

FIELD NATURALISTS ASSOCIATION OF CANBERRA

OBJECTS: To foster an interest in, an awareness and an understanding of nature.

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Meetings are held in the Division of Zoology and Botany, Building 44, in the Australian National University, on the first Thursday of each month, except January. Meetings commence at 8:00 pm and are followed by refreshments.

NEWSLETTER — May and June 2005

NEWS AND EDITORIAL

Unfortunately due to both the distributor and the editor being overseas in the next couple of months the May and June issues of the *Field Natter* have been combined into the one issue. So please take care to record the meeting and outing dates on your calendar.

Paula advises that we now we now have links to our website from ANBG, COG, and the Conservation Council. That's in addition to the ANPS, who had given us a link a while ago. So check it out.

New members

The club would like to welcome the following people as new members to the club: Sue McKendrick and family (Jack, James and Peter Davey) from Bungendore Kathy Stapleton from Queanbeyan

Thursday May 5 at 8:00 pm

The Fauna of the Fauna

- effects, evolution, anatomy, radiation, diversity and zoonoses.

David Spratt, Post-retirement Fellow, CSIRO Sustainable Ecosystems.

Dave Spratt commenced his science career working on the ecology of timber wolves in Algonquin Park, Ontario, Canada. This magically transformed into a study of the brain nematode paralysing deer and killing moose for his Master's degree at University of Toronto. A World Health Organisation scholarship brought him to the Antipodes and PhD studies on the knee worm of kangaroos and wallabies at the University of Queensland. In 1973 he was appointed as a Research Scientist at the CSIRO Division of Wildlife Research in Canberra where for the past 32 years he has been engaged in taxonomic, life cycle, epidemiological and pathological studies of the parasites of wildlife, their role in animal population regulation and their potential as agents of domestic animal and human disease or zoonoses.

Australian marsupials are a unique biological accident, having undergone an evolutionary radiation unparalleled among other mammals, evolving in relative isolation from 65 million years. The diversity of their helminth parasites (nematodes, cestodes, trematodes and acanthocephalans) is striking, given that the Australian marsupials form a monophyletic assemblage. We are now able to trace the origins of these helminths and three routes are evident. Comparative assessment of the anatomy of the gastrointestinal tracts of marsupial families provides a fascinating insight into the development of this helminth parasite diversity. A glimpse into the inner cracks and crevices of the tiny marsupial mouse, *Antechinus agilis*, weighing in at about 23 grams, gives another almost unbelievable insight into parasite diversity.

The talk will commence with an issue which troubled the fledgling kangaroo meat industry back in the late 1960s and early 1970s — large white worms garnishing the product when unpacked in importing countries. Dave will then examine the manner in which parasite species may affect the community of free-living animals, using a number of examples from Australian wildlife and contrasting the parasite problems in wildlife in the two southern continents, Australia and Africa.

He will conclude with a brief view of emerging parasitic diseases in wildlife, domestic animals and humans with a final scenario of a most perplexing problem. We have now diagnosed three cases of life-threatening human disease caused by a nematode living inside skeletal muscle cells in field or bushie-types from Tasmania, the origin of which could be a vertebrate, an invertebrate, a plant, soil or water or, are we witnessing a legacy from the first convicts transported to that penal colony and who, on managing to escape, at times resorted to "predation" of their fellow-escapees in order to survive?

Pebble Mound Mice

Thursday June 28:00 PM

Fred Ford is currently in Canberra for a short spell. His speciality is "pebble mound mice" from Northern Australia. He has spent a long time with a map, a GPS and a 4wd, mapping and studying these little critters of our north. Fred finished is PhD almost two years ago and is currently working with the NSW department of environment and conservation on smoky mice, mountain pygmy possums and quolls. Rick is also working on a new edition of Rodents of Australia.

OUTINGS:

FOG and Field Naturalists Grassland fungi workshop Sat 21st May 9:00am to 3:00pm with Heino Lepp

Heino will provide a short indoor introduction giving the basics of what fungi are and what they do, as well as something about knowledge of Australian fungi. He then plans to look for some fungi in the open, with some discussion about the habitats and ecology of those we see. If we see a reasonable variety of species it would be useful to collect samples for permanent herbarium storage. Grassland fungi are not well documented in Australia. Heino will give some guidance on how to collect (responsibly) and write up a collection for later scientific study. It's not difficult. He strongly advises participants to bring a 10x hand lens or a magnifying glass. If you are interested in participating in collecting specimens, bring a small knife as well. For more fungi information see http://www.anbg.gov.au/fun-gi/

Venue: Mugga-Mugga Education Centre, Narrabundah Lane, Symonston ACT (opposite Therapeutic Goods Administration). Lunch provided. Enquiries Benj Whitworth (62544 556) or Geoff Robertson (6241 4065). To register send payment of \$10 to FOG, PO Box 44, Majors

Creek NSW, 2622, or give it to Benj.

Jervis Bay; Friday to Monday 10-13 June 2005 - Long weekend accommodated

For this public holiday weekend COG/FNAC have booked the accommodation belonging to the University of Canberra Field Station, adjacent to HMAS Cresswell and Jervis Bay village. We will be in the North Block, which has double bunk rooms and shared bathrooms and communal kitchen/dining facilities. Participants will need to take sleeping bags or other bedding as well as food - it is expected some of the meals will be shared.

Tony Lawson (COG) is organising this trip and will be assisted in leading by Jenny Bounds. It will provide participants with the opportunity to examine a variety of habitats ranging from woodland, forest, heathland to coastal, as well as the Booderee Botanic Gardens with its variety of walks. Special birds expected are Eastern Bristlebirds, Tawny-crowned and Scarlet Honeyeaters, Southern Emu-wrens, Fairy Penguins and seabirds such as albatrosses as well as whales.

Participants can arrive either on Friday or Saturday night. Costs will be \$30 per night including the COG admin fee. A \$30 deposit (posted to the Treasurer COG, PO BOX 301 CIVIC SQUARE ACT 2608) will ensure your place, with full payment due to Benj Whitworth on the 10th May or to the COG meeting on 11 May. If you are interested please contact Benj Whitworth on 62544 556 or the COG leader- Tony Lawson on 6161 9430 or by E-mail on tlawson@homemail.com.au.

OUTING REPORT

FIELD NATURALISTS' VISIT TO SHEPHERDS LOOKOUT 10.04.05

Even without doubling the length of the walk by going to Uriarra Crossing, the short walk from Stockdill Drive to Shepherds Lookout rarely disappoints. The panorama over the Murrumbidgee as it turns NW towards its junction with Ginninderra Creek is spectacular even after the January 2003 fires' effects.

In spite of heavy weed infestation and being surrounded by paddocks of Phalaris, moths, butterflies, grasshoppers, spiders, skinks, kangaroos, birds and numerous interesting plants kept observations and shared knowledge moving between the 11 enthused walkers as we moved down towards the Molonglo River's mouth.

Thermals and a light breeze enhanced the flights of two Peregrine falcons Nankeen kestrels. Guano on a cliff face suggested the location of the Peregrines' nest. Even at 2:15 calls from Willie Wagtails, Weebills, Speckled Warblers, Thornbills and White-throated Treecreepers soon betrayed their presence as they foraged amongst remnant paddock Eucalypts, shrubby Acacias and regrowth. By the time we'd reached the 'carpark' again a chattery mixed feeding flock included Scarlet Robins, distant Gang Gangs' 'creaks', Spotted pardalotes', Black faced cuckoo shrikes' calls had been heard. An hour earlier we'd heard and seen Double-barred finches. Do the finches visit the Cormorants' and Ducks' riverine

territory for water or rely on the drying stock dam?

Common Brown, Grass blue, Meadow Argus, Yellow Admiral and Cabbage White butterflies visited a range of plant species. The stunning Day Flying Moth *Apina callisto* was seen several times. Chequered Copper and Saltbush Blue butterflies came into the 'pleasant surprise' category for Michael as he pursued his calling. A wombat had left its deftly placed 'calling card' on several of the replaced step-logs. Such signs of normality and stability were as reassuring as the sightings of Galahs, Currawongs, Magpies, Eastern and Crimson Rosellas.

