



FIELD NATTER

Field Naturalist's
Association of
Canberra

August 2006

Field Naturalist's Association of Canberra

FIRE! VEGETATION AND WATER

Dr Alan Wade, Visiting Fellow ANU Centre for Resources and Environmental Studies. Guest Speaker Thursday August 3rd, 8:00pm
(Location details on the back page)



Alan's interests are studies of impacts of landscape disturbances on hydrological and water quality processes and of the hydrological function of high country fens and bogs, and includes research on the impact of fire disturbed landscape on hydrological and water quality processes.

Alan has offered to " to reflect my main gleanings from 'living in the catchment for the past six years. I'll toss in some bog guff and lots of flowering plant photos and focus talk around veg surveys, plant communities, and impact of fire on landscape and water.

Field trip- Googong Dam Walk Sunday 6th August 10:30am

To keep with the theme of the monthly meeting we will be visiting Googong Dam which is one of the ACT's major water storage dams. Googong dam is 10 kilometres south of Queanbeyan off the Old Cooma Road and is managed as a water catchment, wildlife refuge and public recreation area. The dams storage capacity is 124,500 million litres fed from a 873 square kilometre catchment area. Googong has a variety of birds rarely found in Canberra, plus it has interesting walking trails and landscapes. We will meet at the Googong Dam (dam lookout carpark- see map on website), but then will car pool to one of the walking trails, which we will decide at the Monthly meeting. The more popular walks include around Googong foreshores, the Cascades, Tin Hut and London Bridge, with preference to the latter two walks. This will be a substantial walk so bring good walking shoes and it is always cold, so be prepared. Contact Benj Whitworth on his Mobile 0409 544 557 if you need to. http://www.environment.act.gov.au/__data/assets/pdf_file/13095/googongmapandtrails0804.pdf

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Newsletter contributions welcome

Sightings, reports, travelogues, reviews, photographs, sketches, news, comments, opinions, theories — in fact anything relevant to natural history. Please forward material to chris_b@webone.com.au or 13 Burnside Street Watson ACT 2602,. Any queries please phone 6272 5540

Field Trip - Lake Ginninderra Beginners Bird Walk. Sunday 9th July 2pm

It seemed the Woodswallows were following their migration manual and we didn't go close-enough to their preferred habitat to disturb Quail or find Crested Shrike tits but the 30 species we did find provided several useful observations. Ginninderra Creek was dammed to produce the lake which is surrounded by suburbs & Belconnen infrastructure. Birds are not necessarily 'around' at 2 o'clock. The sun was bright but there weren't many chances to escape the cold northerly wind that followed a minus 4 frost.

Families fed water-birds that assembled to gorge on bread (bad for birds) and bring people closer to birds (a positive, as Grahame pointed out). A few ducks showed hybrid or domestic-pet origins. A pair of Black Swans and a lone Pelican restored some elegance and dignity to the occasion. Grahame explained the differences between Moorhens and Coots saying he and Nicola had seen Darters during their earlier dog-walk. Grahame also showed us a Common Myna's nest incorporating plastic from bags into the ribbons of bark cloaking a *Eucalyptus mannifera's* (Manna Gum) lower trunk.

Mike and Grahame soon realised they were hearing White-plumed and White-naped Honeyeaters. Longer stops allowed us to see them clearly and observe their feeding or rapid flights. Magically they also spent time dipping into the lake from Casuarina branches or the reed beds. Mike heard calls from a Black-faced Cuckoo Shrike. It flew past a few minutes later.

At least 18 Red-rumped Parrots co-operatively gave us chances to see them perched on dead branches, flying in noisy flocks and feeding on the mown grass.

Three Hardheads swam sedately away from a gathering of Little Black Cormorants on the pontoon. Giving a sense of scale a Great Cormorant perched on the boom near the swimming area. Other Cormorants perched in (Weeping) Willows.

