



FIELD NATTER

FIELD NATURALISTS ASSOCIATION OF CANBERRA

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

PRESIDENT: Rosemary Blemings Phone 02 6258 4724

SECRETARY: Janet Twigg-Patterson phone 02 6287 2086

ADDRESS FOR CORRESPONDENCE: GPO Box 249, Canberra ACT 2601

WEBSITE <http://www.geocities.com/fieldnaturalist/index.html>

EDITOR: Chris Bunn <chris_b@webone.com.au> ph: 02/6241 2968

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 — AUGUST 2005

MEETING

Earthwatch program in the Kimberleys

with Nancy FitzSimmons

Lecturer; Resource and Environmental Sciences; School of Resource, Environmental and Heritage Sciences; Division of Health, Design and Science

Thursday 4th August 2005 – 8 pm {This talk is subject to final confirmation}

Earthwatch Institute is one of the world's largest and most respected not-for-profit scientific research organisations. It engages people worldwide in scientific field research and education to promote the understanding and action necessary for a sustainable environment.

In 2003, 3500 volunteers and fellows joined Earthwatch projects all over the world as field assistants. These projects generated scientific information addressing key environmental issues, ranging from global warming to endangered species to world health, with important applications in conservation. This year Earthwatch will support around 140 research projects and will send some 4000 participants to work with scientists as field assistants.

OUTINGS:

Field trip- Stirling Park/Ridge, Yarralumla-
2pm Sunday 7th August

At the corner of Empire Circuit- Hunter St- and Stirling Park in Yarralumla. We will be heading in from the South edge, along the ridge, through a stringybark and brittle gum forest with interesting ground layer. We will then move North through better midlayer down through some interesting woodland including Button wrinklewort daisies and



Intrepid Field Nats on top of Percival Hill July 2005

heath species and we will be searching for speckled warblers and other interesting birds. A surprisingly interesting nature park right in the middle of Canberra. Bring hat, water, and good walking boots, but we should be walking downhill. Should take 2 or 3 hours. Contact Benj Whitworth 6254 4556.

Field trip- Kioloa- October long weekend. Saturday 1st to Monday 3rd

Kioloa is the main Field station for the Botany and Zoology School (ANU). Kioloa, if you haven't been, is on the NSW South coast about 35km North of Bateman's Bay. Within walking distance from the Field station is a beach, coastal banksia scrub, forest, woodland, heath and a rainforest gully. We saw a great variety of plants in flower last year even though the area was in drought, so bring your coastal field guides. We also saw many birds last time. We have booked two new self-contained cabins that have rooms with two single beds in each. Each cabin has shower, toilet, and kitchen. We have booked the cabins from Saturday lunchtime to Monday lunchtime, i.e. 2 nights and 3 days and the cost is \$25 per person per night. Please bring your own food, as the shops are unreliable. This trip was excellent last time, it is a good way to meet members, and you can come and relax or join the walks with other members. We will be car pooling. Please advise Benj Whitworth if you want to attend (6254 4556) and pay a deposit, only 12 places are available. Benj will be in WA, so will hand over organising of the trip to another FNAC member ASAP.

NEW MEMBERS

A big welcome to the following new members:

Due to editorial *ineptitude* I overlooked welcoming Rod and Stephanie Panter from Queanbeyan who joined back in April

Also Charles Buer & Margaret McJannet from Kambah (Charles said that Margaret used to be a member - so welcome back).

NEWS AND EDITORIAL

Apologies for wrong information on newsletter labels

There was a hiccup in information sent out on the July newsletter address labels concerning membership dues.

More seriously than this. A couple of paid-up members did not receive their newsletters last month.

Apologies.

There was a glitch in the mailing list updates last month.

The computer program can't be blamed for this - just a combination of circumstances with some of the committee being away and others still settling into new jobs this year. We are putting in place procedures so that this hiccup does not happen again.

Monitoring after Fire.

Members may be wondering what happened to the 'Monitoring after fire' project that was proposed in April 2003. There was substantial member support from Field Naturalists and ANPS. A small coordinating team met with various ACT Government staff, mainly from Environment ACT. We decided not to go ahead because of the following reasons:

- Lack of support from Environment ACT who felt it may conflict/overlap with their research/programs.
- Inability to gain access to most fire affected areas until 18 months after the fires (except on private land), which made monitoring of trends almost impossible.
- No insurance and no Government permission to put up 'markers' on Public land for identifying sites.
- We couldn't identify a project leader when I went to South America.

Thankyou to all the people who supported the idea.

Benj Whitworth

MEETING REPORT

Dr Bob Taylor's "Bloody Funny Wasps – a new look at ant biology" July 7th 2005

Rosemary vB's FNAC advert in Fridge Door attracted the attention of John Martin's Capital Circle in Thursday's *The Canberra Times*. John had Bob recalling E O Wilson's greeting in Cambridge, Massachusetts in 1959, "Bloody great to have you here, mate". "I never heard him talk like that again" Bob added about Wilson's welcoming attempt at Strine.

One FNAC member recalls the staggering numbers of specific and generic names that formed a backdrop to Bob's talk. Numerous also were the terminologies related to wasps and ants as the evolutionary biology of these specialised insects was explored. If some of the 43 listeners may have found Bob "not easy to listen to", the majority were swept along by his infectious enthusiasm for his topic.

Even on Percival Hill (Sunday 10th) we looked at ants with new appreciation though more questions arose. The rain might have washed away traces of 'ant roads' but we'd heard that ants evolved as pedestrian insects able to carry larger loads, to carry loads co-operatively and to forage at night unlike flying predecessors. Night foraging reduces the risk of predation.

Ants navigate at night by responding to the shapes made by canopies against the light in the sky. Is this mapping the stars or sampling the canopy? How do ants' eyes compare to ours if such interpretation can be achieved? Bob and his colleagues had experimented with the ants' navigational perception by altering the position of canopies.

In other experiments petrie dishes were places over nests' exit holes once ants had left to forage. Did the returning ants have quizzical expressions on their return? 'Home's here but access is denied' If we felt ashamed at tricking such diligent workers it seems insects don't count as animals in RSPCA or in animal welfare terms.

During the day we'd only see a fraction of the ant species. There are 100 species on Black Mountain, for instance. As most of these are nocturnal a new dimension to the scientists' roles, the researchers' work emerged. Bob chose a low-key reference to his discovery of the Dinosaur Ant, whilst on a Nullarbor region field trip with unluckier colleagues who just weren't precisely in the right place at the right moment.

Was adaptive reasoning the term Bob gave to his ability to postulate around the lack of fossil evidence in forming theories about the way ants and wasps evolved in relation to the animal kingdom in the mists of time. If some information flew past too rapidly for absorption there was no despondency. Other facts and anecdotes made instant impact. There aren't many animals that can so obviously modify their environment to suit their needs.

Bees and wasps have evolved cellular brooding. Their larvae are sealed away in individual cells to minimise the spread of infection. Ants' metapleural glands manufacture antibiotics, which are used to sanitise the nest, eggs, larvae and pupae through constant cleaning.

Ants are rarely involved in the pollination of flowers since these antibiotics would severely damage pollen. Those ant species that are pollinators lack metapleural glands. Allectomy is the term for the shedding of wings once the requisite mating journeys or dispersals have been achieved.

For their brief lives males are flying sperm packets.

Bulldog ants' bites can lead to rapid loss of feeling around the bite site. For some people accumulating poison from several bites over time can prove fatal. Whilst familiar with the ants' defence of their nests and the division of labour necessary for social animals' colonial survival, we heard that there are marauding ant species that attack colonies or nests from underground.

Bob is a scientist of the "old CSIRO" mould where research foci readily extend to any aspects of zoology, biology, ecology that do or could influence their field of study. As he answered questions ranging from identification through to academic entomology we felt each detailed answer could readily be expanded into its own presentation. Bob's fast-paced enthusiasm for his topic revealed a passion for investigation of their behaviour, biology and evolution. We couldn't help being fascinated.