Novelty was provided by the shimmering, light-catching creations of large spiders. Two greyish Orb weavers and one amazing dark-orange Orb spider waited in the centres of their respective webs. Several times a long bold thread between trees caught the light so successfully the thread seemed to be baler-twine thick and tough beyond its gossamer reality.

Benj organised the walk for experiencing the honeyeater migration. Perhaps ninety minutes after we began a flock of 20 Yellow-faced Honeyeaters flew over the track and west, down towards the river flats. We saw 2 or 3 smaller flocks as we returned. Almost phantom-silent 7 Noisy Friarbirds perched near us for a few moments in a dead tree. Another migrant group, White-naped Honeyeaters this time, flew over our winding-down chat near the cars.

Recording the diverse vegetation would be a whole different study. Indigenous, weedy, dead, regrowing, robust or extraordinary species are there in profusion. The ferocity of the fires, the incredible tenacity of plants, the strengths of opportunists like St John's Wort and African Love Grass all shown by plants' reactions. *Goodenia hederaceae* in flower once or twice and several refreshingly strong patches of Barbed Wire Grass offer hope for us

through this damaged and yet recovering site.

And thank you Benj, it was great!!

Rosemary Blemings

HOMES FOR THE DISPOSSED

Poverty stricken human beings are not the only animals in desperate need of housing. Recent bushfires, past and present clearing and continuing incremental destruction have kept many of our feathered, furred and scaly compatriots short of habitat. Persistent uncontrollable 'control burning' is not helping.

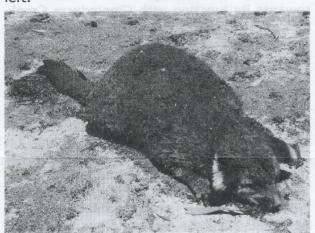
At Wariwillah, our wildlife refuge and V.C.A. property at Michelago, we have decided to help the homeless. Three quarters of the property were burnt out in the recent fires. Almost all the yellow box, apple box and peppermint old growth was destroyed, along with dead trees, logs and stumps. Every bit of wooden habitat was gone.

In the past we had tried various resting boxes, mainly for brushtail possums. We had one success with sugar gliders but the fires destroyed that one. It was of fibreglass, designed and made by Alan Scrimgeour. We have continued to look for tried and tested designs to meet the needs of various kinds of tenant. I have found them, I think, in La Trobe University's models.

La Trobe set up a Wildlife Reserve with research facilities in 1967. They have now arrived at a variety of well-tested designs for nestboxes. These can be bought at a reasonable price, complete with instructions for siting. Each home is planned so as to meet the differing needs of particular animals or birds.

We have already installed about forty of these ready-cuts, and hope to put up about twenty more this autumn. Parrot boxes for Crimson, Eastern and Red Rumps have priority. Next sugar gliders, then brushtail possums, ducks and bats.

I am particularly interested in preserving the variety of brushtail we appear to have here. We found two dead from the fires, separated by over a kilometre. They each had a distinctive white patch behind each ear (see photo). This variation, to my knowledge, has not been recorded elsewhere. It is for this reason that we are placing some emphasis on the brushtail boxes. As the fires may have covered most of their habitat, there may not be many left.



A brushtail possum with white patch behind ears

The most interesting of the new ready-cut nesting boxes is that designed for the small parrot family (see photo), Crimsons, Easter and Red Rumps. This new model is delivered incomplete, and the new inhabitant has to do some work. He or she has to chew a hole big enough to get inside. The entrance has ply firmly stapled across half its size, so that a parrot can see in but not enter yet. Having chewed the

hole big enough, the parrot and its mate can nest and rear their young in safety.



Parrot box. Note the stapled entrance A few practical pointers:

The boxes should be sited at least three metres up and facing Northeast to East, if possible. They are fixed by two nails, supplied, with washers, which according to La Trobe do not damage the tree. To install,

all that is needed is a hammer, an extension ladder (and insurance).

Whilst the above information may be of more interest to rural landholders, suburban residents might be able to divert their brushtail lodgers from the roof to a new and custom-made ready- cut residence.

Also, if you value parrots above exotic blossoms, you might offer accommodation to these colourful, quarrelsome and undeserving tenants.

