

OBJECT: To foster an interest in nature

April 2018

ISSN: 1836-2761



GPO BOX 249  
CANBERRA ACT 2601

FIELD NATURALISTS' ASSOCIATION OF CANBERRA INC.

# FIELD NATTER

**MEETING—Thursday 5 April 2018**  
**7:30 pm Australian National University**  
Jan Anderson Seminar Room, R.N. Robertson Building, Biology Place, ANU, ACT  
details back page

## **Freshwater turtles in the ACT**

**Speaker: Bruno Ferronato**

Bruno will talk about the turtle species found in the ACT and comment on their biology and conservation. In addition, he will present some results from his previous research on the eastern long-necked turtles in Northern Canberra and future studies he and his colleagues are planning to start next Spring.



*Female turtle: Photo by Sam Nerrie*

## **Contents**

Bar-tailed Godwits : International travellers	2
Ian Fraser's new book Birds in their Habitats: Journeys with a Naturalist	2
Field Guide to the Butterflies of the ACT	2
Calling citizen scientists: more data needed to protect echidnas	3
Backyard buddies	4
Insect population decline leaves Australian scientists scratching for solutions	4
Activities	5
Loss of biodiversity	5
Lake Ginniderra this afternoon	5

## Bar-tailed Godwits : International travellers

On a recent trip north we called in on a friend who bands birds. We were talking about some of the new information gained by satellite tags placed on migratory birds. Our friend told us one of his banded Bar-tailed Godwits was documented in Canada 14 years after it was banded in the Lower Hinter.

It was a juvenile when banded, so it most likely stayed here till mature, for 1 to 2 years. The rest is only conjecture as it cannot be proved whether this bird returned back to Australia and Canberra over the next 12 years.

We do not know its actual flight path, but it must be at least 10–11 thousand kilometres each way. That's at least 240,000 kms a year, not counting daily feeding and roosting for the rest of the year.

(That's more than a lot of motor vehicles do in 12 years.)

For a bird, it seems a hard way to make a living with all that commuting.

**Bill Murphy**

Editor: I've heard a bit about geo-tagging birds at the Jerabomberra Wetlands recently and though no expert, wonder whether the latest tagging techniques actually log the flight of the birds. This would have been useful and interesting for the Godwits to see if they did in fact return to Australia annually, (which I believe is the purpose of tagging and tracking the Latham Snipes at Jerra).

## Ian Fraser's new book *Birds in their Habitats: Journeys with a Naturalist*

Everywhere we go there are birds, and they all have mysteries to be unravelled. These mysteries include the way they look, from bizarre to apparently mundane, why they live where they live, and the things they do, many of which are far too incredible ever to be imagined as fiction.

*Birds in Their Habitats* is a collection of stories and experiences, which introduce fascinating aspects of birdlife, ecology and behaviour. Informed by a wealth of historical and contemporary research, Ian Fraser takes the reader on a journey through four continents: from places as unfamiliar as the Chonos Archipelago of southern Chile and the arid Sahel woodlands of northern Cameroon to those as familiar as a suburban backyard. This is a book of discovery of birds and the places they live. And with humour and personal insight, it is a book about the sometimes strange world of the people who spend a life absorbed in birds.

Available at COG meetings, but no doubt also available elsewhere.

## Field Guide to the Butterflies of the ACT

The last issue of the newsletter gave mention of the publication *Field Guide to the Butterflies of the ACT*. I attributed publication to Suzie Bond but there are in fact three authors: Suzi Bond, Steve Holliday and John Stein.

In addition, Adrienne Nicholson sells the NPA Field Guides at the FNAC meetings at members prices so there is no need to travel to other outlets.



# Calling citizen scientists: more data needed to protect echidnas

**These masters of disguise are some of the world's oldest surviving mammals, but they are threatened by habitat loss, traffic and feral cats – and they need our help**

Alexandra Spring: Thu 22 Feb 2018 04.00 AEDT

Researchers believe the remaining Australian echidna population may be threatened and they need citizen scientists' help to save them. They may be one of the world's oldest surviving mammals – around for at least 25 million years – but scientists don't know much about echidnas. Now researchers believe the remaining Australian population may be threatened and they need citizen scientists' help to save them.

The short-beaked echidna is found only in Australia and Papua New Guinea. In 2015, the Kangaroo Island echidna, a once significant subspecies, was listed as endangered. While the remaining population is listed as 'least concern', researchers question the listing. As Tahlia Perry, a PhD researcher at the University of Adelaide's Grutzner Lab, which is studying the molecular biology of echidnas, says: "When you don't have exact numbers, it's really hard to give something a listing."

In September 2017, the lab, in association with the CSIRO's Atlas of Living Australia, launched the free echidna CSI app to encourage Australians to photograph wild echidnas and collect their scat, or droppings. "What we are hoping to find out is whether there are other pockets of populations around the rest of the country that are in the same sort of threat level as the Kangaroo Island species because they face the exact same threats," says Perry.

The main threats to echidnas are land clearing and habitat loss. This was demonstrated on Kangaroo Island when the population shrank as development increased. Echidnas can travel great distances – often several kilometres in a day – they have very large home ranges and so land clearing and rapid developments can cause problems in their ability to travel by removing viable habitat. Other major threats

include traffic, feral cats and potentially the rapidly changing climate.

What is known about the echidna is fascinating. Like their mammalian cousins the platypus, echidnas lay eggs but keep their young – puggles – in the mother's pouch. Once they are the size of a cricket ball and their spines begin to develop, they are kicked out of the pouch and left in burrows. And while some echidna populations nurture their young, mostly the puggles are left to figure things out for themselves.

Echidnas are quite smart, though, having the biggest frontal cortex in relation to their body size of all mammals, including humans. They can climb, burrow and run rapidly. They are mostly solitary animals, but the rare times they are seen collectively is when they form 'an echidna train'. This is when the female is in season and up to 20 males follow her across great distances, all competing for her attention.

With the help of the research project, Perry hopes to discover more about the echidna's DNA, eating habits and hormones to study breeding patterns.

Their ability to escape stressful situations so quickly is why little is known about echidnas, says Perry. "They can literally dig themselves into the ground within a matter of seconds – they completely disappear in front of your eyes... They are masters of disguise and hiding and are insanely fast when they want to be as well.

As part of Guardian Australia's series on endangered species, we're encouraging readers to take part in the echidna CSI project. Download the free app, then photograph your local echidna or collect a sample of their scat and help to save the echidna.

[https://www.theguardian.com/environment/2018/feb/22/calling-citizen-scientists-more-data-needed-to-protect-echidnas?utm\\_source=esp&utm\\_medium=Email&utm\\_campaign=GU+Today+AUS+v1+-+AUS+morning+mail+callout&utm\\_term=265114&subid=14935821&CMP=ema\\_632](https://www.theguardian.com/environment/2018/feb/22/calling-citizen-scientists-more-data-needed-to-protect-echidnas?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+AUS+v1+-+AUS+morning+mail+callout&utm_term=265114&subid=14935821&CMP=ema_632)

## ***Backyard buddies***

I came across this great website and read the page on frogs. It taught me some things I didn't know and has some great tips. I am particularly interested because I have a pond with Spotted Grass Frogs. The section starts with 'Frogs are amphibians.'

One tip that resonated with me is the advice to put a thick rope or hessian bag at the end of your pool so a frog that has fallen in can climb out. I rescued just such a frog about four years ago when I made a retreat at St Clement's, Galong. I had jumped in their pool for a swim and to my amazement found a frog floating (alive) in it. I put it on the grass in the shade and it recovered.

Backyard buddies is an initiative of the Australian organisation Foundation for National Parks & Wildlife.

<http://www.backyardbuddies.org.au/fact-sheets/frogs-1>

Lucy Bastock

## ***Insect population decline leaves Australian scientists scratching for solutions***

**ABC Far North By Mark Rigby: Updated 24 Feb 2018, 3:50 pm**

A global crash in insect populations has found its way to Australia, with entomologists across the country reporting lower than average numbers of wild insects. University of Sydney entomologist Dr Cameron Webb said researchers around the world widely acknowledge that insect populations are in decline, but are at a loss to determine the cause.

"On one hand it might be the widespread use of insecticides, on the other hand it might be urbanisation and the fact that we're eliminating some of the plants where it's really critical that these insects complete their development," Dr Webb said.

"Add in to the mix climate change and sea level rise and it's incredibly difficult to predict exactly what it is."

Entomologist and owner of the Australian Insect Farm, near Innisfail in Far North Queensland, Jack Hasenpusch is usually able to collect swarms of wild insects at this time of year. "I've been wondering for the last few years why some of the insects have been dropping off and put it down to lack of rainfall," Mr Hasenpusch said. "This year has really taken the cake with the lack of insects, it's left me dumbfounded, I can't figure out what's going on."

Mr Hasenpusch said entomologists he had spoken to from Sydney, Brisbane, Perth and even as far away as New Caledonia and Italy all had similar stories. The Australian Butterfly Sanctuary in Kuranda, west of Cairns, has had difficulty breeding the far north's iconic Ulysses butterfly for more than two years.

Without formal scientific research into the phenomena, Dr Webb said it was difficult to make accurate predictions or assessments about insect numbers. On the other hand, he said, it is important to listen to the entomologists, ecologists and researchers who are in the field on a regular basis.

"When experts are relaying this kind of information it is something that we need to turn our mind to and think about what could be going on, and more importantly how do we work out if this is actually happening and what we do about it."

Editor

Suzi Bond of Canberra has made a similar comment that this 2017/2018 season has been very poor for butterflies.

## Activities

### 5 April to 15 May: Photographic competition and display– CSIRO Discovery Centre, Black Mountain (Science Road Acton)

The Atlas of Life in the Coastal Wilderness will have a display next to their 2017 Wild Eye photography competition in the CSIRO Discovery Centre at Canberra from 3 April to 15 May. Canberra Nature Map held their own recent competition for varying categories and will be displaying the winning photos as well. Launch and Prize Giving: 4 pm Thursday 5 April, by Ian Walker the new Conservator for Flora and Fauna. You will need to RSVP to attend the launch, (RSVP [mulvaney@netspeed.com.au](mailto:mulvaney@netspeed.com.au) by 3 April), but are otherwise invited to visit the exhibition.

**Editor's note:** Just a small boast, my photo of a blue banded bee won the Other insects category, so I hope you will find time to drop in as I'm sure there will also be many other fantastic nature photographs.

### 24–25 August: Black Mountain Symposium 2018

9:00 to 4:40 pm 24 August. Themed talks at CSIRO Discovery Centre followed by Wine and Cheese. 9:30 am to 12:00 noon, 25 August: Walks in Black Mountain Nature Reserve. Symposium talks \$55. Wine and cheese option \$10 and guided walk \$5. Registration and program online at [www.friendsofblackmountain.org.au/symposium](http://www.friendsofblackmountain.org.au/symposium)  
The symposium will be opened by Mick Gentleman, MLA, Minister for Environment and Heritage at the CSIRO Discovery Centre, North-Science Road, Acton

## Loss of biodiversity

‘It may well disturb us to learn of the extinction of mammals or birds, since they are more visible. But the good functioning of ecosystems also requires fungi, algae, worms, insects, reptiles and an innumerable variety of microorganisms. Some less numerous species, although generally unseen, nonetheless play a critical role in maintaining the equilibrium of a particular place. Human beings must intervene when a geosystem reaches a critical state. But nowadays, such intervention in nature has become more and more frequent. As a consequence, serious problems arise, leading to further interventions; human activity becomes ubiquitous, with all the risks which this entails. Often a vicious circle results, as human intervention to resolve a problem further aggravates the situation. For example, many birds and insects which disappear due to synthetic agrottoxins are helpful for agriculture: their disappearance will have to be compensated for by yet other techniques which may well prove harmful. We must be grateful for the praiseworthy efforts being made by scientists and engineers dedicated to finding solutions to man-made problems. But a sober look at our world shows that the degree of human intervention, often in the service of business interests and consumerism, is actually making our earth less rich and beautiful, ever more limited and grey, even as technological advances and consumer goods continue to abound limitlessly. *We seem to think that we can substitute an irreplaceable and irretrievable beauty with something which we have created ourselves.*’ *My emphasis - Lucy).*

from Laudato Si’ - On Care for our Common Home, An Encyclical Letter on Ecology and Climate by Pope Francis, III. Loss of Biodiversity, No. 34. pp.34–35: 2015

Lucy Bastock

## Lake Ginniderra this afternoon





Field Naturalists' Association of Canberra Inc.

### Who are the Field Naturalists?

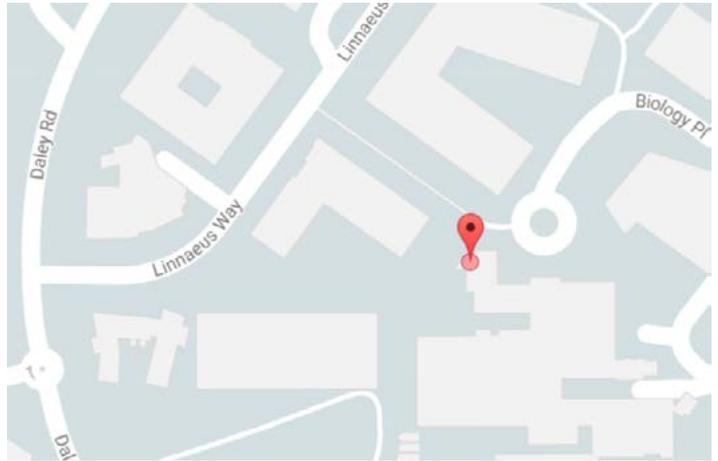
The Field Naturalists' Association of Canberra (FNAC) was formed in 1981. Our aim is to foster interest in natural history by means of meetings and regular field outings. Meetings are usually held on the first Thursday of each month. Outings range from weekend rambles to long weekends away. Activities are advertised in our monthly newsletter. We emphasise informality and the enjoyment of nature. New members are always welcome. If you wish to join FNAC, please fill in the member application below and send it in with your subscription to the FNAC Treasurer at the address below.

**President:** Rosemary Blemings, et al

**Email:** fieldnaturalist@yahoo.com.au

**Website:** under construction

**Editor:** Alison Milton All newsletter contributions welcome. **Email:** apm56@optusnet.com.au



**Monthly meeting venue:** Jan Anderson Seminar Room, R.N. Robertson Building, Biology Place, Australian National University.

**Field Naturalists' Association of Canberra  
GPO Box 249  
Canberra ACT 2601**



#### MEMBERSHIP APPLICATION OR RENEWAL

Family name: ..... First name: .....

If a family membership, please include the first names of other members of the family:

.....

Postal address: .....

Suburb: ..... State: ..... Postcode: ..... Home phone: .....

Work phone: ..... Email address: .....

Subscription enclosed: \$.....(Single/Family \$25) Donation: \$.....

How did you hear about FNAC? Please circle: FRIEND? OTHER? Please specify: