



NATURE TERRITORY

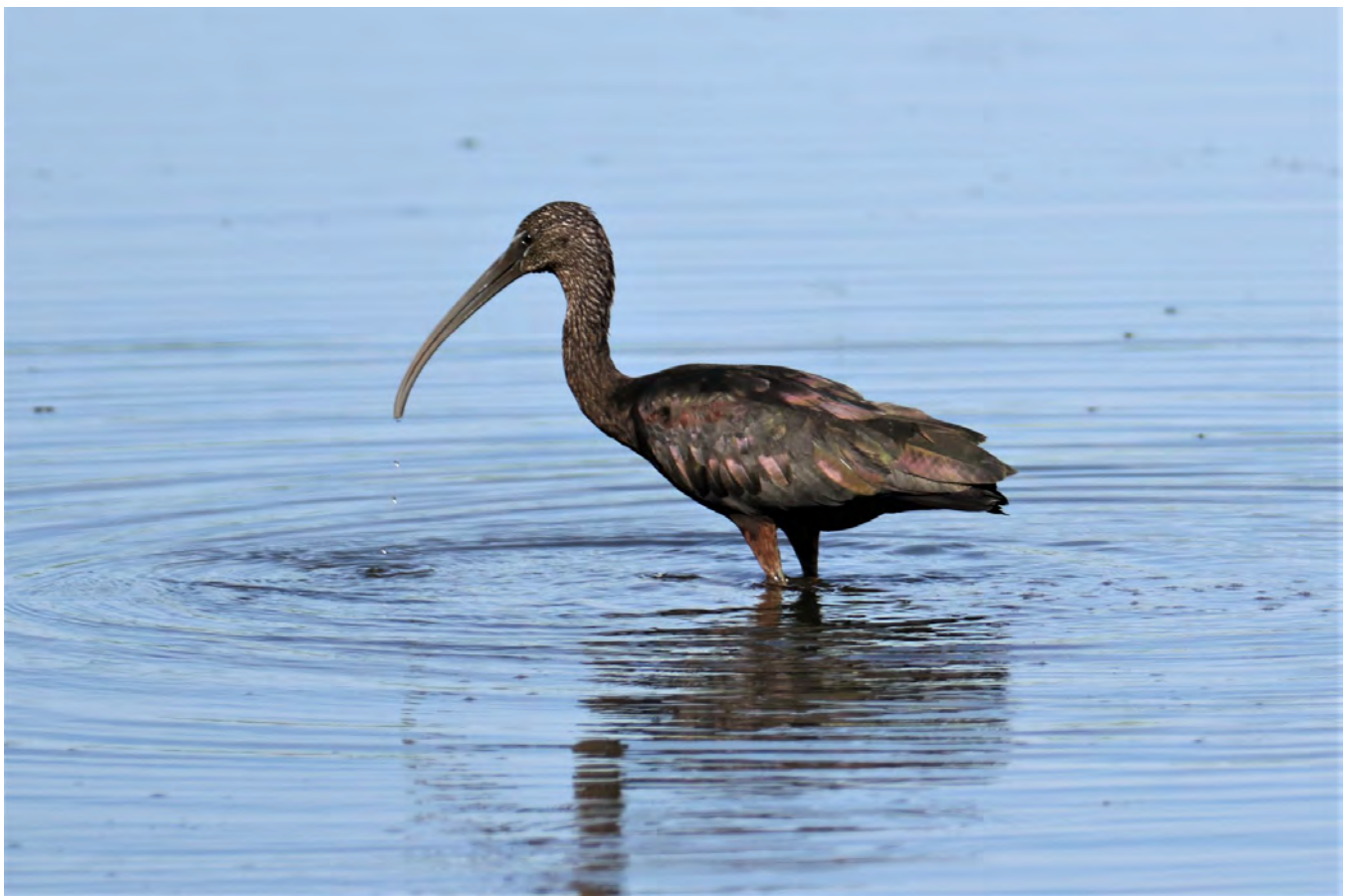
February 2019

Newsletter of the Northern Territory Field Naturalists' Club Inc.

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



Glossy Ibis at Fogg Dam. Check out Chitter Chatter on page 12 for more photos. *Photo: Christopher Spooner*

FOR THE DIARY

February Meeting: Wednesday 20 - Ants of the NT with an emphasis on invasive species with Magen Pettit

February Field Trip: Sunday 24 - CSIRO Lab to view ant and other collections with Magen Pettit

See pages 2 - 3 for more details

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

February Meeting

Ants are fANTastic ... but invasive ants are not! by Magen Pettit

Wednesday 20, 7.45 pm, CDU Casuarina, Room **BLUE 2.2.24**

PLEASE NOTE CLUB HAS A NEW MEETING ROOM - SEE PAGE 14 FOR A MAP

Summary: Ants are the most widely used invertebrate indicators of ecosystem health and biodiversity change. However, there is also the issue of invasive ant species which are amongst the most serious global invasive pests. Invasive ants cost >\$6 billion annually to the global economy. Australia's environmental, economic, and social wellbeing is threatened by these ants, some of which have already been introduced and have become established in Australia. Currently, more than a dozen eradication or management programs will cost >\$400 million over the next 10 years. This presentation will provide information on the ecological



Yellow crazy ant worker and queen. Photo: P Lester



Effective large scale treatments for invasive ant eradication. Photo: B. Hoffman

importance of ants, as well as discussing invasive ants and new technological approaches to Australian ant management programs.

Biography: Magen Pettit is a born and bred Dawinite. She is a versatile field and laboratory entomologist who has been based at the CSIRO labs in Darwin for nearly 20 years. Her main research interests are invertebrate

ecology, invasion ecology, managing invasive species and general community ecology especially for sustainable land management (bioindication), and she has a particular research focus on ants. She has been involved with invasive ant incursion projects in NE Arnhem Land and Norfolk Island. Her current work is effectively managing the eradication effort of Tropical Fire Ant (*Solenopsis geminata*) in Milikapiti (Snake Bay) on Melville Island. Magen is also the curator of the largest ant collection in the southern hemisphere, and includes the most comprehensive holdings (>7,000 species) of Australian ants.



Magen Pettit. Photo: A. Liedloff

February Field Trip

Visit to CSIRO Ant Laboratory with Magen Pettit

Sunday 24, 8.30 am, CSIRO Darwin Laboratories, 564 Vanderlin Drive

PLEASE NOTE PARTICIPANTS MUST BOOK A PLACE, NUMBERS LIMITED

Ants are Australia's dominant faunal group in terms of biomass and the ecological significance of ants can not be overstated. Ants play key roles in nutrient cycling, energy flow and vegetation dynamics. Australian ant diversity and productivity are exceptionally high by world standards, particularly in arid environments, where >100 ant species commonly occur within a single hectare.

Come along to view the largest ant collection in the southern hemisphere! CSIRO's Darwin Ant Laboratory includes the most comprehensive holdings (7,200 species) of Australian ants. The collection is a critical resource for systematics, ecology, natural resource management, biosecurity and biogeography.

CSIRO's Magen Pettit will explain invertebrate collection, preservation techniques and display a number of native ant species to view under microscopes. She will also describe some of the taxonomic features of various ant specimens.

The collection also contains other insect taxa, which will also be available for visitors to view.

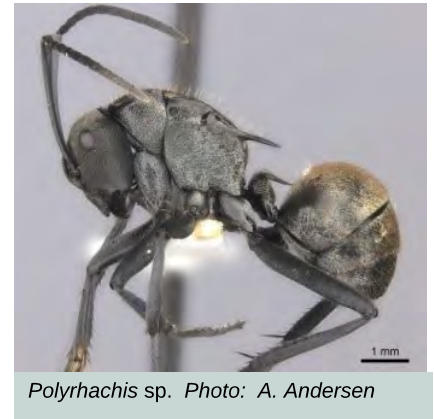
WHERE: CSIRO Darwin Laboratory, 564 Vanderlin Drive, Berrimah (opposite Peter McAulay Centre)

WHEN: Sunday 24 February at 8.30 am sharp* (no longer than 2 hours)

WHAT TO BRING: Enclosed shoes

SPECIAL INFORMATION: Spaces are strictly limited with preference given to financial club members. Please book your place by emailing Tissa Ratnayake mail@imprintdesign.com.au

*Visitors will need to arrive no later than 8.30 am to be escorted onto CSIRO premises after which the security gates will be locked. Late comers will not be able to gain access.



Upcoming Field Nats Activities

March Meeting: Wednesday 13 - Spiders with Caitlin Henderson

March Field Trip: Sunday 17 - Rozak House, Lake Bennett, with Top End Native Plant Society

January Field Trip Report

CDU's Aquaculture Training & AusTurtle's Rehabilitation Facility

Saturday 19 January 2019

Text and photos by Tissa Ratnayake



A Giant Clam.

We in Darwin are so lucky to have this club organise these FREE monthly informative field trips and they are open to members of the public. There is something new to learn on every field trip. So rewarding to see the younger members enjoying themselves, hopefully some of them will be inspired to become scientists.



Note partially missing front left flipper and exposed bone.



Feeding time and lucky to be alive. This turtle slipped from the grasp of a bird and fell onto a boat when it was matchbox size - it was initially thought to be dead but struggled back to life.



Amazing green eyes on this Gold Spotted Rock Cod. I think it thought my camera was food!



A Surgeon Fish swims over clams.



Who would have thought, the turtles really do love a scratch



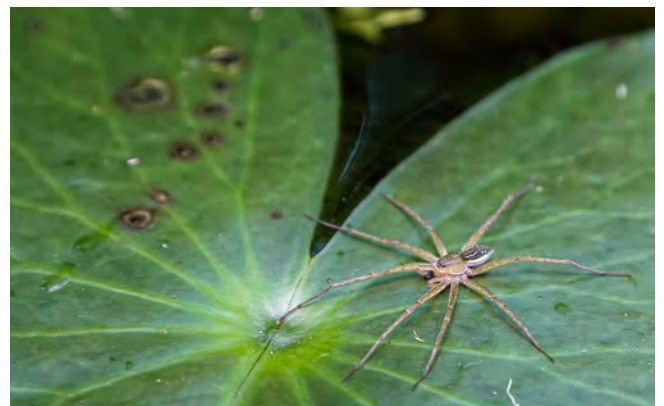
Feeding squid to the turtles.



Feeding the large Barramundi was exciting, the hand-held bait fish would disappear with a loud clap of snapping jaws and a big splash.



Eager members gathered around one of the large turtle tanks.



In this environment it was only natural to see a Water Spider (*Dolomedes facetus*) - they can dive under water to catch small fish and tadpoles.

Bird of the month – Crimson Finch

By Denise Lawungkurr Goodfellow

Bird: Crimson Finch (*Neochmia phaeton*)

Order: Passeriiformes

Family: Estrildidae

Size: 12-14 cm.

Description: A red, or red and brown, long-tailed finch which inhabits vegetation - long grass and sedges, and pandanus - near permanent water. The male is crimson with a red beak, white spots on the flank, and a black belly. Females are brown with a red face and tail and youngsters are all brown. There is a white-bellied subspecies on Cape Yorke Peninsula, Queensland.



The call is a rather musical tinkling. Crimson Finch breeds in the Wet Season, nesting in pandanus, tree hollows, banana plants and even on verandahs and in sheds. Kunwinjku people call this little bird Dalgerowgen.

Where found: this beautiful little bird is found across the Top End, near waterholes and rivers, and garden ponds and birdbaths. During the Wet it also disperses into drier areas, for example open forest.

Notes: Crimson Finch was originally scarce around our Darwin River home, preferring to hang around the pandanus at the east end of the property. However, since we've put in birdbaths, ponds and waterside vegetation some birds are now commonly seen near our house. There also appears to be an increase in their numbers. That may be because of cane toads. According to one study (Doody, et al., 2015) cane toads killed off about 50% of the water monitor population thus leading to an increase in survival of crimson finch fledglings (55-81%). While many would be happy to see more of this lovely bird, an increase in the finch population could lead to a reduction in the plants on which it feeds.

