OBJECT: To foster an interest in nature

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FIELD NATURALISTS' ASSOCIATION OF CANBERRA INC.
GPO BOX 249
CANBERRA ACT 2601

FIELD NATTER

MEETING—THURSDAY, 5 November
6:00 pm Australian National University

Downstairs BOZO Tea-room, Building 116, Daley Road, ANU, ACT

FNAC Christmas party

Please note the change of venue and earlier start time of 6:00 pm

It is our Christmas Get-together in the downstairs BOZO Tea-room. Please bring your own food, refreshments, plates and glasses with something to share. It's a good old natter time. Do come along and join us.

Contents

The story of a suburban koala

Book review by Nick Goldie

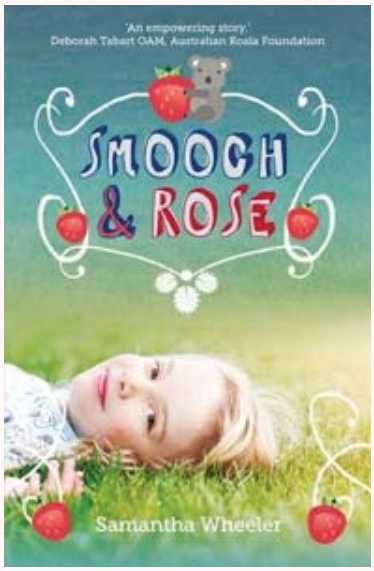
Koalas are not uncommon in the Monaro, but astonishingly, it took two centuries for us to observe a characteristic piece of koala behavior: namely, that they eat bark.

In 2011 on a property called Black Ridge, in high country behind Bredbo, concealed cameras revealed that koalas routinely chew the bark of certain eucalypts, a surprise to the scientific community. The koalas leave a characteristic scarring of the bark, and their droppings – looking like peanuts – are on the ground beneath the chewed tree.

Nowadays, when the Rural Fire Service carries out a hazard reduction burn, they are supplied with excellent maps which show assets such as buildings, but also areas where endangered species may be found – and koala habitats. And indeed, in 2012, fire-fighters carrying out a burn on the southern Tinderry Mountains could confirm what the map said. In the supposed koala area there was the typical chewed bark pattern on a pale gum tree.

All of this by way of introduction to 'Rose and Smooch', a book for young persons by Queensland author Samantha Wheeler.

On the face of it, this is a rather cute book about Rose, a young girl who finds a baby koala on the ground after its mother has been attacked by dogs. She decides to look after the



baby. This is where the author introduces a splash of cold real life. Rose takes the joey to a vet, who is sympathetic but makes it clear that caring for endangered wildlife is a specialist job, and the little koala must be given to a licensed carer.

Rose is furious with the vet, but is soon won over by Carol the carer, a practical person who contracts Rose to collect gum leaves for the joey, now named Smooch. Carol has a house full of animals (all Australian native) – a young roo called Jedda, a wallaby, a magpie, and many more. "Carol told me she'd been caring for injured or orphaned animals for over thirty years. That explained her worn-out hands. Bunny rugs and blankets were tossed over every surface in Carol's house. The kitchen bench was completely hidden under bottles of formula and bags of green pellets and boxes of birdseed. The whole place smelt of warm soggy weet-bix."

Everything seems to be cosy, but real life has a bad habit of intruding. First Rose's dog dies, and then the farm has to be sold. The bulldozers are on their way, and every tree has to go to make way for a suburban development, including the trees, which are now the home of Smooch.

What can Rose do to save the situation? Helped by Carol and her computer, she swings into action, with letters to the local council, letters to State members of parliament, letters to the Federal Minister.

So as not to spoil a good story, I'll just say that it's a tough fight with a happy ending, all due to the steely determination of one small girl. Surprisingly, for a children's book about cuddly koalas, there are several pages of koala information and koala websites: "What to do if YOU find an injured koala!" And always remember the trained carers: in the Monaro, contact LAOKO, Looking After Our Kosciuszko Orphans (6456 1313).

'Smooch and Rose' by Samantha Wheeler (UQP 2013) is available in Cooma from Pages of Life, Sharp Street.

Source Cooma-Monaro Express, Thursday 21 November



The trouble with some children's books

As an inveterate bibliophile (book lover) and ingrained field naturalist I regularly buy books on natural history, mostly pre-loved ones going cheap!

The most recent was Barbara Taylor's 64 page *Snakes*, from the Nature Fact File Series, Southwater imprint of Ames Publishing, 2000: ISBN 1-84215-018-9. Appealing, beautifully illustrated, well structured, with glossary and index, I nevertheless find it difficult to recommend this booklet for children – at whom it is aimed (8–year-olds). Why?

The work abounds with *teleological* language: 'Snakes have forked tongues *for* smelling and tasting the air.'(pg. 4) 'Snakes also have different shapes *to* suit their different environments. Sea snakes have flat bodies and tails like oars *to* help them push against the water and move forwards…' (pg. 6) (My *italics*).

'Teleological' derives from Greek *telos*, 'end' and *logos*, 'science'. According to Wikipedia, a teleology is any philosophical account that holds that final causes exist in nature, meaning that, analogous to purposes found in human actions, nature inherently tends toward definite ends. Since the Novum Organum Scientiarum of Francis Bacon of 1620 teleological explanations in science tend to be deliberately avoided, because whether they are true or false is argued to be beyond the ability of human perception and understanding to judge. Some disciplines, in particular within evolutionary biology, are still prone to use language that appears teleological when they describe natural tendencies towards certain end conditions, but these arguments can almost always be rephrased in non-teleological forms, such as, in this instance:

'Snakes have forked tongues which they use to smell and taste the air.'(pg. 4) 'Snakes also have different shapes, each enabling that particular snake to best survive in its specific environment. Sea snakes have flat bodies and tails like oars. Their tails help them push against the water and move forwards…'

Ever since publication of Charles Darwin's The Origin of Species in 1859 we are aware of the mechanism of evolution: natural selection working upon inherited variations that lead to better adaptations of whole populations to specific environments. There is no reason why even children of 8 to 12 years cannot grasp this concept if it is carefully explained.

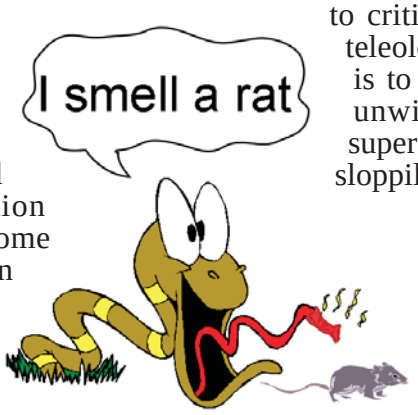
According to the Free Dictionary teleology is:

1. The study of design or purpose in natural phenomena.
2. The use of ultimate purpose or design as a means of explaining phenomena.
3. Belief in or the perception of purposeful development toward an end, as in nature or history. (http://www.thefreedictionary.com/teleological)

If the language used in children's nature books is that of intention, design or purpose, i.e. is teleological, then this must suggest to the child that there is such intentionality, purpose or design in nature (or history) and strongly implies an intender, purpose-giver, or designer – usually called 'God'.

There is time enough later in life for our children, once they understand post-Darwinian biology and it becomes part of their conceptual framework, to critically examine these three possible teleologies. What I am seeking to do here is to warn parents against their children unwittingly absorbing unjustified and superseded teleological thinking through sloppily expressed children's books.

Dierk von Behrens



Lapwing seeks refuge by a human's side

Kevin Thiele the curator of the Western Australian Herbarium, part of the Department of Parks and Wildlife in Perth tells the curious tale of a lapwing, a bird usually cautious of humans. How do we explain this unusual behaviour?

One morning in spring 2006 I dropped my kids off at their country school in eastern Victoria. On the school oval adjacent to the drop-off point, a pair of masked lapwings (we used to call them spur winged plovers) had a nest. It's quite common for lapwings to put their nests, a scrape in the ground with beautifully camouflaged eggs, in open areas such as ovals and playing fields.

Some of the schoolkids told me excitedly that morning that the chicks had just hatched. Lapwing chicks hatch in a pretty advanced state and are able to leave the nest almost immediately, relying on their mottled camouflage pattern to avoid detection by predators. At the first sign of danger or alarm from their parents, the chicks will crouch and remain absolutely motionless until the danger passes or the parents manage to drive away the predator by aggressively dive-bombing it or distract and divert the predator using a broken wing act.

After the kids all went in to school, I noticed that the plovers were in flight, alarm calling and circling the oval. The reasons was that a pair of Australian hobbies, small birds of prey, were also circling, apparently aware of and searching for the crouching chicks. The adult lapwings started dive-bombing the hobbies, a marvellous sight. But soon the first of two unusual things happened. One of the hobbies turned on one of the dive-bombing plovers and grappled it in the air. Locked together, the two birds plummeted heavily to the ground.

Now, a lapwing is larger than a hobby and would be hard for a hobby to kill. The lapwing broke away almost immediately and flew off in a direct line downhill, away from me, the hobby and the oval. It was trailing a leg, clearly damaged by the hobby attack. After a few seconds the hobby also took off and pursued the fleeing lapwing. It caught up about 500 metres from my position, locked with it again, and the two birds plummeted to the ground a second time.

A few seconds later once again, the lapwing broke from the hobby and took flight, this time back towards the oval where its mate was still circling and alarm calling. The hobby likewise took off again in pursuit. That's when the second and to me truly astonishing thing happened. The lapwing was flying in a straight line towards the oval, the hobby about 100 metres behind and gaining fast. I was standing around 30 metres off the lapwing's direct line flight path. When the lapwing had drawn almost level with my position it suddenly changed course, flew directly towards me and landed virtually at my feet, about a metre away, clearly injured and breathing heavily.

The hobby broke pursuit and rejoined its mate. After a few more minutes of circling, the two moved off and the situation calmed down. The lapwing, clearly aware of my proximity, remained at my feet for a few minutes more until the hobbies were well away, then it took off and rejoined its mate on the oval, damaged and still trailing a leg but alive and able to fly.

Now, under normal circumstances a lapwing would never approach to within a few metres of a person. These were wild birds that, despite being relatively habituated to people (they were after all nesting on a school oval), always remained vigilant and wary, more likely to dive-bomb than to allow a close approach.

I find this event interesting and challenging, and in many decades of birdwatching I've had no similar experiences. I'm convinced that the lapwing was aware of me at the time it's changed course suddenly and landed close by, with the result that it evaded the hobby. The challenging thing is that this couldn't possibly have been learned behaviour, as the magpie story, heard on The Science Show a few weeks ago, could have been. Nor could it have been instinctive behaviour. This would have been an unprecedented and unique situation for the lapwing. You can't learn unique, nor have an instinct to cover every eventuality.

I can only interpret it as a purposeful, conscious, goal-seeking and predictive act on the part of the lapwing, a bird equivalent of the logical chain: 'If I keep my current course the hobby will catch me, if I divert and land at the feet of that human, the hobby probably won't follow. Dangerous as it is to go so close to a human, it's my only choice.' I can find no other suitable explanation.

Lapwings are not usually thought of as particularly bright birds. After all, they are related to seagulls rather than to known smart birds like corvids or parrots. Can a bird brain manage the logic necessary for this to be correctly interpreted as purposeful? That's for others to say. But for me, I'm looking at lapwings with new-found interest and respect.

Source: ABC RN's Science Show Saturday 23 November 2013

Spotter's corner

What have you spotted this month?

Send a photo and / or a short report to the Editor at alison.milton@health.gov.au

I had the rare privilege to be visited by a seldom seen bird species in Canberra this month. On seeing a bird I didn't recognise in my almond tree, I reached for my bird guide and identified it as a male Black Honeyeater. On a second visit to the garden he had come back and this time I also briefly saw a second bird, later identified as a juvenile.

For almost a week, I had Canberra's bird enthusiasts all atwitter as the juvenile returned every evening for five days. I can't say if it was visible during the day as I was at work and the last sighting was on Friday evening. The male did not return after the first sighting on Monday evening.

I was not home until after dark on Wednesday, but on each of my other sighting it seemed to have about a 10–15 minute circuit. When it left, it would return in about 10–15 minutes then would stay for about 20 minutes, mostly preening itself, especially after the brief storm on Thursday evening, when I recorded a brief video of the juvenile preening the rain out of its feathers.

The sighting has been reported to COG and ACT Eremaea Birds Birdline. According to the COG database (pre-2006 records are not yet in the database) there has only been 22 recorded sightings in the ACT. Most of these have been at Mulligan's Flat, so I was indeed privileged.

In the news

Albino kangaroo

Lazing in the middle of a kangaroo mob just a half hour drive from city suburbs is a truly incredible tale of survival, rarely seen in the animal kingdom: an albino kangaroo that has survived beyond its perilous childhood.

Its pure, almost dazzling white coat strikes an amazing contrast against the lush greens and bush greys of the valley floor in the ACT's Namadgi National Park.

Parks ranger Brett McNamara thinks the albino kangaroo, likely an eastern grey, is probably about two years old, which is extremely rare in the wild.

The usual fate of such an outstanding creature is a very short lifespan. In this part of the world, 30 minutes past Canberra's southern suburbs, they make easy prey for wild dogs, foxes, and even eagles from the moment they are born. Their pale skin also makes them susceptible to sun burn and cancer, much like a fair-skinned human.

To add to their woes, albino kangaroos also tend to have a genetic predisposition towards sight and hearing issues, making it even more difficult to escape hungry predators.

Source: The Canberra Times, Saturday November 16, 2013, p3 NEWS, Reporter: Hamish Boland-Rudder.

If you would like to read more check it out online at:

http://www.canberratimes.com.au/environment/animals/rare-albino-kangaroos-incredible-tale-of-survival-in-the-australian-outback-20131115-2xlao.html#comments

[Would we Canberrans really consider Namadgi "the Australian outback"?]

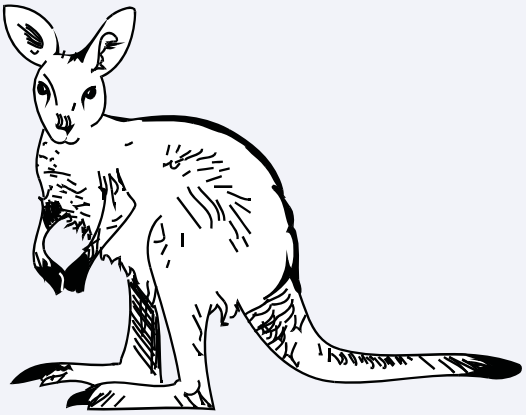
Albino echidna

Last year in October an albino echidna was released into the native bush in Tidbinbilla Nature Reserve after being cared for by an RSPCA carer.

"Echidnas earn their spurs making love, not war….. Sydney researchers have discovered that male echidnas use the spur on their hind leg to communicate with their peers, quite unlike their close relative, the platypus, which uses its leg spur as a weapon." "Research leader Kathy Belov from the University of Sydney….. and her team did discover the waxy secretions, which are produced by glands that sit behind the male echidna spur, were not venomous, unlike those of the platypus." Belov said that the echidna gland looks more like a scent gland which they use to mark their territory during breeding season.

The Canberra Times, Saturday 16 November 2013, p9 NEWS: Reporter: Nicky Phillips

To read more visit http://www.canberratimes.com.au/act-news/casper-free-again-off-the-beaten-tar-20121018-27uhn.html



Submitting articles

Have you had a great experience or a subject of personal interest?? Been moved to write about it, either in prose or verse? Felt the urge to see your name in print? Or even just taken some great photo shots that you would like to share.

Everyone is due their 15 minutes of fame. Why not claim yours?

Field Natter welcomes contributions. Alternatively, send in a photo or two with a short paragraph about it/them.

The closing date for each issue is the last Monday of every month. Handwritten and posted material is acceptable, but email is preferred. We can scan original photographs but digital files are preferred.

