



NATURE TERRITORY

July 2010

Newsletter of the Northern Territory Field Naturalists Club Inc.

PO Box 39565, Winnellie, NT 0821

President:	Tida Nou	8981 6667 (h)
Secretary:	Ian Hance	8945 6691 (h)
Treasurer:	Fiona Douglas	8985 4179 (h)
Membership Officer:	Sherry Prince	8945 7352 (h)
Journal Editors:	<i>details inside newsletter</i>	
Newsletter Editor:	Don Franklin	8948 1293 (h)
Website Editor:	Tissa Ratnayake	8921 8226 (h)
Committee Member:	Stuart Young	8995 5026 (w)
Committee Member:	Graham Brown	8945 4745 (w/h)
Committee Member:	Peter Holbery	8901 6105 (w)
Committee Member:	Annie Grattidge	

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.



Mutual interest: Common Tree-snake *Dendrelaphis punctulata* and White-breasted Woodswallows? Photographer Andrew Bell described the snake “traversing an overhead electrical wire, slowly approaching a group of [White-breasted] Woodswallows who seemed quite interested in it, keeping just ahead. A Spangled Drongo landed behind it and it turned around back towards the drongo which just edged sideways along the wire keeping about half a meter ahead of it. [The snake] eventually descended the pole without a feed. It seemed to attract more birds to that wire than were [perching] elsewhere.” (Katherine Sewerage Ponds, 29 May 2010)

CONTENTS

	Club activities .. p2	Club notices .. p3
mammals .. p4-5	Kakadu .. p6	Lord Howe Is. .. p7-8
insects .. p9	bird observations .. p10	recent literature .. p11

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

Club activities

July meeting. Wednesday July 14, 7:45 PM. Blue 1.14 (Business Bldg.), CDU.

Greg Miles

"Our wildlife is not safe in the bush"

The rush to relevance of captive breeding

Our world is changing fast. All around the planet - and Australia is no exception - the natural environment is in decline. A quick look around our states will clearly demonstrate that the bush and its resident flora and fauna are under siege. Sometimes - as with the Top End - the cause is not clear. With each passing year more species of plants and animals are added to the endangered species list and these additions are set to grow. The Federal Government has signalled an awareness that its efforts at nature conservation are not working and has embarked on a review of its legislation. State Governments are slowly beginning to realise that their own nature protection regimes are failing.

At the same time as our precious animals are disappearing, there is an army of enthusiastic animal keepers in Australia who want to help. It is estimated that there are 30,000 licensed reptile keepers in NSW and Queensland alone.

These people, in all states and territories, are keen to keep and breed "security" populations of rare and endangered animals but are prevented from doing so by Government red tape and legislative inflexibility.

Nature conservation in Australia is in crisis and the time has come to look at new and innovative ways to add to the established way of doing things.

Greg Miles argues that radical changes are necessary to ensure the continued survival of our most vulnerable living assets.

Greg Miles has recently retired from 30 years as Chief Ranger and Park Naturalist in Kakadu National Park. He was also the Government Conservator of Christmas Island for 3 years. In his time with parks he has specialised in protected area land management and wildlife monitoring issues. These days he splits his time between ecotouring, breeding of the NT's own Pig-nosed Turtle at his home in Humpty Doo, and agitating for changes to Australia's wildlife protection regime.



.....
July field trip. Sunday July 18, 10AM. *Captive breeding facilities for Australian species.*

We will visit an aquatic plant nursery / native fish breeding facility at Howard Springs managed by Dave Wilson, and the world's only Pig-nosed Turtle breeding facility, which is at Humpty Doo and run by Greg Miles.

Meet at Dave Wilson's place at 28 Mahaffey Road (off Girraween Road), Howard Springs at 10AM. Greg Miles will meet us there and subsequently lead a car shuffle to Humpty Doo. Bring a hat, sunscreen, water and snacks. The field trip will wind up around lunchtime. For more information, contact Tida Nou on 8981 6667 (note she will be in the field periodically) or tida.nou@internode.on.net.

.....
August meeting Wednesday August 11. Jon Clark: *Borneo.*

September meeting Wednesday September 8. Judit Szabo: *Bird surveys in Venezuela.*

October meeting Wednesday October 13. Emma Francis: *Mangrove snakes.*

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

Top End Native Plant Society activities

July 15 meeting. Deb Bisa: *Experiences in Arnhem Land.*

August 19 meeting. David Griffiths: *Boabs of the Botanic Garden.*

September 16 meeting. Garry Cook: *Thorned Acacias and ancient herbivores.*

October 21 meeting. Dave Liddle: *Vegetation of Top End Coastal Islands* (to be confirmed).

General meetings are held on the 3rd 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.

Club notices

Welcome to new members: Simon Murphy & family; Hiltrude Kivelitz; Barry Suckling; Isabelle Lotscher; Dane Trembath & Kathryn Dwyer.

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.

Welcome to new Committee member: Annie Grattidge has kindly agreed to fill a vacancy on the Club's Committee. Annie is taking a leading role in preparing lists and photos arising from the Crab Claw Island field trip for the island's management. Welcome Annie!

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

Deadline for the August newsletter: Friday July 23.

Memberships are now due for renewal

If you have not done so already, please help your Treasurer and Membership Officer by renewing promptly.

If you receive your newsletter by conventional mail: the expiry date for your membership is shown below your address on the back page of the newsletter – **and will be highlighted if your membership is now due**. Above your address you should find a membership form. You are most welcome to continue receiving a printed copy – but you may wish to receive the newsletter in full colour by ticking the option to receive your newsletter by email in future.

If you receive your newsletter by email and your membership is due for renewal, we should have contacted you by email during June.

Membership forms may be downloaded from <http://sites.google.com/site/ntfieldnaturalists/downloads>.

If you wish to pay by EFT, please contact Fiona Douglas, email fiona.douglas@octa4.net.au.

Club library: Donated by Birds Australia: Paton D, O'Connor J, eds. 2010. The State of Australia's Birds 2009. Restoring Woodland Habitats for Birds. Birds Australia: Melbourne. 28 pp.

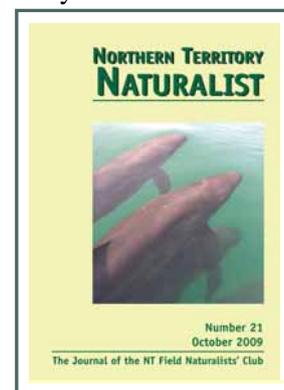
Lists of holdings can be found on our web-site: <http://sites.google.com/site/ntfieldnaturalists/library>.

Northern Territory Naturalist: 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). 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. Editors of the journal are Dr Lynda Prior, Dr Michael Braby 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: NTFNC members have access to this world-famous 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 are not onerous and are made clear at time of picking up the keys.

Declining small mammals

Using monitoring data from Kakadu National Park for the period 1996 to 2009, Woinarski *et al.* (2010) presents further evidence of alarming decline in the small mammals of northern Australia. “A total of 25 small mammal species was recorded. Plot-level species richness and total abundance decreased significantly, by 54% and 71%, respectively, over the course of the study. The abundance of 10 species declined significantly, whereas no species increased in abundance significantly. The number of ‘empty’ plots increased from 13% in 1996 to 55% in 2009. ... Across plots, the extent of decline increased with increasing frequency of fire. The most marked declines were for northern quoll, *Dasyurus hallucatus*, fawn antechinus, *Antechinus bellus*, northern brown bandicoot, *Isodon macrourus*, common brushtail possum, *Trichosurus vulpecula*, and pale field-rat, *Rattus tunneyi*.”

Firth & Panton (2006) surveyed the mammals of Croker Island of the coast of the Cobourg Peninsula. They recorded seven species of which only three were native. “These were black flying-fox (*Pteropus alecto*), grassland melomys (*Melomys burtoni*) and the dingo (*Canis lupus dingo*). The remaining 4 species were domestic and feral animals (horse, cat, cattle and pig).”