We shared his sense of the fun of science and the deep respect he has for these amazing invertebrates.

PB, PF, CF, JG, PG, PH, MK, MK, PM, NM, RP, CR, RvB, BW, BW, CB, RB.

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

Night Sky Observing

View the night sky from one of the most scenic spots in Canberra.

Using research-grade small telescopes and the historic Farnham Telescope, see first hand why Mt Stromlo has been a working observatory since the beginning of the 1900's.

Time: 7pm (August 13 and 20)

Venue: Mt Stromlo Observatory, Cotter Road, Western, ACT

Cost: Gold coin donation

Bookings: Essential, Natalie Aked

T: 6125 0232

Suitable for: All ages except children under 5

Cats, Cars and Catchments – Where to for the Bush Capital?

How much bush should we keep in our rapidly expanding city? How often should we be able to water our gardens in times of drought? Is it time for a car exclusion zone in Civic?

Canberra faces serious environmental questions. Some of the nation's leading scientists will share their views on our future at this ANU-Canberra Times forum in Science Week.

This is not a forum for the faint-hearted. Issues of environmental science are at the heart of the Capital's future. Away from the forms, planning committees and political arena, this is a chance to hear the facts we need to face about our future.

The ANU panel members are: Dr Janette Lindesay, Climatologist; Dr Cris Brack, Forestry Expert; Professor Tony McMichael, Epidemiologist; Professor David Lindenmayer, Ecologist; Adjunct Professor Paul Perkins, sustainable resources expert.

The forum will be facilitated by Rod Quinn.

Time: 7.30-8.30pm

Venue: Llewellyn Hall, Childers Street, ANU

Cost: Free

Bookings: Not required

The Good, The Bad and The Ugly – Conservation, Sustainability and Australia's Environment – By David Lindenmayer

Australia is one of the most species-rich nations on the planet. It is also one of the most degraded with the highest per capita numbers of threatened species of any place in the world. This talk addresses urgent transitions needed to allow long-term sustainability

Time: 5.30-6.30pm

Venue: Research School of Biological Science, Biology Place, ANU,

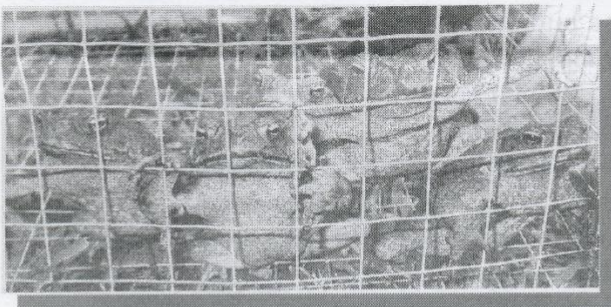
Cost: Free

Bookings: Not required

Suitable for: Adults



TOP END TOADBUSTERS. SOLUTIONS TO THE CANE TOAD MENACE



A community-based toad eradication program [FrogWatch (North)] has been launched in the Northern Territory to defend the cities of Darwin and Palmerston from the creeping menace of cane toads.

The campaign has won significant government support, with a \$422,000 grant over 18 months that will allow it to tackle the

cane toad problem on a number of fronts. Community advertising and a weekly 'frog talk' session on local radio have helped raise the profile of the exotic cane toad.

Long time FrogWatch coordinator Graeme Sawyer said new designs in cane toad traps had revolutionised the organisation's toad control strategy.

Graeme said field tests had shown that a single, relatively inexpensive trap (costing around \$100) could in a few weeks round up most of the toads in a five-acre area, bringing the local resident cane toad population to near zero.

"We know toads travel extensively at night, investigating their environment," he said.

"If they see a light they come to it and if they have to push their way through a one-way door into a trap to feed on insects they will".

The NT's Bonrook Station has had a

significant cane toad problem over the past two years. But a single trap there recently caught 543 toads over a six-week period, almost wiping out the local population.

The pattern in that test and others in the NT was that a significant number of toads were caught in the first night, half as many the next night then fewer and fewer over the next few weeks.

