now calling for manuscripts for issue no. 20. Manuscripts 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.

Northern Territory Naturalist is a registered, peer-reviewed journal (ISSN 0155-4093). Author instructions may be downloaded from

<http://www.geocities.com/ntfieldnaturalists/journal.htm>.

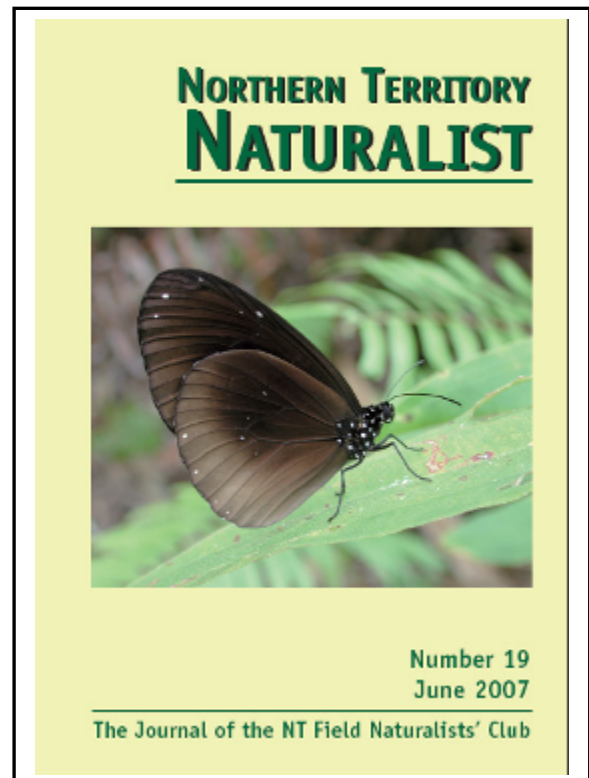
If possible, manuscripts should be submitted in digital form by emailing to lynda.prior@cdu.edu.au. Editors of the journal are Dr Lynda Prior, Stephen Reynolds and Dr Michael Braby.

Back issues of the *Northern Territory Naturalist* are available individually (some in photocopy only) or as a set. The cost of a set is \$50- for nos. 1-18 or \$60- for nos. 1-19. Contact Don Franklin, don.franklin@cdu.edu.au.

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.

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



Trying to find birds in Vietnam

Text and photos by Helen Larson

Last September I was lucky enough to be invited to visit a fishery college in Vietnam, not far from Hanoi in Bac Ninh Province, to teach staff there about museum techniques and fish taxonomy. That is a story in itself, but the other good thing about the trip was the chance to see the birds of north Vietnam, which include numerous species of pittas and pheasants and laughingthrushes and babblers and woodpeckers – and other fascinating creatures.

The Fishery College at Binh Dang Village was out in the countryside, surrounded by rice and vegetable fields, and as I was staying on campus I thought I might see some local birds easily, away from the city and its seething traffic. My plane landed in Hanoi at night and the next day, after meeting the college director and staff and touring the new campus buildings where the fish course would take place, I began to get an idea of what the birds might be like. "Non-existent" is the phrase that came to mind. All of the countryside, nearly everywhere I went, was basically bereft of birds. Seeing a distant white egret in a paddy field was an event. There was one village and neighbouring fields, somewhere between Tam Dao and Tu Son, in which the rural bird population seemed "normal", with drongos, shrikes, egrets and tree sparrows perching on power lines, low bushes and on people's houses. Maybe the head-man of the district liked birds and forbade people to kill and eat them. Everywhere else, birds were dinner, a protein source. Just like the fish, ducks, snails, hens, crabs, turtles, clams, frogs and dogs in the markets.

The Fishery College campus eventually revealed 10 species over a two-week period, including a Common Kingfisher, *Alcedo atthis*, who haunted the director's ornamental fishpond. I only saw 74 species during my visit (of which 18 were "lifers", species I had never seen before); this in a country which has 848 species (according to Avibase).



Seller of freshwater mussels, Tu Son Village fish market near the Fishery College.

Everything is alive or nearly so, with fish displayed in big tubs. Harvesting good food is serious business, and the vendors were very happy to meet an overseas fish-aficionado.