Eleven Field Natters accumulated these species:

Black Swan Pacific Black Duck Hardhead Little Pied Cormorant Little Black Cormorant

Great Cormorant Australian Pelican Purple Swamphen Dusky Moorhen

Eurasian Coot Masked Lapwing Silver Gull Crested Pigeon Galah

Sulphur-crested Cockatoo Crimson Rosella Eastern Rosella Red-rumped Parrot Red Wattlebird

Yellow-faced honeyeater White-plumed Honeyeater White-naped Honeyeater Magpie-lark Willie Wagtail

Black-faced Cuckoo Shrike Australian magpie Pied Currawong Welcome Swallow Common Starling Common Myna

CONTRIBUTION FROM ROSEMARY BLEMINGS

The marsupial that swims on top

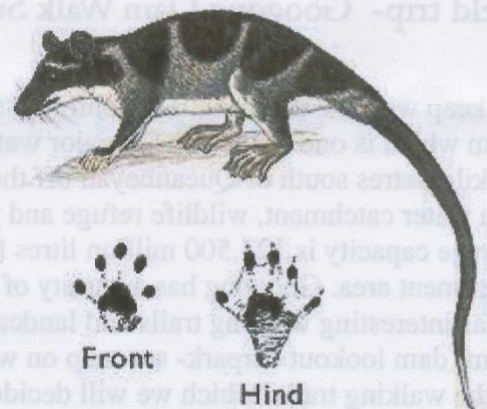
One of the most remarkable marsupials of South America is the Yapok or water opossum *Chironectes minimus*. This animal is the only marsupial that has special adaptations for life in water—and what fantastic adaptations they are. It has webbed hind feet that is used exclusively for propulsion, the front feet being splayed out in front of it ready to seize any prey that it may encounter as it swims. It dispenses with its use of its forelegs in swimming because the air trapped in its unwettable fur enables it to float with its entire head and body at the water surface.

This enables it to breathe continuously while swimming at a maximum speed of 2.6 kms almost double that of other opossums.

Other adaptations is a tail that is flattened laterally and used as a rudder; eyes positioned high on the head; and ears that are relatively small and closable. Like many marsupials the pouch of the female is said to be especially waterproof due to contraction of strong muscles in the pouch wall that close its mouth and together with the waterproof fur prevent the young from getting wet from water entering the pouch. But the more extraordinary adaptation is that of the adult male that has a pouch anterior to the scrotum and when it swims the testes are drawn up against its belly and the mouth of the pouch is partly closed around the scrotum to assist in streamlining the body in the water. As occurs so often the retractable wheels of aircraft had been long ago invented in nature.

Water opossums breed between January and December and raise litters of 1 - 5 offspring. They are anti-social animals, the sexes only come together to breed. The young leave the pouch after 48 days but remain close to their mother. They are not common but are not considered endangered. Adapted from the "Life of Marsupials" by Hugh Tyndale-

Biscoe



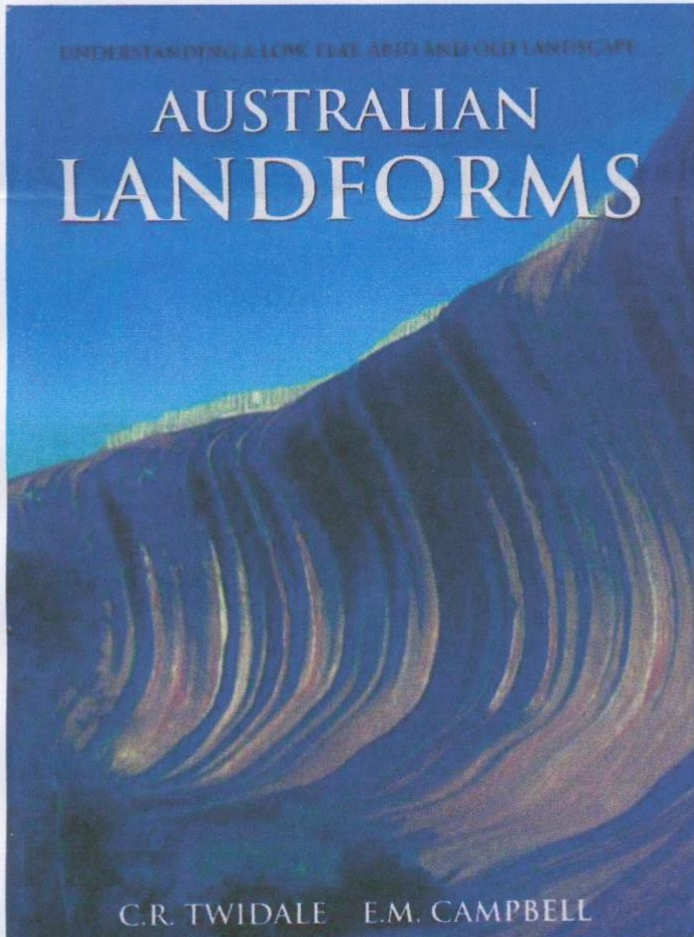
'AUSTRALIAN LANDFORMS – Understanding a Low, Flat, Arid and Old Landscape'

by C R Twidale and E M Campbell, Rosenberg, Dural NSW, revised edition 2005, ppbk, A4, 336 pages. CSIRO publishing \$59.95

Review by Dierk von Behrens

Having recently walked more than 1111 km across the southwest corner of Western Australia through a range of captivating land- and seascapes - along the Bibbulman and Cape-to-Cape tracks and through the Sterling Ranges - I devoured this excellent text, wanting to understand more and deeper. Traveling back in my mind to our long walk near the Darling fault it was sobering, indeed, to reflect that the vertical displacement along this lineament amounted to 15 km.

Structure, process and time - dealt with in the book's first four sections, are still the three dominant factors that the highly qualified authors use to interpret the Australian landscape. Simultaneously, they critically appraise historical as well as current ideas.



The Quaternary – the most recent and shortest geological period lasting a mere two million years, but packed with unusual climatic fluctuations – is covered in its fifth and final section. This also contains chapters entitled Landforms of cold climates, Deserts, Coastal forms and Humans as geomorphologic agents – the latter of particular interest with its vivid and memorable Australian examples.

Intended for upper secondary school and tertiary students, this fine book will appeal to dedicated naturalists, inquisitive arm-chair and actual travelers and people interested in disciplines whose subject matter is located in the physical landscape. These fields of study include geology, geography, botany, zoology, biology, ecology, environmental studies, and soil and agricultural science. Those of us looking for as comprehensive an understanding of our physical environment as is available today and a solid framework to challenge creationists will find both in its pages.

The book is lavishly illustrated, using:

Photographs - all except the historical ones in full colour

Diagrams and maps - mostly in black and white; and a range of tables.

A reasonably comprehensive glossary and similar index enhance understanding and exploration of content. An Overview chapter, an Appendix on the Geological Background, and a most impressive chapter of References and Further Reading

complement these.

On a close reading of this work I could only find five mistakes, two major ones of strange similarity:

A caption (figure 1.4a, page 14) speaks of Lake Akraman as the site of a meteor impact crater "some 600 000 million years ago", whereas the oldest date quoted in the book's Geological Time Scale (page 22) is 4500 millions of years ago.

In the essay on saline soils at the bottom of the left hand column on page 283 we read: "Beneath the Murray Basin alone there are some 600 000 million tons of salt stored deep beneath the surface." This figure cannot be correct here either.

A case study follows each chapter. The final essay appended to the one on human impacts, for instance, deals in just over a page with saline soils and does so in so honest a fashion that it justifies the alarm Ian Haynes and I experienced while driving through and flying over the Western Australian wheat-belt with its frightening evidence of destruction: "The problem is widespread. The worst-affected areas are in Western Australia... southwest of a line from Geraldton to Esperance, where 350 km² have already been devastated and where another 20 000 hectares are ruined each year."

Having experienced many changing and changed land- and seascapes intensely over almost three months, little wonder I was so motivated to understand them better with the aid of this classic. This edition, which reflects on events up to June 2005, is a delight to work through and I thoroughly recommend it.

St John's Wort *Hypericum perforatum* is a yellow-flowering, rhizomatous, perennial herb indigenous to Europe. The common name comes from the fact that it traditionally flowers by and is harvested on St John's day, 24 June. The genus name "hypericum" is derived from the Greek words *hyper* (above) and *eikon* (picture) in reference to the traditional use of the plant to ward off evil, by hanging plants over a picture in the house during St John's day. The species name "perforatum" refers to the small windows in the leaves, which can be seen when they are held against the light

From Wikipedia

New Members

Helen & Bob
Lehman, Nicholls
ACT 2913

Remember: Coming up soon will be a member's night. So don't be shy, consider giving a short presentation on any subject of your choosing

Garth Dixon in print!

Garth Dixon made a lasting impression during my first or second FNAC meeting by saying "What are we going to do about St John's Wort?". Sixteen years later it's still best not to ask how 'the authorities' have responded to that challenge. Garth & Ros didn't avoid issues, of course. They fervently attacked weeds & ensured *Warriwillah* became a Wildlife Refuge and achieved Voluntary

Conservation Agreement status.

In the first edition for 2006 *Bush Matters* has an illustrated article by Garth entitled *Ventures in rural revegetation*. He shares ideas from ten years of planting but does so in a way that appreciates the difficulties landholders face as they put restoration ideals into practice. Since *Bush Matters* is the newsletter of the Conservation Partners Pro-

gram NSW National Parks & Wildlife Service part of the Department of Environment and Conservation (NSW) it's encouraging to see effective advice reaching out to so many. If anyone would like a copy of the article please let me know.

Rosemary Blemings
6258 4724

Managing the Weed Menace

A publication launched this month will become an important tool in the national battle against major weed infestations, according to the government

Weeds of National Significance (WONS) are the weeds considered to currently pose the most serious threats at a national level.

Plants are categorised as WONS because of four things – how invasive they are, the impact they cause, the potential for them to spread, and the socioeconomic and environmental values on which they impact. There are 20 such weeds. One of the challenges for management of WONS is access to accurate and consistent information about infestation and spread.

Weeds are a serious threat to natural and agricultural ecosystems and have major impacts on the health, safety, amenity, economic well-being and quality of life of Australians.

More information about WONS can be obtained at <http://www.weeds.org.au/natsig.htm>.

The 20 weeds of national significance are

alligator weed | athel pine | bitou bush/boneseed | blackberry | bridal creeper | cabomba | Chilean needle grass | gorse | hymenachne | lantana | mesquite | mimosa | Parkinsonia | parthenium weed | pond apple | prickly acacia | rubber vine | salvinia | serrated tussock | willows |

Letters to the Editor

B&B and Choughs

Hi Chris

I was on the phone to a friend and commented that the choughs were back in our backyard. She told me this story and I thought it might make an interesting item for Field Natter.

"We had in a pot a Bunya-bunya pine, grown originally from the tree at Lanyon by my aunt. When it was as tall as me we planted it out in the garden but very soon after found it dug up all around to a depth of several inches. We assumed that thieves, maybe confusing it with the Wollemi pine, had been caught in the act and had scarpered. So we returned it to its pot.

However, noting that choughs were digging holes in the lawn, we wondered if they might have done the damage to our pine, perhaps seeking the blood-and-bone which had been put into the planting hole.

To test this hypothesis I put some b-and-b into a pot saucer and put it into the hole, disguising it with leafy twigs and mulch. Sure enough, some days later the choughs were caught "red-footed", pulling apart the camouflage cover to get at the blood-and-bone."

Cheers, Maureen Bell

The bird, the cat and the lighthouse keeper

You may recall in last month's Field Natter I quoted a piece from *The Bedside Book of Birds* by Graeme Gibson. Here is another example from the book, written by David Quammen (1948-), United States:
"FROM THE SONG OF THE DODO

Stephens Island is a dot of land between the North Island and the South Island of New Zealand, and the extinction of the endemic wren, *Xenicus lyalli*, is just one more instance among many, tiny in its own scope but emblematic. The bird was a small thing with short wings and almost no tail, either totally flightless or nearly so. It made its living by skulking among rocks and feeding on insects. Even during good times it was perilously rare. Besides these disadvantages presumably it suffered from ecological naiveté - being too trusting for its own good. We can't be confident whether or not it was totally flightless, nor just how disastrously trusting because almost no one ever saw it alive.

It was discovered in 1894 by a light-

house keeper named Lyall - or, to be more precise, it was discovered by one of Lyall's cats. The cat killed a local bird and proudly presented it to its master, as cats will do. Lyall, being something of a bird-watcher, recognized that the stubby-winged creature was unusual and passed it along to an expert on New Zealand's birds. The expert in turn shipped the preserved specimen off to a British bird journal, along with a manuscript describing this new species and naming it, for the lighthouse keeper, *Xenicus lyalli*. With the wren now internationally famous, collectors arrived on Stephens Island. Apparently a combination of factors - collection, habitat destruction as the island's forest was cleared for pasture, and further predation by Lyall's cats - destroyed the entire population within a very short time. Twelve specimens of *X. lyalli* now exist in museums. Back on Stephens Island itself, the bird has never been seen again."

Contributed by Phyl Goddard [who promises to find something more cheerful for next time!]

"The bird was a small thing with short wings and almost no tail"

"almost no one ever saw it alive"



Xenicus Lyalli
They are called "wrens" due to their similar appearance and behavior, but are not related to true wrens.

**Field Naturalist's
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Who are the Field Naturalists?

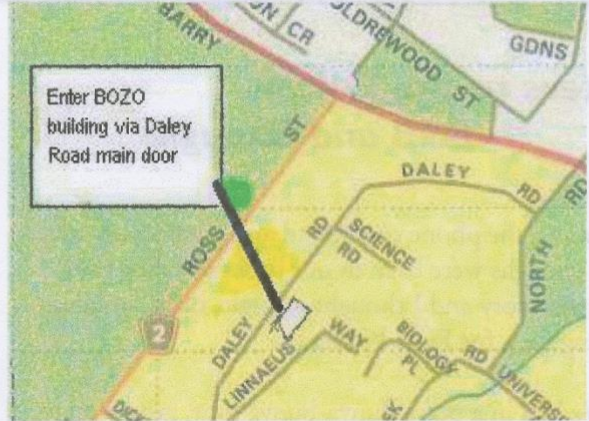
The Field Naturalists Association of Canberra (FNAC) was formed in 1981. Our aim is to foster interest in natural history by means of meetings and regular field outings. Meetings are usually held on the first Thursday of each month. Outings range from weekend rambles to long weekends away. Activities 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: Benj Whitworth, tel 02 6254 4556

Secretary: Rosemary Blemings, tel 02 6258 4724

Website: www.geocities.com/fieldnaturalist/index.html

Newsletter editor: Chris Bunn <chris_b@webone.com.au>
Tel 02 6241 2968. Member contributions welcome.

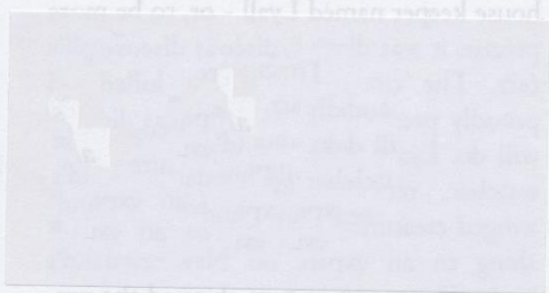


Monthly meeting venue: Division of Botany and Zoology, Building 44, Daley Rd, Australian National University. Park in Linnaeus Way. Meetings start at 8 pm and are followed by refreshments.

FIELD NATURALISTS ASSOCIATION OF CANBERRA INC.

GPO Box 249
CANBERRA ACT 2601

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PP 233744/00022



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 \$20) Donation: \$.....

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