

May 2017
ISSN: 1836-2761



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CANBERRA ACT 2601

FIELD NATURALISTS' ASSOCIATION OF CANBERRA INC.

FIELD NATURALIST

MEETING—THURSDAY 4 May 2017
7:30 pm Australian National University
Gould Seminar Room, Building 116, Daley Road, ANU, ACT
details back page

Moths

Speaker: Glenn Cocking

Glenn is a volunteer Lepidoptera collector and curator at the National Insect Collection. His presentation will be in three parts, starting with a review of some of the more prominent moths of the ACT, south coast and nearby ranges (there are too many species to do this comprehensively). This will be followed by an account of some important things about moths generally that it would be good for people interested in them to be aware of, and conclude with some comments about unusual moths old and new. The photo is of one competitor for Canberra "moth of the summer" - *Dasypodia selenophora*. Did you see it?



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Observations

Margaret Kalms has found that magpies may have discovered a new form of communication. See her observations below.

I found this amazing magpie nest. Take a close look at all the different things that have been used to make it, rope, wire, string, netting and the one I really love is the iPhone cable! Does this magpie have a mobile phone?!! Do the chicks phone their friends?!!

and I saw this amazing electric blue wasp in February. (Editor: the wasp is the Blue-black hairy flower wasp *Austroscolia soror*.)



Orange bellied parrot

The Field Naturalist, Canberra gave a donation to the save the orange bellied parrot (OBP) organisation and the following is a recent report on current progress.

Fieldwork wrapped up this Monday, when the last OBP of the year left the nest. To summarise the field season: We raised >140 K for operation OBP and thanks to those funds, we immediately went into the field to start work. We spent the summer monitoring the nests of all OBPs at their breeding grounds at Melaleuca, checking their nests roughly every third day to monitor progress. To address the terribly male biased sex ratio of wild OBPs (only 3 wild females returned to breed this year), collaborators at the Tasmanian Government

released a group of captive bred female parrots at the start of the breeding season. This gave more of the remaining wild male OBPs a chance to breed, and by the end of the breeding season we had monitored 16 nesting attempts. Over all, 19 OBPs were bred in the wild this year. Thanks to your support, we were able to implement our fostering trial successfully, and one of those nestlings was the result of our trial. ‘Matilda’ was transferred by helicopter from the Tasmanian government breeding facility in Hobart to her new home on 15 January and she was accepted and raised by her new parents. It was a major achievement and this breakthrough has opened up new options for how to manage the OBP population in the future.

A fuller version of the story (including photos) is available online at: <http://www.abc.net.au/news/science/2017-01-24/captive-bred-orange-bellied-parrot-chick-adopted-by-wild-mother/8194666>

If you want more updates on Operation OBP you can search for updates on Twitter using #operationobp, or check out the Team Swift Parrot Facebook page. To learn more about our work, visit our website www.difficultbirds.com We are working to set up a donation portal on that page so you’ll be able to continue providing support if you like the work we are doing.

Thanks again for making Operation OBP such a success.

Henry Cook

Peter Wohlleben's The hidden life of trees: what they feel, how they communicate

It might be said that Colin Tudge's *The Secret Life of Trees* is an attempt to define trees whereas Peter Wohlleben explores the 'Secret World' of trees' behaviour in *The Hidden Life of Trees* written, nine years after Tudge's exceptional account, in 2015.

For thousands it requires a huge metamorphosis of thinking to even consider that trees behave, feel, communicate and react. We are so used to them being static, trusted elements of stability in our lives. As Tim Flannery says in his Foreword to the Black Inc. Australian edition "...they live on a different time scale than us."

Peter Wohlleben manages a forest in the Eifel mountains in Germany therefore he's most familiar with "the struggles and strategies of beeches and oaks". In the Australian edition's Introduction he notes 'My story also explains why forests matter on a global scale' yet, as I read I wondered whether his experiences and findings would be pertinent in Australia's forests and woodlands.

Most individual trees of the same species are connected to each other through their root systems. Nutrients are exchanged. Further research showed that trees support each other; it's in their mutual interest to assist and support each other and to retain the structure of the forest, the spread of the canopy.