"After that traps caught just one or two a night and from that we conclude that these traps clear out local populations and then capture new arrivals as they move into the area," Graeme said.

An important feature of the traps is that they do not capture other species, which either are not attracted inside or can escape through the trap's mesh (or may be eaten by a cane toad -editor).

The earlier 'pitfall' trap designs captured toads but also trapped other species, meaning volunteers might have to deal with snakes and lizards as well as toads.

"In about 200 nights of trapping we've had no

by catch in any of the three cage traps," Graeme said.

"Up until these results we thought success in reducing toad populations would rely on people power, through toad musters - going out at night and collecting, them by hand.

"But these traps do the same job or better, are not labour intensive and work all night."

FrogWatch will now work with LandCare and other volunteer environmental organisations to install 'supertraps', which will be auto-switching, solar powered and permanent.

(Adapted from The Web the National newsletter of the Threatened Species Network)



WANTED -

If anyone has a copy of the out-of-print book by Ronald Strachan:

Complete Book of Australian Mammals (CSIRO, 1982) which they would be willing to sell, please email Philip Bell <philip.bell@gmail.com> or phone Philip or Maureen on 6251 5837.

It is not available through any of the major internet secondhand sellers.

Field Nats turn up in strange places in Paris. From a photo taken by the Bells



Indian Myna bird trial in Cairns (from a government media release)

Found in almost every garden up and down the east coast of Australia playing havoc with native wildlife, the Common Indian Myna bird's days may be numbered thanks to a new trial in Cairns to reduce the numbers of the introduced pest. Funded by the Australian Government's Natural Heritage Trust, the \$130,000 trial was announced by Australian Minister for the Environment and Heritage, Senator Ian Campbell and Member for Leichhardt, Mr Warren Entsch.

Senator Campbell said the project, to be undertaken by Australian National University researcher Dr Chris Tidemann with support from Cairns City Council and the Australian Rainforest Foundation, could have national long-term benefits in the control of Mynas and other invasive pest birds. "Dr Tidemann has developed a possible means that could result in the Indian Myna being trapped effectively and humanely. This has implications for controlling the spread of other invasive pests, like the closely related European Starling," Senator Campbell said.

"The Indian Myna has devastating effects on native wildlife. They take over nesting hollows, destroy eggs and chicks, and stop native birds like rosellas and kookaburras from breeding. They are capable of evicting even large birds, such as Dollar Birds, from their nests" Many conservation and environment groups have expressed support for reducing myna numbers, including Birds Australia and Birds Queensland," Mr Entsch said. "In the year 2000 Common Indian Mynas were the most commonly recorded feral bird in Canberra. At the same time, the Common Indian Myna was listed by the World Conservation Union as one of the world's 100 worst invasive species. "The Indian Myna is becoming a bigger problem in eastern Australia, with evidence indicating that north of the ACT the Common Indian Mynas are spreading into habitat occupied by the threatened Superb Parrot.

P.S. - Closer to home The Watson Community Association - has just gained a small grant from the Tradies Club to buy a Myna bird trap

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.

FAMILY NAME.....FIRST NAME.....

If a family membership, please include the first names of other members of the family.

.....
POSTAL ADDRESS.....

SUBURB.....STATE.....POSTCODE.....

PHONE: HOME..... WORK

SUBSCRIPTION ENCLOSED \$..... Single/Family \$20

How did you hear about FNAC? Please circle FRIEND OTHER Please state.....

FIELD NATURALISTS ASSOCIATION OF CANBERRA INC.

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

If undeliverable return to:

The Secretary
GPO Box 249
CANBERRA ACT 2601

SURFACE
MAIL

POSTAGE
PAID
AUSTRALIA

Print Post approved
PP233744/00022

THE ECONOMY IS A WHOLLY OWNED SUBSIDIARY OF THE
ELVISOR... THE OTHER WAY AROUND. "GAYLORB NELSON
Former U.S. Senator and Governor of Wisconsin

PRINT POST

NO. IN BUNDLE

POST TOWN OR SORTING DIVISION

STATE

POSTCODE