Quoll genetics and translocation

The translocation of Northern Quoll *Dasyurus hallucatus* to islands off the coast of Arnhem Land as an emergency conservation measure in the face of the threat from Cane Toads *Bufo marinus* is not without risks. Island populations are by definition limited in size and prone to genetic risks (loss of diversity and inbreeding depression) and genetic change. In consideration of these issues, the translocation program included an evaluation of trends and risks, a consideration that has now been published (Cardoso *et al.* 2009). The authors compared the genetic diversity of the mainland populations that were the source for the translocation (Darwin area and two populations in Kakadu) with that of the two translocated populations (Astell and Pobassoo Islands) two and three years after the translocation, and with two naturally-occurring island populations (Marchinbar and Groote Eylandt). After three years, the translocated populations showed possible signs of slight loss of diversity compared to their founder populations, but insufficient to be convincingly demonstrated. In contrast, the genetic diversity of the two naturally-occurring populations was markedly lower and, along with one mainland population, showed evidence of having been through a “bottleneck” – a period of very low population. A change in the frequency of gene types in the translocated populations also suggested a “founder effect” in which the translocated individuals are not wholly representative of the genetic diversity of the parent population. Three years is a very short time for genetic effects to become evident, so this must be regarded as an assessment of risk as much or more as one of consequence. In order to maintain the translocated populations as representative of (former) mainland populations, the authors recommend: a. ongoing genetic monitoring; b. supplementary translocations to these islands of unrelated individuals; and c. swapping individuals between the two islands.



Mistaken identity of an endangered bat

The Bare-rumped Sheathtail Bat *Saccolaimus saccolaimus* was known in Australia (the species also occurs in Asia) from only from two locations in the Northern Territory and a few records from coastal Queensland. It was classified as Critically Endangered nationally, Endangered in Queensland and Data Deficient in the Northern Territory. The two NT locations were; two specimens collected from Kapalga in Kakadu National Park in 1979 and 1980, and a sighting of 40 individuals at Noonamah in 1996.

If you believe the field guides (at least the one your ed. is looking at), the species is readily distinguished by fur colour from other members of the genus in Australia. So when about 100 bats belong to the genus *Saccolaimus* were found in and around a fallen tree at Howard Springs and Damian Milne *et al.* (2009) couldn't match them to existing descriptions ... a detective story of investigation began. The first step was a genetic comparison, using museum specimens, of the Howard Springs animals, *S. saccolaimus* and the Yellow-bellied Sheathtail Bat *S. flaviventris*. The result were a surprise: specimens of “*S. flaviventris*” from Port Roper, the base of Cobourg Peninsula, Howard Swamp, Keep River and Jasper Gorge proved to be *S. saccolaimus* – as also were the Howard Springs bats. Re-examination of the specimens showed that fur colour is variable and not a good guide to identity, Previously-employed measurements also proved unreliable. Further examination suggested that the width of the canine tooth might be a useful identification character, and this was confirmed when two further “*S. flaviventris*” with narrow teeth proved to be *S. saccolaimus* upon genetic analysis.

Asian Swamp Buffalo in Arnhem Land (from *Recent Literature*, p11)

Whereas the BTEC operation of the 1980s largely cleared feral buffalo from many areas of the Top End, little effort was made to control abundance in Arnhem Land, and they are now common in places there. Freshwater springs with buffalo present have more turbid water, wallows and bare ground, and shorter grass, than those without (Ens *et al.* 2010). Although regarded favourably as a source of food by many traditional owners, obvious environmental problems associated with large numbers may be changing this perspective (Albrecht *et al.* 2009).



Agile Wallabies at East Point (from *Recent Literature*, p11)



In the latest of a series of papers about the Agile Wallaby *Macropus agilis* at East Point, Simon Stirrat (2008) explores demographic patterns during 1992 to 1994 when the population was very large. “The maximum wet-season population size was relatively stable for several years before, and during, this study. mortality of animals up to 18 months old (including pouch young and young-at-foot) was high compared with adult mortality rates. Females reproduced throughout the year, but more large pouch young were observed in the wet season than at other times of the year. The sex ratio of the population was female-biased, probably a result of higher mortality of males in the dry season. Predation by dogs was documented but contributed a relatively small fraction of total annual mortality.”

A large male Agile Wallaby. Photo: Brian Thistleton.



Corrections to the last issue

Page 5: although *Melaleuca* has increased on the South Alligator floodplain, Aaron Petty advises that “the change is woody vegetation as a whole, and paperbarks are actually a very small component of it The main increase of woody veg on the floodplains, by far, are *Cathormion* and *Barringtonia acutangula*” [*Carthormium C. umbellatum* and the Freshwater Mangrove *B. acutangula*].

Page 11: the correct link for Crowley *et al.* (2007) is <http://sites.google.com/site/ntfieldnaturalists/downloads>.



After a tough climb, a wonderful outlook from Mt Gower, Lord Howe Island.
Photo: Ian Morris. See pages 7-8 for a report on Ian’s talk at the June Club meeting.



The 'Land Lobster'

Ball's Pyramid is a 548 metre tall rock with steep, sheer sides, sticking out of the ocean. It is the world's tallest and most isolated seastack.

Ball's Pyramid

23 km off the coast of Lord Howe Island, Ball's Pyramid is an ancient volcanic cone and last habitat of the Lord Howe Island Stick Insect (“Land Lobster”). Photo: Ian Morris.

Kakadu

Photographs by Tida Nou



Above left: Leichhardt's Grasshopper.

Above: Short-eared Rock-wallaby.



Left: the stone country.

Below: Magpie Geese at Mamukala.



Left: Agile Wallaby and Willie Wagtail.

Below: sunset from Field Island.



Lord Howe Island

Reporting back on the June club meeting talk by Ian Morris

Tida Nou; photos by Ian Morris

Lord Howe Island is a small, mountainous island in the Tasman Sea, lying around 600km north east of Sydney. The island is about 10km long and 2km wide, and is the eroded remnant of an ancient shield volcano. The island was inscribed as a World Heritage Area in 1982 in recognition of its unique biodiversity and has been described as the most beautiful island on Earth. Ian Morris, roving freelance naturalist, spent a week there in 2009 and kindly shared his stunning images and experiences of the island with us.

Mt Ligbird, Lord Howe Island.

Lord Howe Island

has the most southerly coral reef in the world, with cold, crystal clear water which support a diverse range of marine life, including Green Turtles on the edge of their range. At Ned's Beach on the eastern side, visitors can enjoy fish feeding and close up encounters with Galapagos Sharks and friendly Kingfish.

Lord Howe Island was permanently settled in 1834. The first scientific party arrived in 1869 with additional expeditions taking place in 1871 and 1876. An official expedition by the Australian Museum in 1887 set the stage for a long association between the museum, Sydney Royal Botanic Gardens and Royal Botanic Gardens in Kew. The Australian Museum in particular has undertaken a great body of work on the island and involved locals in the research. An airstrip was constructed on the island in 1974. Previously, the only way to get to the island was by boat from Sydney.

The flora of Lord Howe Island is a blend of elements from Australia, New Guinea and New Caledonia. Around 40% of the 300 species are endemic. The most notable species are the *Howea* genus of palms. The palm forest on lower slopes of the island support 2 species of palm keenly sought by the indoor plant industry. These are the Curly Palm (*Howea belmoreana*), which grows in colonies on intermediate mountain slopes, often in association with the Kentia Palm (*Howea forsteriana*), the world's most popular indoor palm.



Seeds for 4 species of *Howea* are harvested by local nurseries. There is a lucrative trade in palm seedling exports. For this, a number of island residents have learned to climb palm trees and collect seeds by the sack-full to germinate and grow to seedling stage, which are then exported to Europe and North America. This process is managed to ensure the sustainability of the palm industry. The palm industry and tourism are the main industries on the island.

The basalt peaks, Mt Gower and Mt Lidgbird, tower over white sandy beaches and azure reefs on the southern end of the island. There are numerous naturalists on the island who test out visiting

naturalists with increasingly tough trails to walk. However, the rewards are great – the views from difficult trails such as the Goathouse Cave, a volcanic overhang, provide a fantastic view of the island including of the volcanic monolith, Mt Lidgbird.

Experienced walkers can attempt the 8 hour precipitous trek up Mt Gower (875m). The walk can only be completed with a guide. Accurate foot placement is essential, as is the frequent use of ropes, to aid you along a steep path with a big fall on either side. Local Jack Schick led Ian and his group on the walk (Jack has clocked up an impressive 1000+ walks up the mountain!). Along the way, curious Providence Petrels and Currawongs check you out and may befriend you, the latter inviting themselves to join you for lunch.

Sir David Attenborough completed the Mt Gower Walk with the same guide during his visit to film *The Life of Birds*. Jack has perfected a unique call that attracts the petrels, and did this for the purposes of the documentary. The petrels come to land at your feet and look at you curiously. They then have to climb a tree to take off as they are unable to take off from the ground. This behaviour appears to be curiosity-driven rather than a search for food scraps, petrels being specialist fish-eaters. Thousands of the petrels nest at the top of Mt Gower, and the island is the only known breeding location of this species. Their nest burrows are relatively common and appear to be used by multiple generations. They were previously common on Norfolk Island, where they were taken and stockpiled as food, leading to their extinction there.

The walk up Mount Gower takes you to “World’s End”, a stunning stunted moss forest that is covered by cloud for roughly a third of the year. The downside is you only have 30 minutes to enjoy the spectacle before commencing the walk back down.

Fourteen species of seabirds and 18 species of terrestrial birds live on Lord Howe Island. The White Tern also breeds on the island. It is a pantropical species about which little is known. These delicate birds only come ashore to breed and lay their egg precariously on a bare branch, a nesting strategy that can prove risky in an island prone to



high winds. Red-tailed Tropicbirds occur in good numbers on Lord Howe Island. They can be readily observed playing in the wind. Red-tailed Tropicbirds eat flying fish and nest in caves and crevices, and there is competition for breeding sites. The young are fed until they are larger than their parents. The parents then leave them and when the young get hungry, they go looking for food. The high winds on and around the island also mean there are regular blow-in birds, including the White faced Heron which turned up during Ian’s visit.

Simple nest on a branch: the White Tern.

The Lord Howe Island Woodhen, described by Ian as a “short-wheel-based Chestnut Rail”, was once one of world’s rarest birds. Captive breeding of the species was undertaken by CSIRO from 1979 to 1983. The reintroduction of the woodhens to the island had a few teething problems, but birds now occur in reasonable numbers. The colour banded woodhens are known and keenly watched by local residents, with their social interactions and reproduction observed and monitored. The woodhens even get right of way on the road.

The main types of rock on the island are oceanic basalt and a fossil-bearing calcerite. The fossil-bearing rocks show that the island once supported the Giant Horned Turtle, a Gondwanan land turtle that matched Green Turtles in size. Fossils of these have been found in a few places, including Madagascar, and Riversleigh. The entire genus is now extinct. Ball’s Pyramid, 23km off the island is 548m tall and is the world’s tallest, most isolated seastack. It is the remnant of an ancient volcano. A population of the rare “land lobster” or Lord Howe Island Stick Insect which disappeared from the main island, was discovered on Ball’s Pyramid in 2001. A breeding program is now in place for the stick insect and has proved successful.

Human settlement on the island has led to the extinction of numerous species through overhunting for food or persecution for crop damage. Further declines have been caused by feral animals such as cattle, horses, goats and cats on the island. However, the most problematic feral animals are Black Rats, which were accidentally introduced in 1918 and have been linked to the extinction of species such as the Lord Howe Starling, Lord Howe Fantail and Lord Howe Gerygone. A controversial program for the eradication of Black Rats has been recently proposed. The proposal involves the removal of animals vulnerable to rat predation (or a subset of these populations), rat-baiting the island, then taking the native animals back once the rats have been eradicated.

The residents of the island value their wildlife. Bicycles are the preferred mode of transport. There is a cap on the number of people, cars and cows allowed on the island to minimise impacts on natural values.

Many thanks to Ian Morris for a very enjoyable talk.

Light-trapping at Charles Darwin NP

Report on the June excursion, led by, reported on and photographs by Graham Brown

About 15 people attended this field trip including a few non-members. Conditions were good, a still night with almost no wind, and despite the time of year, plenty of insects were attracted.

The collecting was done at the bush edge near the lookout carpark. A sheet was hung vertically between trees behind a mercury vapour lamp that produced ultraviolet light.

Moths were perhaps the most common insects while there were very few beetles. Some of the more unusual insects included Mole Crickets, Plant-hoppers, and Mantis Lacewings.

Spotlighting was poor and only resulted in disturbing a few cane toads. The highlight for larger animals were a Childrens Python (*Antaresia [Liasis] childreni*) and Brown Tree-snake.

Mole Cricket (*Gryllotalpa* sp.; Gryllotalpidae).



Mantis Lacewing (*Spaminta* sp.; Mantispidae).



Plant-hopper (*Eurinopsyche obscurata*; Fulgoridae).



Crossing the road: Brown Tree-snake (*Boiga irregularis*).



Scarab Beetle (*Colpochila* sp.; Scarabaeidae).

Interesting bird sightings

22 May to 25 June 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
Waterbirds, seabirds and waders				
Plumed Whistling-Duck	29/05	Palmerston Sewage Ponds	Andrew Bell	300+ (large nos.)
Brown Booby	22/06	Lee Point	Bas Henson	1
Australian Pratincole	2/06	Darwin Airport	Diceum	15+;
		and other sightings, various observers, including tens of thousands on the Barkly Tablelands		
Oriental Plover	c. 20/06	Lee Point	Clive Garland	1
Broad-billed Sandpiper	14/06	Lee Point	Arthur & Sheryl Keates, Gavin & Meg O'Brien	1
Birds of prey				
Eastern Osprey	25/05	CDU Tower	Colin Trainor	2, possibly nesting
~	25/05	Channel 9 Tower, Darwin	S & A Keates and D Binns	2, possibly nesting
Black-shouldered Kite	29/05	Adelaide River Floodplain	Sheryl & Arthur Keates	2, nesting
Square-tailed Kite	26/05	20 km east of Annaburroo	Marc Gardner	2
~	5/06	15 km south-west of Katherine	Don Franklin, Heather Ryan, Deb Bisa	1
~	17/06	CDU Casuarina Campus	Richard Noske	1
Grey Goshawk	9/06	Rapid Creek	Bryan Baker	1 carrying nesting material
Peregrine Falcon	c. 26/05	Parap	John Rawsthorne	2
Rufous Owl	5/06	Botanic Gardens	Sheryl & Arthur Keates	1
Masked Owl	c. 13/06	Melville Island	Jessie & Jo	1
Other non-passerines				
Emu	12/06	Gunn Point Road	Sheryl & Arthur Keates <i>et al.</i>	1
Chestnut-quilled Rock-Pigeon	c. 6/06	betw. Oenpelli & Maningrida	R Noske <i>et al.</i>	2 nestling & 14 seen over 2 days
Banded Fruit-Dove	c. 6/06	between Oenpelli & Maningrida	R Noske, M Gardner, J Rawsthorne	1
Passerines				
Variegated (Lavender-flanked) Fairy-wren	c. 6/06	between Oenpelli & Maningrida	Richard Noske <i>et al.</i>	
Rufous-throated Honeyeater	29/05	Palmerston Sewage Ponds	Niven McCrie	and 6 or 7 other sightings around Darwin, various observers
Banded Honeyeater	1/06	Nightcliff Shopping Centre	Richard Noske	and lots of other sightings around Darwin, various observers
Varied Sittella	29/05	Charles Darwin NP	Niven McCrie	party
White-breasted Whistler	c. 7/06	Kulaluk Bay	R Noske <i>et al.</i>	nest with 1 egg; later predated
Masked Woodswallow	3/06	CDU Campus	Richard Noske	4;
		and numerous other sightings around Darwin & beyond, various observers		
White-browed Woodswallow	4/06	Anzac H'way	Jon Clark	1;
		& other sightings in Darwin, various observers		
Arafura Fantail	c. 6/06	Casuarina Coastal Reserve	Gavin & Meg O'Brien	1
Hooded Robin	c. 22/05	Maranboy Ck. Central Arnhem H'way	Sheryl & Arthur Keates	2
Tawny Grassbird	c. 6/06	Casuarina Coastal Reserve	Gavin & Meg O'Brien	1
Gouldian Finch	6/06	Bird Billabong	M Jarvis	100+; & other sightings, various observers.
~	6/06	Bullita Access Road	D Franklin, H Ryan, D Bisa	c. 100 in 3 groups



Andrew Bell photographed this Australian Pratincole chasing dragonflies on foot at the Katherine Sewerage Ponds on 29 May 2010. "The technique", he wrote, "seems to be to hold your head low to the ground, horizontal with your back, and then charge at them while they're perched. (It obviously missed the one in the photo but then succeeded with another)."

Graham Brown has tentatively identified the dragonfly as a Blue Skimmer, *Orthetrum caledonicum*.

Recent literature about Top End natural history

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

MAMMALS

Compiled by Don Franklin

Not so technical

- Nou T. 2009. Wet season burning for the Golden Bandicoot. *TSN News* Autumn: 10.
Nou T. 2009. Declining native mammals in northern Australia. *TSN News* Winter: 10.
Palmer C. 2009. Northern Territory coastal dolphin research project. *ECNT newsletter* March: 12.

Marsupials

- Cardoso MJ, Eldridge MDB, Oakwood M, Rankmore B, Sherwin WB, Firestone KB. 2009. Effects of founder events on the genetic variation of translocated island populations: implications for conservation management of the northern quoll. *Conservation Genetics* 10: 1719-1733.
DeGabriel JL, Moore BD, Shipley LA, Krockenberger AK, Wallis IR, Johnson CN, Foley WJ. 2009. Inter-population differences in the tolerance of a marsupial folivore to plant secondary metabolites. *Oecologia* 161: 539-548.
Dougall A, Shilton C, Choy JL, Alexander B, Walton S. 2009. New reports of Australian cutaneous leishmaniasis in Northern Australian macropods. *Epidemiology and Infection* 137: 1516-1520.
Gubala A, Davis S, Weir R, Melville L, Cowled C, Walker P, Boyle D. 2010. Ngaingan virus, a macropod-associated rhabdovirus, contains a second glycoprotein gene and seven novel open reading frames. *Virology* 399: 98-108.
O'Donnell S, Webb JK, Shine R. 2010. Conditioned taste aversion enhances the survival of an endangered predator imperilled by a toxic invader. *Journal of Applied Ecology* 47: 558-565. [Northern Quoll, Cane Toad]
Stirrat SC. 2008. Age structure, mortality and breeding in a population of agile wallabies (*Macropus agilis*). *Australian Journal of Zoology* 56: 431-439.

Swamp buffalo and other introduced species

- Albrecht G, McMahon CR, Bowman DMJS, Bradshaw CJA. 2009. Convergence of culture, ecology, and ethics: management of Feral Swamp Buffalo in Northern Australia. *Journal of Agricultural & Environmental Ethics* 22: 361-378.
Bowman DMJS, Murphy BP, McMahon CR. 2010. Using carbon isotope analysis of the diet of two introduced Australian megaherbivores to understand Pleistocene megafaunal extinctions. *Journal of Biogeography* 37: 499-505. [Asian Swamp Buffalo, Banteng]
Ens E-J, Cooke P, Nadjamerrek R, Namundja S, Garlingarr V, Yibarbuk D. 2010. Combining Aboriginal and non-Aboriginal knowledge to assess and manage feral Water Buffalo impacts on perennial freshwater springs of the Aboriginal-owned Arnhem Plateau, Australia. *Environmental Management* 45: 751-758.
McMahon CR, Brook BW, Collier N, Bradshaw CJA. 2010. Spatially explicit spreadsheet modelling for optimising the efficiency of reducing invasive animal density. *Methods in Ecology and Evolution* 1: 53-68.

Rodent parasites

- Mulder E, Smales LR. 2009. Parasites of *Rattus colletti* (Rodentia : Muridae) from the Adelaide River floodplain, Northern Territory, and comparison with assemblages in other *Rattus* species. *Australian Journal of Zoology* 57: 377-383. [Dusky Rat]
Weaver HJ, Smales LR. 2009. The parasite assemblages of *Zygomys argurus* (Thomas, 1889) (Muridae : Murinae) from northern Australia. *Australian Journal of Zoology* 57: 429-432. [Common Rock-rat]

Miscellaneous & general

- Firth RSC, Panton WJ. 2006. The mammals of Croker Island, Northern Territory, Australia. *Australian Mammology* 28: 121-123.
Milne DJ, Jackling FC, Sidhu M, Appleton BR. 2009. Shedding new light on old species identifications: morphological and genetic evidence suggest a need for conservation status review of the critically endangered bat, *Saccolaimus saccolaimus*. *Wildlife Research* 36: 496-508. [Bare-rumped Sheath-tail Bat]
Woinarski JCZ, Armstrong M, Brennan K, Fisher A, Griffiths AD, Hill B, Milne DJ, Palmer C, Ward S, Watson M, Winderlich S, Young S. 2010. Monitoring indicates rapid and severe decline of native small mammals in Kakadu National Park, northern Australia. *Wildlife Research* 37: 116-126.



Parasites of kangaroos & wallabies

Leishmaniasis is a disease caused by the parasites of the genus *Leishmania*, different species of which may variously infect humans, dogs, horses and other mammals. It is commonly transmitted by sandfly bites. Dougall *et al.* (2009) “describe the first cases of Australian cutaneous [skin – *ed.*] leishmaniasis in eight northern wallaroos, one black wallaroo and two agile wallabies from the Northern Territory of Australia.” The species of *Leishmania* involved appears to be unique to kangaroos and wallabies.

Wallabies and kangaroos in northern Australia also host Ngaingan virus, which is transmitted by biting midges (Gubala *et al.* 2010). This is a rhabdovirus, some species of which cause diseases as diverse as potato yellows and rabies. In laboratories, Ngaingan virus is recommended for cautious handling, but it is apparently not known to infect humans. [Your editor couldn't ascertain whether Ngaingan virus affects infected wallabies and kangaroos adversely.]