For further information contact La Trobe direct:

Ph. (03) 9479 2871 Fax (03) 9479 3706 Web

http://www.latrobe.edu.au/wildlife/nestboxes.html

Garth Dixon
5 April 2005

Woodlands for Wildlife - Recovery for our Birds

Free Public Seminar - Saturday 4 June, 1.30pm to 4.30pm CSIRO Discovery Theatrette, Black Mountain ACT

In celebration of World Environment Day, the Canberra Ornithologists Group, in collaboration with the Wildlife Research and Monitoring Unit of Environment ACT and the Centre for Resource and Environmental Studies ANU, is hosting a seminar focussing on woodland birds and actions for their recovery • this seminar is for a wide general audience as well as researchers, students etc. Woodland birds continue to decline in our region against a background of loss of habitat and other factors. There are less than 5% of the original woodlands left in the SE of Australia, and much of this is in small, unconnected patches. What is being done, and what more can be done, to bring some of our declining birds back to local woodlands? What research is needed to answer the questions we don't have the answers to? How can we restore and reconnect habitat for particular species of birds? This seminar will focus on what individual land owners, community groups, academic and research organisations, and governments are doing - "on the ground". Speakers include Professor David Lindenmayer (Centre for Resource and Environmental Studies, ANU), Dr Geoff Barrett (CSIRO Sustainable Ecosystems), Dr Jack Baker (Birds Australia), Ms Alison Rowell (Consultant to COG Woodland Bird Survey) Seminar Chairperson Dr Richard Schodde. Panel discussion with speakers.

How to Register: Prior booking

is recommended to ensure a seat (and to assist in catering afternoon tea). Email completed registration form

to seminar@canberrabirds.org.au or mail to COG PO Box 301, Civic Square, ACT 2608. Bookings can be made up to Wednesday 1 June. Otherwise seats subject to availability on the day. (Theatre has capacity for 170 people).

Registration form and further information available on the COG website at: www.canberrabirds.org.au.

The aggregate motion of a flock of birds, a herd of land animals, or a school of fish is a beautiful and familiar part of the natural world. The following computer site demonstrates that the aggregate motion of the simulated flock is the result of the dense interaction of the relatively simple behaviours of the individual simulated birds (or boids as named for the computer model). In this particular model the three steering behaviours **Separation**: you steer to avoid crowding local flockmates; **Alignment**: you steer towards the average heading of local flockmates and **Cohesion**: you steer to move toward the average position of local flockmates. Flocking requires that you (if you are a boid) react only to flockmates within a certain small neighbourhood around itself.

The site to visit is: http://www.red3d.com/cwr/boids/

Ulladulla: Heathland Reserve and Warden Head FROM Benj Whitworth

Although I have been to Ulladulla perhaps twice a year for 20 years, I had never visited the Ulladulla Southern Heathland Reserve. After hearing of some interesting birds I decided to go there on the 26th of March. The reserve is on the South East edge of Ulladulla, you can reach it by turning East at the Ex Servicemen's club, I went along Dowling St. Entering through coastal scrub I saw many flowering red tubular flowers of native fuchsia and also a Pimelia, possibly P. ligustrina as it was tall and with long stems rather than clumped. These were also scattered in the heath that you reach after perhaps 30m. I didn't have a lot of luck identifying the plants using 'The coast and hinterland in flower' (McCann, 1992) and didn't really have time to consult the 'Flora of NSW'. So take any plant ID with a grain of salt. Hopefully at a later date I will be able to go back. Also in flower were some yellow Banksias coastal Banksia integrifolia) and 'saw' Banksia (B.serrata). All these flowers supported a large number of honeyeaters, mainly dozens of New Brush Honeyeaters and Holland Wattlebirds, plus a couple of red wattlebirds.

I didn't see a lot of birds because two huge white bellied sea eagles were circling the whole time (2 hours), often very close, no doubt because towards the East of the reserve is a cliff. One bird was noticeably larger, probably a female, this bird was

also darker and in Simpson and Day (1996) it says birds get lighter with age. Finally, when smaller birds started moving around more, a brown goshawk flew over, once again sending all small birds dashing for cover. Other birds seen included brown thornbills, lots of white browed scrubwrens, about 15 red browed finches and a whipbird seen up close.

Other plants in flower included two species of Guinea flower, a shiny oval leafed one possibly Hibbertia sericea and a narrow leafed one which looked like our Hibbertia Fan riparia. Large purple hidden (Scaevola) were often vegetation, some white flowered small Mint bushes, a small white flowered tea tree (Leptospermum), a few flannel flowers and erect violets (Hybanthus veronii). One plant I had a lot of problems with looked like an allocasuarina with white flowers varying in petal number and sometimes with a strange yellow hairy 'fruiting body' about 1.5 cm in diameter. I had almost given up on seeing the southern emu wren, which was the main reason I went to the reserve, and was about the leave the heathland for the car, when I heard a wren alarm call, tziit tziit. I waited for a minute and a male appeared out in the open, the rufous crown actually caught my gaze and allowed me to see the bright blue face and throat and incredibly long tail held erect. I didn't get to see the shy female, but could hear it close bye. It

was good to see these birds again, after many years.

Leaving the reserve I nipped slightly further North to the Warden Lighthouse and stumbled across osprey!! It flew up from the lookout with a large mammal (for it to carry) in its talons, possibly a young rabbit. Although I only saw it for 8 seconds, it was only 10m from me and I got good views of the chest collar of brown speckles, the white throat and belly, the black stripe extending back from its eye and the small crest. This bird had brown flecks though its white crown and more brown specks on the chest than I remember from other birds I have seen

and I suspect it was an immature bird. I walked along a newly made trail creeping through tea tree and startled a small mammal, most probably a bush rat.

Both reserves are well worth a visit if you are in the area. Hopefully next time I will have more time.

McCann, I.R. (1992) The coast and hinterland in flower. Victorian National Parks Ass. Victoria.

Simpson, K., Day, N. and Trusler, P (1996) Simpson and Day- Field guide to the birds of Australia, 5th Edition. Penguin Books, Ringwood.

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

Study shows introduced foxes transformed vegetation on Aleutian Islands¹ from lush grassland to tundra

Huge colonies of seabirds accustomed to nesting on islands free of predators began disappearing when fur traders started introducing foxes onto islands in the Aleutian archipelago in the 18th century. The ground-nesting birds made easy meals for the foxes. A study published in the journal *Science* now shows that the effects of the introduced foxes rippled through entire island ecosystems, transforming the vegetation from lush grasslands to scrubby, low-growing tundra.

It turns out that the nutrient-poor volcanic soils of the Aleutian archipelago can only support dense grasslands if they receive regular doses of fertilizer in the form of bird droppings. On islands without foxes, seabirds transfer nutrients from the ocean to the land by feeding on marine fish and invertebrates and spreading nutrient-rich guano around the islands. Add foxes, and the indirect effects on the whole ecosystem are as dramatic as the direct effects on the seabirds.

Evidence that more ocean-derived nutrients were cycling through the ecosystems of fox-free islands than on fox-infested islands came from analyses of nitrogen isotopes in soil, plant, and animal samples.

Foxes were first introduced to some of the islands by Russian fur traders in the mid- to late-18th century as a way to supplement the declining harvest of sea otter pelts. But the practice escalated between the 1890s and the 1930s, when the U.S. government worked to establish fox farming businesses on the islands. Mostly arctic foxes and smaller numbers of red foxes were introduced to more than 400 islands.

¹ The Aleution islands are an archipelago of islands off the Southern Alaska coast.

FIELD NATURALISTS ASSOCIATION OF CANBERRA INC.

The Field Naturalists Association of Canberra was formed in 1981. The aim of the club is to stimulate interest in the natural history of the ACT through regular meetings and field outings. Meetings are usually held on the first Thursday of each month. Field outings are also planned each month and range from day outings to long weekends and camping. The emphasis is on informality and fun. New members are always welcome, especially family groups and young people. Information on activities is circulated in the monthly newsletter. If you wish to join FNAC, please complete the form below and send it with the appropriate subscription to: The Treasurer, FNAC, GPO Box 249, Canberra ACT 2601.

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