Note: When sending photos or stories, please DO NOT include the photos in Word, PowerPoint or PDF files. Please send the photos as original graphic files: .JPG is the most common format. My email file size limit is 10 MB so if file sizes are too large please send individually in one or more separate emails.

Email contributions to alison.milton@health.gov.au or phone 6289 2717 to discuss
Post: 20 O'Sullivan Street, HIGGINS, ACT 2615

Alison Milton, Editor

In the news

Scientists killed world's oldest living creature

When scientists inadvertently killed what turned out to be the world's oldest living creature, it was bad enough.

Now, their mistake has been compounded after further research found it was even older – at 507 years.

Read more: http://www.canberratimes.com.au/environment/animals/scientists-killed-worlds-oldest-living-creature-20131115-2xkpr.html "The ocean quahog - a type of deep-sea clam - was dredged alive from the bottom of the North Atlantic near Iceland in 2006 by researchers. They then put it in a freezer, as is normal practice, unaware of its age." "Scientists from Bangor University studied it and concluded it was 400 years old." This was a miscalculation. …Using more refined methods.

Dr Paul Butler, from the University's School of Ocean Sciences, with the help of Jan Heinemeier, associate professor at the University of Denmark discovered that Ming the mollusk was 507 years old.

"A quahog's shell grows by a layer every year, in the summer when the water is warmer and food is plentiful. It means that when its shell is cut in half, scientists can count the lines in a similar way trees can be dated by rings in their trunks. The growth rings can be seen in two places; on the outside of the shell and at the hinge where the two halves meet. The hinge is generally considered by scientists as the best place to count the rings, as it is protected from outside elements. When researchers originally dated Ming, they counted the rings at the hinge. However, because it was so old, many had become compressed. When they looked again at the outside of the shell, they found more rings. It means the mollusc was born in 1499 – just seven years after Columbus discovered America and before Henry VIII had even married his first wife, Catherine of Aragon in 1509.

Scientists say they can study the clam's layers to find out about sea temperatures and water masses from thousands of years ago."

Claire Duffin in The Daily Telegraph, London

Want to discover more?

http://www.nefsc.noaa.gov/publications/tm/tm148/tm148.pdf

will take you to a technical paper on the Ocean Quahog *Artica islandica* by the U. S. Department Of Commerce, National Oceanic and Atmospheric Administration.

http://en.wikipedia.org/wiki/File:Arctica_islandica_Islandmuschel.jpg

The dark periostracum is flaking off this dried valve of Arctica islandica from Wales

Source: http://www.canberratimes.com.au/environment/animals/scientists-killed-worlds-oldest-living-creature-20131115-2xkpr.html

Month	Speaker	
5 December	Christmas party	Venue:
2014	Stay tuned for more exciting and interesting speakers	

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 von Behrens pH: 6254 1763
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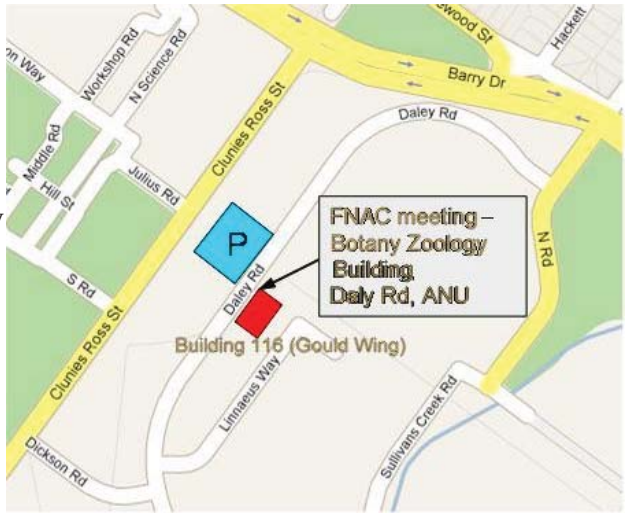
Website: under construction
All newsletter contributions welcome.
Editor



Monthly meeting venue: Division of Botany and Zoology, Building 116, Daley Rd, Australian National University. Park (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: