

OBJECT: To foster an interest in nature

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GPO BOX 249  
CANBERRA ACT 2601

FIELD NATURALISTS' ASSOCIATION OF CANBERRA INC.

**FIELD NATURALIST**

## MEETING—THURSDAY, 5 October 2017

7:30 pm Australian National University

Gould Seminar Room, Building 116, Daley Road, ANU, ACT

details back page

### Small farms network

Speaker: Alex James and Jennie Curtis

The core business at the moment is providing access to education and information for small farmers in the ACT Capital region. While they may touch on some of the topics marketing, widely separated farms, the lack of abattoirs, transport distances and food freshness etc the main focus is building a supportive network for everyone on the land. How they deal with big picture policy issues is likely to evolve over time once the new committee and the framework becomes established.



### Contents

Organic/nonindustrial farming review	2
Australian Magpie 'dunks' its food before eating, researchers find	3
Through the lens	4
Activities	5
How you can help to ban platypus death-traps	6
Australian National Botanic Gardens news	7

# Organic/nonindustrial farming review

**M**artin Royd is a fifth generation farmer from the Braidwood area. He set up his own farm, Jillamatong, in 1985 and was our guest speaker last month.

Martin turned to regenerative farming practices after experiencing drought on his father's farm at the age of 16. The 1982 drought saw him go droving and he learnt that each animal is an individual. Behind him, Braidwood was devastated by the drought. When he returned, he killed the weeds on his farm with chemicals and sowed pasture. But he soon saw the shortcomings of that system thinking: the cattle only ate the good grasses and the weeds took over again.

Martin gradually adopted the principle of 'reading the land and listening to the animals.' He began to rotate his stock over the land – mirroring how nature might work with animals moving through the land in search of food and habitat. His 'time-controlled grazing' led to improvements in the depth and health of his soil. His land—and we enjoyed looking at various photos of it—is now sectioned into 53 paddocks, and the cattle are restricted to one paddock at a time, while the others rest.

He showed us photos of a massively eroded gully that initially confounded him when he took over the farm. In the end, he overcame it by 'reading the land'

and redirecting water to create a chain of ponds that ended the devastating erosion and recreated a fertile top soil.

Martin told us stories about thistles, dams, platypuses, dung beetles, worms and cows. For instance, the latter drop their manure on the hills as they go up. With the aid of the dung beetles, the manure improves the land. As I listened, I thought about how on recent trips, I'd noticed cows on the uppermost sections of hills. I felt that Martin works with his animals' preferences and not against them.

He mentioned Mulloon Farm near Bungendore and Mulloon Creek Eggs as examples of restorative, regenerative commercial farms.

Martin sees a future for ruminants and decries the less than transparent 'science' that would argue they emit too much methane. His enquiries about the results of one study revealed that the methane was measured in a cattle feed lot. His grass-fed cattle, by contrast, have lower levels of methane emission and levels of omega 3 that compare well to fish.

His grass-fed cattle have prized creamy yellow fat, too, though not recognised or accepted by supermarkets when trying to sell his beef. His paddocks now have a mix of around 80 different grasses, but one of the major ones is *Microlaena*, a native well suited to the conditions. He has grown

*Microlaena* to over a metre in height. He no longer sows European grasses. He believes we lost the native grasses a long time ago when farmers overstocked their land with sheep and didn't understand why the native grasses were no longer providing the pasture needed. He showed us recent satellite photos provided by NASA as evidence of what his practices lead to and

what his neighbours' 'orthodox' practices lead to. While they had drought-stricken brown land; he had green land. He gets good dew because of the height of his grass, and this means extra moisture for their roots.

As he concluded his profound personal and societal story, Martin asked us whether calculating the monetary value of produce by nutrient was better than by kilo. This is because the produce in our supermarkets has variable nutritional value, but we don't know that with any accuracy.

Martin has seen firsthand what doesn't work with traditional farming practices. You might summarise these as 'impositions', where his practices are 'compositions' of the land, the waters and the animals working together under the stewardship of the farmer.

I've seen 'Chain of Ponds' road signs here and there on my travels in the country. Now I know those ponds are good and a great loss if they've been damaged or destroyed. Travelling stock reserves are the same precious remnants of 'old' nature.

Land management is a big issue; big enough to get NAB's attention. They are innovating their thinking to better assess a farmer's natural capital. What is the state of their land? Is it in good shape? Will the farmer be a good risk for their liabilities to the bank?

Martin told us about the influences on his land management philosophy and practices: Aboriginal people, Elaine Ingham, Peter Andrews, Bill Gammage, Bruce Pascoe and Christine Jones. He spoke too of Landcare and Soils for Life, and how he started the Natural Sequence Association.

Martin's talk was so exhilarating, that while he went well over time, everyone just wanted him to continue speaking.

I would sum up Martin's approach with the phrase 'respecting natural systems'. Hallelujah!

**Lucy Bastecky**

*Martin brought along a thistle plant that had grown on his land. He used to poison these but has since learnt that the extensive root (more than a metre in length) breaks up the ground below, and the plant eventually becomes tender enough for the cattle to feed on.*





# Australian Magpie 'dunks' its food before eating, researchers find

Source: University of York, 7 September 2017

Scientists at the University of York, in collaboration with researchers at Western Sydney University, have shown that the Australian Magpie may 'dunk' its food in water before eating, a process that appears to be 'copied' by its offspring.

The research could potentially shed more light on the dietary systems of some bird species and how they respond to the defences of its prey.

Food dunking is common behaviour in a range of bird species, but has never been observed in the Australian Magpie before. Not only was it observed in the adult bird, but the offspring were seen to copy the 'dunking' process.

Dunking is thought to be an important food-process for birds, but it remains unclear as to why some birds do this and some do not. One theory is that it helps moisten the food to make it more digestible and other theories suggest that it might help make unpalatable insects less toxic to eat.

Eleanor Drinkwater, PhD student at the University of York's Department of Biology, said: "Food dunking has been seen in at least 25 bird species, particularly in birds that have high cognitive abilities.

"The Australian Magpie is an intelligent animal, however we were not expecting to see dunking displayed by this bird. In a separate study on predator-prey interactions between katydids and Australian Magpies we were observing a family of magpie at a site near Kosciuszko National Park to see what they would do when offered the insect.

"We presented the wild magpie with a local insect called Mountain Katydid, which is thought to be distasteful due to the toxins it emits. The adult magpie first dragged and beat the insect on the ground before carrying it to a nearby puddle, dunking it and thrashing under water."

The adult male bird appeared to eat the insect under a nearby bush, before returning to take a second insect, repeating the action, but this time leaving the 'dunked' insect at the side of the puddle.

The team then observed a juvenile bird that had been watching the adult male pick up the discarded insect and mimic the actions of the adult male before eating the insect whole.

Eleanor continued: "Although more research is needed to understand why the bird dunks its food before eating, our initial assumptions are that it responds to the 'nasty tasting' chemical

defences of the insect, by dunking it in water and making it more palatable.

"It was exciting to see that this process was copied by the juvenile bird, suggesting that this behaviour could be socially learnt. More research can now be done to determine how common this behaviour is from adult birds through to its offspring."

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The research is published in the journal *Australian Field Ornithology*.



# Through the lens

Now with the luxury of being able to spend four hours staring at the same few bushes looking for insect life I am being more and more able to appreciate the micro world of insects.

It is amazing what you can find when you just step back and wait and watch. I have a couple of correas that in particular are a hive of insect life, despite now being almost past flowering. Once the sun warms up the insects start coming up to settle on leaves and await their prey.

Initially I found a small brown mantid that could be regularly found in around the same spot. There is now a second, plus a green variety and a fourth very small one. The next day there were two more on the nearby lavender. Are the green and brown mantids the same species?



*I have been watching for the mantids every day and find a different number and different sizes. However, more recently I found one had grown to a much larger size and I was lucky enough to see it after he had caught a bee and was in the process of devouring it.*

However, the mantids are not the only insect of interest. Of particular interest are the variety of spiders. Jumping spiders are numerous if you just take the time to look, with many differing colours and patterns. But there are also the other spiders. tiny green flower spiders or spiders the size of a pin head that only reveal their marvels through a macro camera lens; hatching spiderlings that to the naked eye are just tiny specks of grey but seen through the lens have wonderful yellow banded bodies.

Then there are the hover flies; shield bugs; lady beetles; and the list goes on.