I was able to make short trips to two national parks: Cuc Phuong, a very large reserve of forest, mountains and streams, and Tam Dao, a smaller area around an old colonial hill station. Cuc Phuong is a wonderful park, rather like Kakadu in that traditional people still live within it. Although unlike Kakadu, the people were moved out of the park when it was declared and then they crept back, and management of the fauna consequently has been problematic (i.e. it is being eaten, especially the mammals). September was not the ideal time for birds as winter is best (when species move south from China) but Cuc Phuong forests still contain fabulous things such as babblers, flycatchers, minivets, sunbirds and warblers. And pittas. I know they were there because I heard several species, and they even moved closer and responded to my bad imitations, but none would come close enough for me

*View back towards the valley, along the Ancient Tree loop track, Bong substation, Cuc Phuong National Park. Invisible pittas followed me on either side and Black Eagles, *Ictinaetus malayensis*, were circling over the ridge in the distance.*

to spot them. Raptors were present, as were a range of squirrel species, including the very spectacular Black Giant Squirrel, *Ratufa bicolor*. But the abundance of birds was generally low. As were visitor numbers – at Bong Substation, where the comfy bungalows are, there were a few French, German, Kiwi and Australian visitors, and only the Kiwi was a birder (and he had difficulty finding birds too).



The Chapa Spadefoot Toad (or White-eyed Litter Frog), Leptobrachium chapaense, filled with eggs, Bong Substation, Cuc Phuong National Park. She was the only wild frog I saw.

laughingthrushes and bulbuls in tiny cages hung outside. We met five tourists with rifles on the old ‘watertank trail’ which leads to Tam Dao Mountain – they happily showed me the ground-squirrel, *Tamias*, and half-dead Ashy Drongo, *Dicrurus leucophaeus*, that they had just bagged. The hill forest of Tam Dao was inhabited by plenty of small birds though – especially the neck-breaking *Phylloscopus* warblers and families of bush-warblers. But the handsome Blue-and-white Flycatcher, *Cyanoptila cyanomelana*, and the cheerful Black-throated Laughingthrush, *Garrulax chinensis*, were the real treats for me (especially after seeing so many of the latter species in cages).

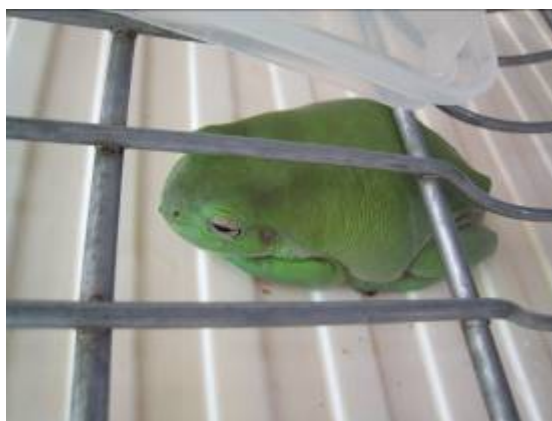
Wherever I went, people were very welcoming, especially when they discovered I was more than interested in their fish and birds. Vietnam needs more overseas bird and fauna watchers to visit, to help convince people it is worthwhile conserving their country’s biota, especially in their parks.

Tam Dao Mountain in the background, along what is left of the fabled “watertank trail”, now a failed tourist road, blocked to traffic by immense unstable rockfalls. Fishery College staff member Trung on left (in her dress sandals) and our guide on right.



Suburban visitors, welcome and not

*OK, we're not suggesting that Peter wasn't welcome. But the Water Python (*Liasis fuscus*) stealing chicken eggs wasn't. We're not so sure about the Green Tree-frog (*Litoria caerulea*) that took up residence under the kitchen sink strainer for three days.*



Photos by Susan Jacups

The eye of the storm

Reporting back on the two talks at the December Club meeting

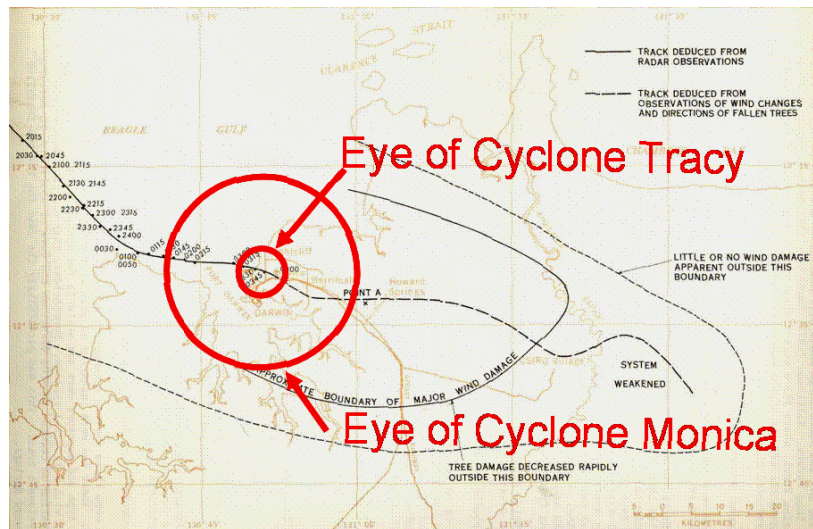
Lyn Reid

Mark Hentschel presented a fascinating overview of tropical cyclones, giving us an insight into just how damaging they can be – 300,000 people dead in Bangladesh in 1970, a 13 metre storm surge in Queensland in 1899, and the highest recorded wind gust in Australia of 267 km per hour in WA in 1999 – there is still discussion of whether Tracy would have beaten this had the machinery survived! Thirty metre waves and massive rainfall can also occur.

Incidentally, once and for all, cyclones, typhoons and hurricanes are one and the same – even if the latter two spin the wrong way (because that's the name used in the northern hemisphere).

After an unsettling picture of TC Monica (big, big, big) and an excellent shot of TC Ingrid showing the anatomy of a cyclone very clearly, Mark described for us the various categories of cyclones, from 1 to 5, but pointed out that even small cyclones can be dangerous. The NT has the dubious honour of having the most erratic cyclone paths in the world - makes prediction very difficult.

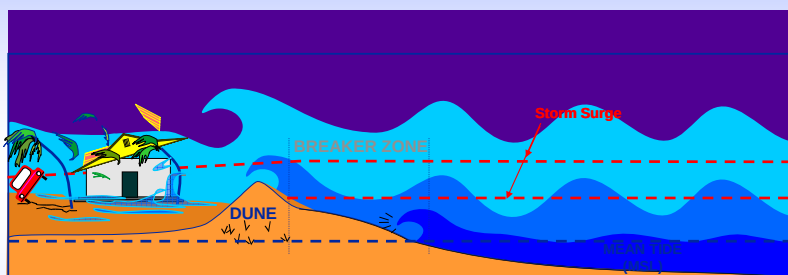
Mark then treated us to video clips of Category 3, 4 and 5 blows and followed these with a picture of Monica's path across the coast near Maningrida – total wipeout. Then pictures of Christmas Day 1974 in Darwin, and of TC Ingrid's effect on Minjiland and the Dunham River.



Path, damage and eye of TC Tracy over Darwin, December 1974, with the eye of TC Monica overlaid (no, it was never in this location!) for comparison. Supplied by Garry Cook.

We were then given a clear explanation of how storm surges build, and were shown a before and after set of pictures of their effect. In

Coastal Crossing - Storm Surge



question time, he explained that it is the latent heat of condensation that fuels a cyclone's activity – hence they grow over water.

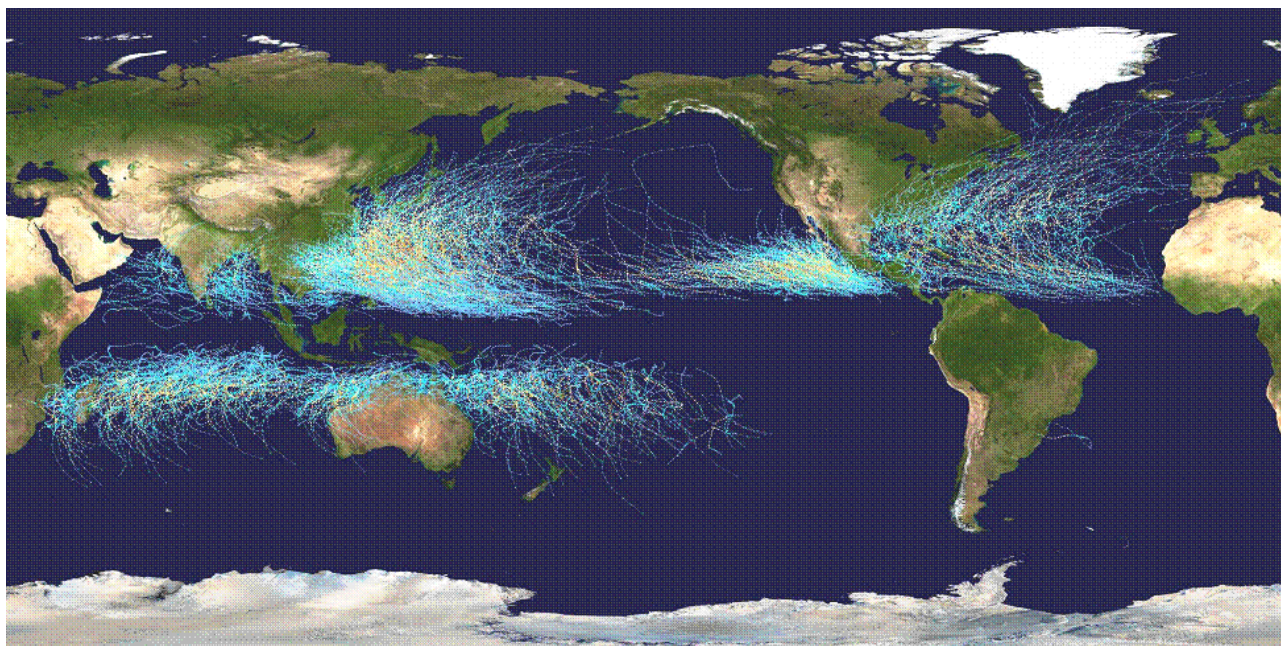
Finally Mark explained about predictions, warnings and access to information.

Altogether a very informative and interesting talk especially, for some of us, the videos!

Supplied by Mark Hentschel.

After a refreshing break, Dick Williams talked about cyclones and trees. Dick is a (renowned) bushfire scientist, but filled in admirably for Garry Cook and Clemence Goyens, who are authors of a manuscript entitled 'Cyclones and savannahs: Lessons from Monica' (in press). This paper incorporates mathematical models of the effects of the 2007 cyclone Monica in the NT.

Dick presented a world map showing cyclone paths over the last 20 years (next page). This is fascinating and had everyone asking questions and admiring the patterns. What is the lonely event on the east coast of South America? Why no cyclones off north-east South America? Why would you live in Japan? Why watch a TV show when you could just study the map?



Cyclone paths over the last 20 years. Supplied by Garry Cook.

We moved on to consider that cyclones can be seen as another recurrent disturbance event in savanna, alongside fire and drought. The contrasting effect of these was shown by pictures of trees after disturbance – those damaged by drought regenerated from the base although their crowns were dead. Cyclones cause disturbance mainly by wind though both salt and fresh water flooding may occur.

It should be noted that if you lose your trees you lose your canopy and your carbon offset.

Darwin and the north coast are no stranger to cyclones; they are recorded in 1897, 1915, 1917, 1937, 1974 and 1981. A series of sketches of Victoria Settlement, Port Essington show the effect of a cyclone in 1839. They document the loss of trees and some subsequent recovery.

And so to TC Monica, a very large cyclone with central barometric pressure down to 915 mb, much larger in diameter than Tracy and also very severe. In addition, Monica moved slowly across the landscape, increasing the time vegetation (and everything else) was exposed to the winds, and so more damage was caused. Dick remarked that he planned to leave town anytime another such monster is threatening.

We were shown photographs of some of the damage caused where Monica crossed the coast including a shocking one of a totally defoliated area west of Maningrida. Other photographs showed bark blown off trees, a dragonfly embedded in the bole of a tree, and a dead dolphin.

LANDSAT pictures show massive loss of vegetation. One is left with an impression of a really, truly, nasty cyclone.

CSIRO provided money to fly Monica's track in a helicopter, taking detailed photographs of the damage. It was also possible to calculate wind speed and direction at any given point. These data enable calculation of the correlation of maximum gust speed and proportion of trees lost which in turn allowed the calculation of probability curves for damage and return intervals. The curves suggest that a cyclone will kill 50% of the trees in an event once every 100 years and 80% every 1000 years. (So are we safe until 3007?)

In addition to the immediate damage some later effect are important – there will be excess flammable waste, bigger fires and excess carbon dioxide emissions. Fauna are adversely affected immediately and also by disruption to, for example, the normal seasonal flowering of damaged but living trees.

We are very grateful to Dick for stepping into the breach at such short notice and for giving an excellent and entertaining presentation, assisted by the red wine prescribed, he claimed, by his retired GP [Ed.: *GP by the name of Reid?*].

Addendum

I was in Port Macquarie (staying with a daughter-in-law called Helen) when TC Helen came to visit Darwin. I was absolutely glued to the fascinating radar loops provided by the Bureau of Meteorology; what a magnificent service. It was nearly as good as being here. [Ed: *good is not how some who were present described it to me; I was away too.*]

The elusive Northern Shrike-tit

Reporting back on the surveys of December 1-2

Louise Harrison

On a weekend early in December, a group of enthusiastic field naturalists joined Simon Ward from Parks and Wildlife in search of the rare and elusive Northern Shrike-tit. The Northern Shrike-tit [*Falcunculus (frontatus) whitei*] is a threatened sub-species listed as Vulnerable under NT and national legislation. There are few records of it in the NT, but the most recent records have come from the Katherine Region, and this area is the focus of a research project investigating the birds' habitat requirements.

The small group of volunteers met at 7am on the Saturday morning on the Central Arnhem Highway, for instructions on how and where to do systematic surveys for the Shrike-tit using call playback. Four groups of two people were each allocated a GPS, MP3 player and speaker set, field data sheet, and a road to work on (Stuart Highway, Central Arnhem Highway, King Valley Way or Maranboy Road) and we headed off in our designated directions.

The survey method required each group to play the call of the Shrike-tit at regular (2km) intervals along the roads in the area, and listen for replies to try and detect birds in the area. Surveys continued until late morning and then recommenced late afternoon for a few hours, but unfortunately no Shrike-tits were detected on Day 1.

The strategy on Sunday morning was to visit sites on the Central Arnhem Highway where recent sightings (and breeding activity) have been confirmed, and to spend time following individual birds to record their foraging behaviour.



The elusive bird. Photo: Simon Ward.



An adult bird and a juvenile were quickly located in one of these sites in open woodland using call playback, and then some of us watched the birds intensively for about 2 hours while feeding and other activities were recorded onto a dictaphone. A number of other nearby sites were also revisited during the morning, but no further individuals were found.

The weekend was enjoyed by all involved and was a success in that all participants had the opportunity to see at least one of these delightful birds, systematic surveys were conducted in the broader area around confirmed habitat, and details of foraging behaviour and juvenile activity were recorded. Thanks go to Simon for giving the NT Field Nats the opportunity to be involved in this project.

The open savanna woodlands south of Katherine are where most recent NT records have come from. But why is the species so sparingly recorded when this habitat is so extensive? Simon Ward hopes to find out. Photo: Mani Berghout.

Day-flying moths

Reporting back on the December 16 excursion

Linda Rennie

Eighteen committed Field Nats met at the Berry Springs turn off at 8am on a Sunday morning in the middle of the Christmas festive season. They were not deterred by the effects of late nights and partying to wander through the hot and steamy bush to swipe, catch and identify day flying moths and butterflies with Michael Braby. After a short drive to Finn Road, Michael started by showing us his impressive collection of butterfly nets. He had one that folded up small and compact enough for any bush walker, and a range of ones with telescopic handles. His prize possession, recently purchased in Japan (a country where butterflying is a popular pursuit) was a net on a lightweight 5 meter telescopic pole, designed for catching butterflies at the top of the canopy. Many of us thought it could double as a windsock, with some keen birders thinking it could even be used to catch the odd bird.

Once we were all equipped with a net (yes Michael had enough that no one missed out) we headed to the side of the road that had not been burnt for some years and had plenty of growth and undergrowth. It wasn't long before several male 'Sun Moths' had been flushed out and netted for identification. Males fly early in the morning with the females emerging later at midday. With the first good specimen came the first big surprise for many, Michael promptly put one in the killing jar. Michael did this to make it easier to handle and observe with out it being damaged and losing scales however to some especially the younger members who were very good at catching, a killing jar was a foreign concept to their sense of conservation. They then had the dilemma of whether to show their catches for identification with the risk them also being put in the killing jar. A total of 18 different butterflies, plus a variety of day-flying moths, were observed.

After a couple of hours several members who are also members of the Top End Native Plants Society (TENPS) left for their Christmas break up and the refreshing waters of Berry Springs. Of interest, there were numerous plants of the TENPS emblem, *Grevillea longicuspis*, flowering at our moth site. After a brief morning tea break we crossed the road where Michael kept our interest by showing us a colony of 'Fiery Jewel' larva with their very distinctive symbiotic, smelling ants tending them. This gave us a very holistic look at butterflies and day flying moths.

Then finally at midday, several female sun moths were netted as Michael had been promising. It was at this stage the true value of the killing jar and the field pinning of the moths and butterflies was evident. We were able to clearly see the difference between the 'Sun moth' males netted between 9 and 10am and the females netted at midday. It also gave us the opportunity to look closely at several varieties of 'Grass-darts' to see the differences between species. To finish an interesting, informative and rewarding morning, several people produce their new or well-used book, *Butterflies of Australia – Their Identification, Biology and Distribution*, for Michael to autograph.

[*Butterflies are day-flying moths, of course.* Ed.]



The Little Kingfisher is seen more often during the wet season – see Interesting Bird Sightings on the next page.

Photo: Andrew Bell, who wishes to acknowledge the boat driver, Jo Wright.

Interesting bird sightings

23 November 2007 to 24 January 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
Emu	24/01/08	85 km west of Jabiru	M Gardner	1
Lesser Frigatebird	5/01/08	Wagaman	A Carlson	20+
Great-billed Heron	5/12/07	Buffalo Creek	S Keates <i>et al.</i>	1
Osprey	12/01/08	Channel 9 TV tower, Gardens	S Keates <i>et al.</i>	2
Grey Goshawk	16/01/08	Wagaman	A Carlson	1 flying over
Peregrine Falcon	30/12/07	Channel 9 TV tower, Gardens	A & S Keates	1
Brolga	22/01/08	near Lake Bennett	R Stanton	pair nesting, 2 eggs
Buff-banded Rail	20/12/07	University Ave., Palmerston	L Eclipse	1 near MacDonalds
White-browed Crake	5/01/08	Jabiru	M Gardner	1 dead at house
Red-backed Button-quail	6/12/07	Holmes Jungle Swamp	S Keates <i>et al.</i>	3
Swinhoe's Snipe	29/12/07	Fiddler's Lagoon (Knuckey's)	A & S Keates	1
Black-tailed Godwit	1/12/07	Buffalo Creek mouth	A Keates	500 +
Bar-tailed Godwit	3/12/07	Alice Springs sewage ponds	M Gillis	4
Little Curlew	16/12/07	Elizabeth Valley Rd Noonamah	D Binns, A & S Keates	300 +
Pacific Golden Plover	16/12/07	Elizabeth Valley Rd Noonamah	D Binns, A & S Keates	40 +
Grey Plover	2/12/07	Leanyer Sewage Ponds	A & S Keates	2, first record here
Oriental Pratincole	16/12/07	Elizabeth Valley Rd Noonamah	D Binns, A & S Keates	1
Common Tern	5/01/08	Lee Point	A & S Keates	30+
Partridge Pigeon	23/11/07	Jabiru swimming pool	M Gardner	1
Northern Rosella	13/12/07	Batchelor Sewage Ponds	R Stanton	pair
Oriental Cuckoo	5/12/07	Buffalo Creek	S Keates <i>et al.</i>	1
~	6/12/07	Holmes Jungle	S Keates <i>et al.</i>	1
Channel-billed Cuckoo	27/11/07	Lake Jabiru	M Gardner	5
~	4/12/07	Ironstone Lagoon	L Harrison	1
~	23/12/07	Wagaman	A Carlson	1 heard
~	6/01/08	East Point	A & S Keates	1 heard
Rufous Owl	16/12/07	Darwin Botanic Gardens	N McCrie	1 fem. nr info centre
~	25/12/07	Darwin Botanic Gardens	N McCrie	1
Barking Owl	22/12/07	Anzac Parade, Middle Point	A Carlson	2
Barn Owl	22/12/07	Anzac Parade, Middle Point	A Carlson	5
Tawny Frogmouth	22/12/07	Fogg Dam	A Carlson	1
Fork-tailed Swift	25/11/07	Jabiru	M Gardner	10
~	1/12/07	Central Arnhem Road	S Keates <i>et al.</i>	c. 20
Little Kingfisher	6/12/07	Buffalo Creek	S Keates <i>et al.</i>	1 or 2
~	8/12/07	Sandy Ck, Cas. Coastal Res.	A & S Keates	1
White-throated Gerygone	19/01/08	Brandt Rd, Mickett Creek	A & S Keates	1
Crimson Chat	7/12/07	Rainbow Valley Cons. Reserve	M Gillis (in Alice Springs)	pair nesting, 2 eggs
Hooded Robin	29/12/07	Marrakai Road	A & S Keates	1 male
Grey-crowned Babbler	16/12/07	Jingili	H & J Larson	pair, first for 24 years
Crested Shrike-tit	2/12/07	Central Arnhem Road	S Ward <i>et al.</i>	2 + 1 juvenile
White-breasted Whistler	8/12/07	Buffalo Creek	A Carlson	2 females
Cicadabird	2/12/07	King Valley Rd	G Crowley & S Keates	1 heard
Yellow Wagtail	11/01/07	Leanyer Sewage Ponds	S Keates <i>et al.</i>	6
Chestnut-breasted Mannikin	13/12/07	Batchelor Sewage Ponds	R Stanton	200 +
Zitting Cisticola	1/12/07	Holmes Jungle swamp	A Keates	1
~	6/12/07	Holmes Jungle swamp	S Keates <i>et al.</i>	2
~	29/12/07	2nd flood plain, Marrakai Rd	A & S Keates	heard



The Hooded Robin is rarely seen as close to Darwin as the Marrakai Road. This one is either a female or young male. Photo: Don Franklin.

Recent literature about Top End natural history

Mammals

Compiled by Don Franklin

Not so technical

Hancock, D. 2006. Buffalo rising. *Australian Geographic* Apr.-June 2006: 102-111.

Ward S. 2007. Nationally vulnerable Northern Hopping-mice found in different habitat. *The Web* Summer 2007: 8.

Webb M. 2006. Go on Dad, give us a cuddle. *Australian Geographic* Oct.-Dec. 2006: 26-27. [Rock Ringtail family life]

Wallabies and kangaroos

Doody JS, Sims RA, Letnic M. 2007. Environmental manipulation to avoid a unique predator: Drinking hole excavation in the agile wallaby, *Macropus agilis*. *Ethology* 113: 128-136.

Murphy BP, Bowman DMJS. 2007. The interdependence of fire, grass, kangaroos and Australian Aborigines: a case study from central Arnhem Land, northern Australia. *Journal of Biogeography* 34: 237-250.

Telfer WR, Bowman DMJS. 2006. Diet of four rock-dwelling macropods in the Australian monsoon tropics. *Austral Ecology* 31: 817-827.

Telfer WR, Griffiths AD, Bowman DMJS. 2006. Scats can reveal the presence and habitat use of cryptic rock-dwelling macropods. *Australian Journal of Zoology* 54: 325-334.

Banteng, buffalo and feral cattle

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Northern Hopping-mouse

The Northern Hopping-mouse (*Notomys aquilo*) has long been a mystery creature, with remarkably few records. Previous records have been from coastal dunes on Groote Eylandt and nearby parts of the Arnhem Land coast. However, recent spotlight surveys by NRETA and local land council rangers revealed at least four individuals in flat sandy woodland away from the coast on Groote Eylandt (Ward 2007).

Wallabies living with crocodiles

Along the Daly River, having a drink can be a fatal experience. In evident response to the abundance of Saltwater Crocodiles (in freshwater, of course), Agile Wallabies prefer to excavate a hole in nearby sand and allow water to seep in, to obtain a drink, rather than drink from the river (Doody *et al.* 2007). Sounds like a good method for thirsty naturalists, too.

Diet of kangaroos and rock-wallabies in Arnhem Land

The diets of four rock-dwelling macropods – the Short-eared Rock-wallaby, Narbarlek, Common Wallaroo and Black Wallaroo – varied from season to season and provided limited evidence of niche separation amongst species (Telfer & Bowman 2006). However, the escarpment-endemic Black Wallaroo appears to be more of a browser than the more widespread, grass-feeding Common Wallaroo.

Based on the abundance of scats, macropods (Agile Wallaby & Antilopine, Black and Common Wallaroos) selectively visited moist burnt areas and selectively avoided burnt rocky areas (Murphy & Bowman 2007). This was evident within 4 weeks of a fire and lasted for more than a year. Resprouting grasses in moist areas had high concentrations of nitrogen, suggesting that the kangaroos were selecting for more nutritious food.