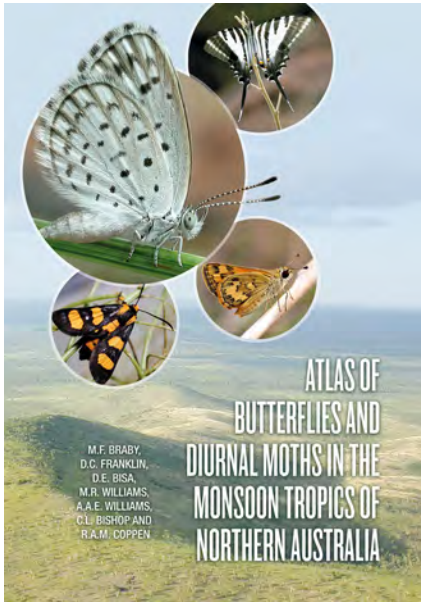
References:

Doody, J.S., Soanes, R., Castellano, C.M., Rhind, D., Green, B., McHenry, C.R. & Clulow, S. (2015). Invasive toads shift predator-prey densities in animal communities by removing top predator. Ecology, DOI: [10.1890/14-1332.1](https://doi.org/10.1890/14-1332.1).
<https://www.newscientist.com/article/dn27199-cane-toad-has-surprise-effect-on-australian-ecosystem/>.

Goodfellow, D.L. & M.P. Stott, M.P. (2000, 2005). Birds of Australia's Top End, Darwin: Scrubfowl Press.

Woinarski, J. C. Z.; Fisher, A.; Armstrong, M.; Brennan, K.; Griffiths, A. D.; Hill, B.; Low Choy, J.; Milne, D.; Stewart, A.; Ward, S.; Winderlich, S.; Young, S.; & M. Ziemnicki (2012). Monitoring indicates greater resilience for birds than for mammals in Kakadu National Park, northern Australia. Wildlife Research, <http://dx.doi.org/10.1071/WR11213>.

Butterfly Book Launch and Workshop



There will be a book launch for the *Atlas of Butterflies and Diurnal Moths of the Monsoon Tropics of Northern Australia* recently published by ANU Press at the Theatre, Museum and Art Gallery of the Northern Territory, Darwin on Thursday 28 February, 2019 from 5-7pm.

A second event a few days later will be a workshop that deals with a new citizen science project *Butterflies Australia: A national database of butterfly distributions* funded by the Australian Government Department of Industry, Innovation and Science with support from The Australian National University. The workshop will be held at Room Blue 2A.1.01, Charles Darwin University, Casuarina on Saturday 2 March 2019 from 10am-12pm.

Both events are open to the public.

Publications

The following are the latest publications to arrive at NT Field Nats. Publications will be brought to General Meetings each month. Please feel free to browse through and borrow.

Geelong Naturalist

Monthly magazine of the Geelong Field Naturalists' Club Inc., Vol. 54, No. 8. December 2018

Birds Queensland Newsletter, Vol. 49, No. 11. December 2018

The Naturalist News

Published for Naturalist in Western Australia, December 2018

Origins

Magazine produced by Charles Darwin University, Edition 2 2018

The Queensland Naturalist

Journal of the Queensland Naturalists' Club Inc, Vol. 56, Nos. 4-6, December 2018

QNC News

Newsletter of The Queensland Naturalists' Club Inc, No. 342 January-February 2019

Australian Birdlife

Magazine published by Birdlife Australia, Vol. 7, No. 4, December 2018

Field Natter

Field Naturalists' Association of Canberra, December 2018 (electronic)

Friends of Fogg Dam

Newsletter No 21, December 2018

Christmas Beetles

An article by Kate and Graham Brown appearing as “Bug Bits” in the NT News.

With Christmas and New Year’s behind us again, we — like many others — have paused in reflection.

Although, we reflect somewhat differently to others and wonder about the myths surrounding Christmas beetles.

It is a common belief that Darwin is home to Christmas beetles.

However, those prickly-legged, noisy, grey blurs that fly into ceiling fans and catapult against our walls are not technically Christmas beetles. Even if they turn up at Christmas.



Anoplognathus macleayi, it is a common belief that Darwin is home to Christmas beetles.

Christmas beetles are scarabs (family name Scarabaeidae) and belong to the genus *Anoplognathus*.

This genus is represented by more than 30 species, none of which reside in Darwin. In fact, in the Territory, Christmas beetles have been recorded only as far north as about Borroloola.

Christmas beetles are relatively large with strong spiny legs that are used for digging. Similar to most scarabs, the top is rounded (convex) in cross-section.

Unlike Darwin’s scarabs, the colours of Christmas beetles are much more vibrant, and, depending on the species, are variably yellow, golden or bright metallic green.

There are a lot of scarabs in the Northern Territory, but the most common scarab seen in Darwin is *Lepidiota* (especially *L. squamulata*). These beetles are unmistakably brown and covered in flat white scales and tend to emerge about the same time as the first rain.



Lepidiota is a beetle of the Scarabaeidae family. beetles.

Another local species — *Ischiopsoph*a — emerges a little earlier, flies much faster and is more active during the middle of the day. This species is also likely to be mistaken by some as a true Christmas beetle.

You may be able to identify *Ischiopsoph*a because, although it is bright metallic green, the top of the body is distinctively flat. Of course, that’s if the beetle sits still long enough to be recognised.



Ischiopsopha are beetles from the subfamily Cetoniinae.

Scarabs produce one generation per year with adults appearing in Spring to early Summer; however, most of the year is spent as a larva feeding and growing.

Eggs are laid into the larval substrate, which is often soil among grassroots. Regardless of species, larvae all look the same to the naked eye: a C-shaped grub with a darker head and tail.

When fully fed (on decaying logs, other plant material or even dung) larvae pupate in the same substrate or small hollow they have created.

The pupa looks like the adult, but white with visible appendages adhering to the body.

Pupation takes only a few weeks before adults emerge, whereby most are commonly seen in the early evening on warmer, stiller nights.

Recently, there have been discussions regarding a significant decline in Christmas beetle populations, particularly around the Sydney area.

While scientific evidence is limited, any reduction is likely to be resultant of habitat loss and localised insecticide use.

Christmas beetles tend to almost exclusively feed on eucalyptus leaves as adults, and with increased urbanisation and reduced food supply many species are sadly impacted.



Lepidiota larva.

With regard to the Darwin scarabs, which tend to emerge in the first rains, it is possible that our scarabs have also suffered due to the absolute lack of rain this wet season.

If you have noticed a change in the habits or frequency of insects in your area or have found something you would like identified, I'd love to hear about it. (bugbits@gmail.com)

Podcasts

To access the ABC Radio National podcasts check the website at:
<https://www.abc.net.au/radionational/programs/offtrack/>

Life Matters, Radio National: Rubber jellyfish vs sea turtles: who wins?

How does a helium balloon get from your hand to the digestive tract of a sea turtle? A new documentary explains how our celebrations are shutting the party down for marine life. Rubber Jellyfish examines the relationship between helium balloons and their impact on the world's oceans including six endangered species of sea turtles in waters around Australia.

In a 2012 study from the University of Queensland, balloons were identified as being

disproportionately consumed by sea turtles based on commonality of balloons as litter on Queensland beaches. In other words, the study found that sea turtles specifically target balloons. In fact, of all rubber items found inside of deceased sea turtles, 78% were balloons or balloon fragments.

They concluded that sea turtles were consuming balloons to such a large degree due to their similarity in appearance to jellyfish which is a prey all sea turtles eat – click here for the scientific paper (<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0040884>)



(Left) Film maker Carly Wilson with helium balloons that have burst into the characteristic jellyfish shape. All of these balloons were collected on the nesting beach for a population of critically endangered loggerhead sea turtles on the Sunshine Coast. (Right) A green sea turtle in care after ingesting a balloon. Photos: Larissa McCollin/Blair Witherington

John Wolseley on art and beetles, Blueprint for Living, Radio National



John Wolseley describes himself as a hybrid mix of artist and scientist. His art is always a collaboration with nature, and in this case with the Aboriginal artist Mulkun Wirrpanda. Together over the last five years they painted the floodplains and flora of the Blue Mud region of Arnhem Land. He gave Tim Entwisle a tour of his exhibition earlier this year at Australian Galleries in Collingwood.

Note: The Midawarr exhibition is currently showing at the Museum and Art Gallery Northern Territory. Exhibition ends on 3 March 2019.

SPIDERS



© Jürgen Otto

15 December 2018 – 28 April 2019

magnt.net.au

Admission fees apply

**MUSEUM
AND ART
GALLERY**
NORTHERN
TERRITORY

An exhibition developed & toured by the Australian Museum & Questacon - The National Science and Technology Centre



Australian Government



Chitter Chatter - excerpts from the Club's Facebook group

19 January 2019: Heather Ryan

Pale Triangle Butterfly hanging on to the *Leptospermum* during the current downpour in Durack.



January 23: Judy Egan Lots of these pretty little moths around at the moment. Orange-banded Day-moth, *Periopta diversa*. These were at McMinns Lagoon feeding on *Spermacoce* sp.



16 January 2019: Nick Volpe Hawk Moth *Macroglossum* sp. from East Point. A really odd looking moth!

Graham Brown: *M. hirundo*? These things fly like thynnid wasps.

16 January 2019: Alana de Laive Does anyone know what this strange thing is? My best guess is some sort of caterpillar nest? Also can't decide if it's really cool.. or the stuff of nightmares

Liz Statham Processional Caterpillar the stuff of nightmares if you have horses or cattle

Nick Volpe Itchy caterpillar

Alana de Laive Ahh yes! I've seen their little conga lines before, I should have known. Thanks Liz! Just read up about the horses. That's crazy?!

<https://www.australiangeographic.com.au/blogs/wild-journey/2017/06/hairy-and-dangerous/>





13 January 2019: Nick Volpe

Nature is incredible! The Green-ant Mimicking Spider *Amyciaea albomaculata* looks and behaves exactly like a Green Tree Ant *Oecophylla smaragdina* to avoid predators and also predate on the ants themselves! This image of the spider eating a Green Tree Ant was captured in the rainforest at the Territory Wildlife Park.



17 January 2019: Judy Egan Wonderful to see these two Partridge Pigeons getting all lovey-dovey this morning at Humpty Doo (yes, pun intended!). Haven't seen any for years. Unfortunately right at the limit of my lens reach so photos not as sharp as I would like.



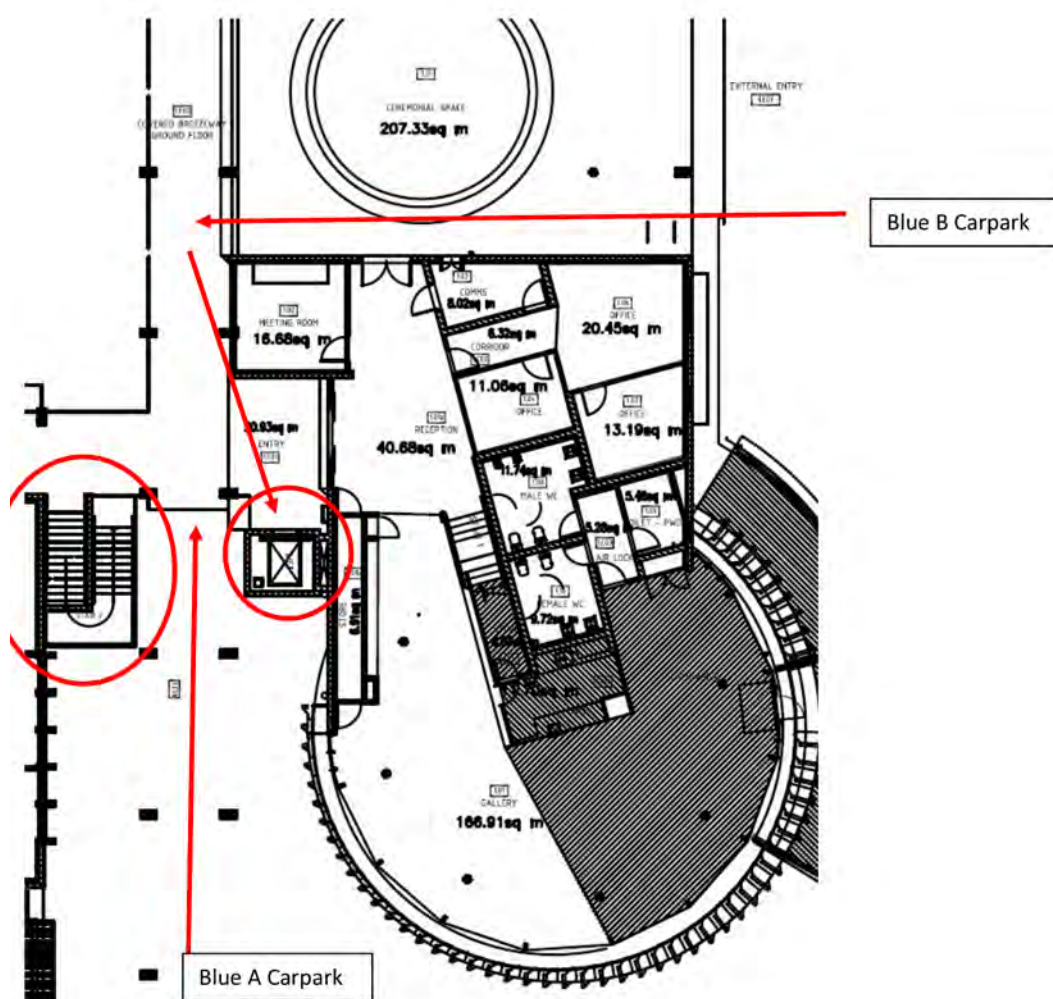
1 January 2019: Brian Jukes Thought some members may like to see a Rainbow Pitta's nest, currently complete with 4 eggs. Hopefully they survive. And Happy New Year to you all!!

Brian Jukes An unfortunate update to these pictures. Yesterday there was only 1 egg left and today that has gone as well. The nest is not disturbed in any way and there are no signs of busted shells around either. There were a few little black ants around, perhaps...

Tissa Ratnayeke Brian thanks for the original post and this update. Many of our native wildlife including birds also depend on eggs and chicks for survival. Hopefully your Pittas will strike it lucky next time.

Club Meeting Room for 2019

The Club has been allocated a new meeting room for 2019 at Charles Darwin University's Casuarina Campus. It is in the same complex the Club's 2018 meetings were held in but has now been moved upstairs to room number [BLUE 2.2.24](#).



NT Field Naturalists' Club Directory

President:	Richard Willan	8999 8238 (w)
Secretary:	<i>Vacant</i>	
Treasurer:	Jo Rapley	0487 193 241
Committee Members:	Graham Brown	0417 804 036
	Mark Grubert	8999 2167 (w)
	Lyn Lowe	0411 269 216
	Leona Sullivan	0423 951 874
	Andrew Bell	0428 882 979
BirdLife Australia Liason Officer:	Andrew Bell	
Newsletter Editor	Leona Sullivan	0423 951 874
Website and Facebook:	Tissa Ratnayeke	0417 659 755

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



Club notices

Thank you: The previous issue was despatched by **Tissa Ratnayeke**.

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Newsletter contributions welcome: Sightings, reports, travelogues, reviews, photographs, sketches, news, comments, opinions, theories , anything relevant to natural history. Please forward material to news.ntfieldnatsnt@gmail.com

Deadline for the March newsletter: 28 February 2019

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Need a Club membership form? Go to: <http://ntfieldnaturalists.org.au/membership/>

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Northern Territory Naturalist:

Chief Editor, Richard Willan, advises that Volume 28 has been printed and copies have been mailed out to members who haven't been able to personally collect their copy. Contributions for next year's volume are now welcome.

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Top End Native Plant Society 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 0459 440 665.

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NT Field Naturalists' Club Meetings are *generally* held on the second Wednesday of every month, commencing at 7:45 PM, 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.