*I published a photo of mamma spider in March. She was protecting an egg sac but has long since disappeared. However, her babies are now hatching and making their way into the world and I was lucky enough to capture it.*



So how do you find these marvels? Partly observation; patience; and partly being in the right place at the right time. Watch the filmy spider web blowing in the breeze that may have a spider attached and follow it as it skims up the gossamer thread back to the safety of a leaf. Without this I would never have noticed the tiny black speck on the end of a leaf that through the lens revealed a mottled black back but beautiful yellow legs, when it stretched them.

Perhaps try a spray bottle of water with bigger spiders sent scuttling by the disturbance or coming to the top surface for a drink (particularly jumping spiders). The movement will catch your eye.



## Activities



*If I hadn't seen the spider web I would have paid no attention to this speck on the end of a leaf; but on closer inspection it was a beautiful green spider.*



*These gum hoppers are the weirdest looking creatures. They look just like bark until you disturb them and they 'shoot up' these antennae.*

Smaller spiders may be dislodged by the spray so watch for them dangling from their gossamer threads and you may find tiny green flower spiders or infant orb spiders; and don't forget to watch the ground at your feet. You may be surprised to find the very odd looking nymph of a leaf hopper. It looks just like a piece of bark; until you see it move.

**Alison Milton.**

## Activities

### **Sunday 15 October, 9.00 am: Wildflower Walk to the Pinnacle Offset**

Meet at the car park on Springvale Drive, opposite De Salis Street, Weetangera. Last year's walk to this new extension to the reserve was quite lovely. This year we'll again be walking down through the reserve into the new area, which looks out over the neighbouring Kama Nature Reserve and the Molonglo Valley. Join our specialist plant guides to check out the gorgeous native wildflowers and take a look at the work being done by the Parks and Conservation Service rangers to turn this promising patch back into grassy box-gum woodland and native grassland. Dress for the weather and wear sensible footwear as we'll be going off the track for some of the walk. Bring along some water and a bit of morning tea if you like, and don't forget your camera — some of the views are stunning! The round trip will be about 4 km in all and we expect to be back at the car park by around 11.30.

This walk is with the Friends of the Pinnacle.

### **21 September 2017 to 30 January 2018 10.00 am–5.00 pm: Dombrovskis: Journeys into the wild exhibition, exhibition Gallery, Ground floor. Free**

Peter Dombrovskis was one of the world's foremost wilderness photographers. His powerful, reflective and deeply personal images of the unique Tasmanian wilderness had a lasting impact, changing the way Australians think about their environment. The Library has over 3,000 Dombrovskis transparencies, and has printed 70 of the best for this exhibition, the most complete survey of his work to date in Australia.

### **Thursday, 5 October to Sunday, 22 October 2017: exhibition of the ANBG photographic group**

The exhibition will comprise framed works, unframed mounted prints, cards and bookmarks. These will all be for sale, with a percentage of sales going to support the Friends of the Botanic Gardens.

Month	Speaker	Topic
5 October	Alex James and Jennie Curtis	Small Farms network
2 November	Meredith Cosgrove	Photographic guide to ACT native plants
7 December		Xmas party

# How you can help to ban platypus death-traps

In the September 2017 *Field Natter*, we reprinted the Australian Platypus Conservancy's (APC) 'Myths about platypus deaths in yabby traps—the facts' as well as a copy of the joint letter from the FNAC and the Conservation Council ACT Region supporting the call for a ban.

The APC is leading the call for a total ban on the use of enclosed yabby traps. A detailed information paper (in PDF format) about the problem of by-catch mortalities is available on the APC website at [www.platypus.asn.au](http://www.platypus.asn.au)

The APC has provided the following text and information:

You can support APC's call for a ban on enclosed yabby traps by contacting the relevant minister responsible for fisheries in your state or territory.

For the jurisdictions where platypus mainly occur, their details are as follows:

NSW: Niall Blair, Minister for Primary Industries (Fisheries)

Victoria: Jaala Pulford, Minister for Fisheries

ACT: Mick Gentleman, Minister for Environment

Queensland: Bill Byrne, Minister for Agriculture and Fisheries

Tasmania: The use (but not sale) of enclosed yabby traps is already prohibited.

Please remember that Australian water-rats/rakali and freshwater turtles are also at risk from enclosed yabby traps, particularly in South Australia and the Northern Territory where they can be set in all waters, both public and private. The relevant Ministers to contact are:

SA: Leon Bignell, Minister for Agriculture and Fisheries

NT: Ken Vowles, Minister for Fisheries

WA: The use (but not sale) of enclosed yabby traps is already prohibited.

In theory, the Commonwealth has no direct responsibility for inland waters. However, a National Fisheries Bycatch Policy covering marine species has already been formulated by the Commonwealth and the states. It seems only logical that a parallel policy to protect freshwater wildlife including platypus and rakali populations should be adopted.

There is also no reason why the Commonwealth could not take the initiative to encourage states and territories to address this issue. There is even an established inter-governmental body with state and territory representatives where this matter could appropriately be raised, namely the Australian Fisheries Management Forum.

If you believe that the federal government should take positive action to protect a national icon, then you can express your opinion to:

Anne Ruston, Commonwealth Assistant Minister for Agriculture and Water Resources (Fisheries)  
[assistantminister.ruston@maff.gov.au](mailto:assistantminister.ruston@maff.gov.au)

Josh Frydenberg, Minister for Environment  
[campaigns@environment.gov.au](mailto:campaigns@environment.gov.au)

Contact details for APC:

Australian Platypus Conservancy

Tel: (03) 5157 5568

[platypus.apc@westnet.com.au](mailto:platypus.apc@westnet.com.au)

Website: [www.platypus.asn.au](http://www.platypus.asn.au)

Facebook: Australian Platypus Conservancy (Official)

You can also support the petition to ban the sale of the opera house style enclosed yabby traps to the Victorian Parliament: <https://www.platypuseducation.com/opera-house-net-petition>



## Australian National Botanic Gardens news

Over the past few days I've made a few forays into the botanic gardens. A month or so ago a Powerful Owl caused quite a bit of excitement when it established a home in the rainforest. It had two distinct roosting spots but perhaps it ran out of food as it didn't stay long.

However, there still a bit of nesting activity. The Satin Bowerbird has built his bower and has had interest from at least three females. Nearby are two Spotted Pardalote nests. One is apparently abandoned after being harassed by wattlebirds.

The second nest is still active with the parents coming and going regularly. For the second time I have witnessed these birds removing the baby 'droppings'. Magpies also do this.



The Tawny Frogmouths are nesting near the Eucalypt lawn as usual, with the female spotter in a tree nearby. Zooming in on one my photo of the nest I'm sure I can see a pair of eyes of a chick.



Nearby, a poor Raven was being harassed by a pair of Currawongs and a Red Wattlebird. Despite this it kept wandering around, trying to hide under bushes rather than just fly away. The ruckus made the female Tawny Frogmouth sit up and look around to see what was going on.



There are two White-throated Tree Creeper nests; one still seems to be building the nest.

Much further back towards Black Mt, an Australian Owlet-nightjar is roosting in a tree hollow. I was lucky enough to see it pop its head into the opening and stay there for around 20 minutes, enjoying the sun on its face. I've heard of at least one person who waited two hours and still didn't see it.



**Alison Milton**



Field Naturalists' Association of Canberra Inc.

### Who are the Field Naturalists?

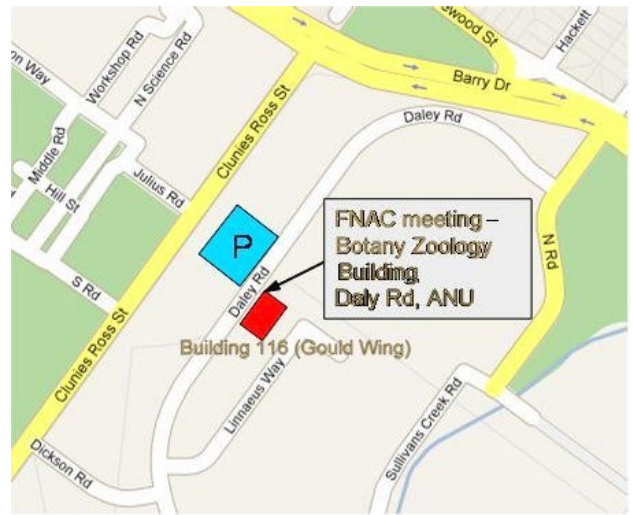
The Field Naturalists' Association of Canberra (FNAC) was formed in 1981. Our aim is to foster interest in natural history by means of meetings and regular field outings. Meetings are usually held on the first Thursday of each month. Outings range from weekend rambles to long weekends away. Activities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