Trees use scent to communicate. When giraffes ate Acacias the trees responded by "pumping toxic substances into their leaves to rid themselves of the large herbivores." The toxins' effects sent the giraffes 100 m away to other Acacias. Caterpillars in Europe are warned off by the release of chemicals in the leaves that are being attacked.

Trees also send messages via their roots and the fungal hyphae that surround them in 'unbelievable density' operating like fibre-optic Internet cables. Tree species are in contact with each other through conversational skills via roots and hyphae even if they may be competitors. Loss of a tree's network



of hyphae could lead to isolation and the ill health that then encourages insects' attacks. Shrubs and grasses also exchange information in this way. Trees' root tips contain forms of nerve cells that respond to electrical signals.

Trees 'agree among themselves' about the timing of flowering and the quantity of pollen produced. The intricacies of relationships between trees and their pollinators include references to species avoiding inbreeding. "When a seed falls from a tree each species has its strategy as to when the seed sprouts." In Europe, germinating seedlings fall victims to boar and deer. Over evolutionary time, species have reacted to these threats as well as those of weather. Landcarers here have frequently wondered at the mechanics and forces of weeds' seedbanks.

The form of trees is explored under the title "Forest Etiquette" showing why deciduous trees favour straight trunks, how snow has influenced trees' forms and the effects of seeking the canopy's openness and light. The concept of trees hibernating, slowing down during Northern Hemisphere winters is followed by exploring the senses of timing and day-length and how these are measured by organisms with no apparent brains.

Parenting by trees could be dismissed by the sceptical but there are plausible explanations and scientific evidence to back up the suppositions. Forests' ailing trees are also supported, a huge contrast to the way we expect greatness from street trees and yet have no understanding of their social and ecological needs relative to our anthropocentric behaviour.

In recent decades we have made great strides in exploring and understanding new concepts beyond traditional botany and zoology. *The Hidden Life of Trees* takes these journeys further by navigating the intimate paths of forests and the physiology of their trees.

Rosemary Blemings

The Pinnacle Nature Reserve – Autumn 2017

I have made two forays into the Pinnacle Nature Reserve this Autumn to see if the greenhood orchids are flowering. In recent years these have flowered in March but perhaps due to the unseasonably warm weather on my first visit only one or two of the rosettes were just appearing.

Failing to find any orchids I became fascinated by some colourful ants rebuilding their nests after the recent rain. While watching these I also saw some very small black ants carrying seed pods about five times their own length. However, it was while watching this one ant that I made my most interesting discovery. A creature I had never seen before.

This creature was flat, rectangular and almost 'squared off' at either end. It was black with orange markings along its multiple legs and only about 2 cms in length. It stopped and 'played dead' when I touched it to stop it moving out of my camera range.



After taking some photos I moved on to photographing the ants.



Not long after a group of walkers stopped to ask what I was photographing. When I mentioned my 'mystery' insect I learned that two of the walkers were entomologists, and from my hazy descriptions suggested that this was perhaps a *Peripatus*: an

insect between a beetle and a flat worm and a very unusual find.

However, my excitement at this potential find was deflated when I sent photos and consulted entomologist Roger Farrow who suggested that this was in fact a lycid beetle larvae, possibly *Porrostoma rhipidium*. While disappointed, Roger did point out that while the beetle is common the larvae are rarely seen so this was still an exciting discovery.

On the less positive side, moving on, I then came across a young teenager who had obviously just completed building a BMX speed hump on one of the tracks. Seeing me approaching with a camera around my neck he quickly made 'tracks' himself and since the soil was still fresh I dismantled the hump as best as possible. He doesn't seem to have been back to rebuild.

I waited a couple of weeks before going back. There were only a few birds around, mostly grey fantails. Walking off-track I nearly walked into a Golden orb spider web, but thankfully was paying attention.



The orchids are still nowhere near flowering however again, I found an unwanted intrusion within the reserve. As I was looking at the orchid site I heard the roar of a motorcycle heading up the main equestrian track. Some time later he came round on the border track then turned and headed back up the equestrian track. I took photos but his trial bike had no number plates for identification.

However, on the positive side, as I checked through my photos at the Dungowan Street entrance, I looked up to see a wedge-tailed eagle overhead then realised there were a pair. Luke, who rents the Kama house, just happened to drive up and I had a chat with him. He said that the eagles are seen regularly coming across the corridor from the Kama Reserve. Hopefully this won't change with the new proposed development that will abut the Kama Reserve.

Activities

Saturday 14 October 2017 - 9.30 am sharp to 12 noon or later 46th Black Mountain spring wildflower ramble

Belconnen Way entry just before Caswell Drive turnoff - watch for balloons. Celebrate the spring flowering on beautiful Black Mountain with a social ramble for wildflower lovers in the tradition established by Nancy Burbidge, and continued by George Chippendale. Discover the surprising diversity of tiny orchids, bush peas, wattles and billy buttons on easy bush tracks with experienced guides and good company. All springs are not the same. The pattern remains but timing and abundance vary with the weather. Friends of Black Mountain welcomes all comers, be they experts or those who have never slowed down to see the somewhat cryptic diversity. We plan several guides, with helpers, who will take different directions. BYO morning tea, water, hat, sunblock and stout shoes. Bookings essential to ensure we have enough guides. Contact friendsofblackmountain@gmail.com or Libby Viccars on 6296 1936.

Artist-in-residence 2018

Apply Now!

Craft ACT: Craft and Design Centre's Artist-in-Residence program offers an amazing opportunity for craft practitioners and designer-makers to extend their artistic boundaries through a unique research and residency period.

For 2018, we are honoured to announce the Australian National Botanic Gardens as our research partner. Artists-in-residence will have the possibility to work with the team of ANBG with a special focus on the theme of Australian Endangered or Vulnerable botanical species at the beginning of April 2018. The research period will be followed by the residency period at Namadgi National Park, where the artist will have the use of a living and working space at Gudgenby Ready-Cut Cottage. Artists may be asked to engage with the community and participate in a public program including an open day at the Cottage. Resulting work from the Artist-in-Residency program will be displayed in an exhibition at Craft ACT in 2019.

For more information and to apply visit the Craft ACT

<https://craftact.submittable.com/submit>

Submissions close 5 pm 15 June 2017.

Month	Speaker	Topic
4 May	Glenn Cocking	Moths
1 June	Brian Hawkins	The Bush Blitz scheme
6 July	Erin Walsh	Scientific illustration
3 August	Members chance to shine	AGM
7 September	Martin Royds	Organic/non-industrial farming
5 October	Alex James and Jennie Curtis	Small farms network
2 November	Meredith Cosgrove	Photographic guide to ACT native plants
7 December		Xmas party



Field Naturalists' Association of Canberra Inc.

Who are the Field Naturalists?

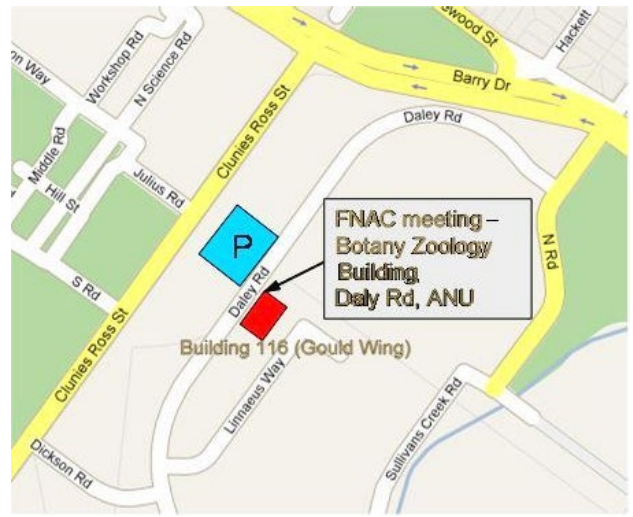
The Field Naturalists' Association of Canberra (FNAC) was formed in 1981. Our aim is to foster interest in natural history by means of meetings and regular field outings. Meetings are usually held on the first Thursday of each month. Outings range from weekend rambles to long weekends away. Activities 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 .

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Editor: Alison Milton All newsletter contributions welcome. **Email:** apm56@optusnet.com.au or cc' Alison.milton@health.gov.au



Monthly meeting venue: Division of Botany and Zoology, Building 116, Daley Road, Australian National University. (The Xmas meeting is at the adjacent building 44 and will start at the earlier time of 6:30 pm.)

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: