

April 2007



FIELD NATURALISTS' ASSOCIATION OF CANBERRA

FIELD NATTER

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

MEETING THURSDAY April 5  
8:00 pm Australian National University  
Meeting details back page

# Planet H/eaters - a global warning

Dr Andrew Glikson

"Dr Andrew Glikson is an Earth Scientist in the Australian National University, with a 40 years record in geological surveys in inland Australia and studies of the early history of the Earth, origin of continents and oceans, and the role of volcanic eruptions, asteroids impacts and greenhouse effects in terrestrial evolution. His talk "**Planet H/eaters - a global warning**" will explore the nature and origin of the current climate change, the consequence of anthropogenic combustion of the

carbon products of more than 400 million years of biological evolution. The imbalance created between the innovative powers of an overgrown human neocortex and the primitive mammalian brain threatens advanced life forms on Earth. Random creativity results in, often destructive, technological determinism. On the other hand, the strongest force on Earth remains **the Life Force**, which has survived for four billion years despite major volcanic, tsunami, asteroid/comet impacts, ice ages and greenhouse episodes."

### EDITORIAL

Well what a month was March Who would have guessed our meeting for-March was going to be a wash-out . Then due to our President having serious health problems, which we now wish are completely resolved, and also because of no meeting, a March excursion didn't occur. But all is not lost, especially as we have a very interesting meeting and excursion this month — details in this newsletter

Chris

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## Spotlight/Possum Walk- Feb 2007

Arriving at the top of Black Mountain, it was light enough to enable us to see many clouds, and we discussed the excellent speaker Ken Batt who gave a talk on Clouds at the last Field Nats meeting. I recognised cumulus. A great crowd turned up, being 14 walkers. The clouds threatened rain, and in fact it seemed to be raining all around us, but luckily not on us, except for a few 'spots'.

People tested their torches and just before dark we set off. Observing some interesting hollows in the twilight, we hoped for movement but didn't see any. The mid-level vegetation was virtually non-existent, due to the drought, but recent rains had given ground-covers like *Lomandra* a spurt. Having no mid-story concerned me because sugar gliders rely on wattles for gum and shrubs for sap and insects. Also, the common ringtailed possum often build their nests (called dreys) in thick, mid-story bushes, and none were present.

We stumbled our way around, with Rod and Stephanie Panter and Paula following me, and when we reached the West side we could see the lights from the beautiful new Glenloch interchange. I kept hearing strange sounds, but couldn't spot anything and the noises were either insects or birds too far away to see. The scribbly gums set a ghost-like scene, as torchlight flickered through the sparse forest. The scribbly gums were shedding, or is it moulting, and some were brilliant reds and yellows.

I heard a rustle and looking up we found two cute common ringtail possums. Field Natters 'ood' and 'aaaahed' as everyone began to get reasonable views. The possums didn't seem all that concerned by the lights and one continued to feed in the flowering scribbly gum, while the other walked off slowly along a branch. Ringtails feed on leaves, flowers, buds and some fruit (McKay, 1991). Their short round ears, with white patches behind, and their white bellies were clearly visible, as was the prehensile tail with bare skin. They seemed smaller than I recall, particularly one of them, and we wondered whether one was a juvenile. People seemed happy, and chatted as we wandered around the Southern side of the Mountain, through stringybark forest, a wet gully, and a woodland with large mature gum trees- but 'no luck' possum-wise.

On crossing the main Black Mountain road we frightened a roosting flock of birds, which were either red-browns or fairy wrens and boy did they kick up a fuss! We turned North and headed straight up the hill. The moon shone bright and I was chatting about plants (not expecting to see any more possums) when we heard a yelp. Shirley had spotted another ringtail. This one was quite low, and seemed a lot bigger than the other two. It crossed right over our heads, to within a few metres, and appeared to be heading for something. It tried a variety of pathways and showed us how it uses its tail. Paul and Nicola tried photography but with little success. People seemed pleased after the trip, having seen at least a few possums. Just difficult with the recent drought.

Benj

### References

McKay, G. M. (1991) *Common ringtail possum*. In the Complete book of Australian mammals. R. Strahan (Ed) Australian Museum. Sydney

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## Janet's Eucalypt Herbarium

I am trying to collect many samples of different eucalypts. So far I have collected species from S.A to ACT. If you know of an

unusual species that grow near you could you let me know please. I need the suburb, street name and nearest house number. You can contact me on either email [p.j.edstein@homemail.com.au](mailto:p.j.edstein@homemail.com.au) or phone 6288 1398.

I am doing this as a hobby now that I am retired and am finding the study and chasing up of eucalypts quite a passion.

Even my husband now looks at the trees!!

Thank you everyone, Janet Edstein

# The April Excursion



## Honeyeater Migration- Saturday April 14<sup>th</sup>, 9am- 12pm.

The honeyeater migration is one of the most dramatic animal events in the ACT and occurs twice a year. Autumn is much better than the Spring migration. Last year Field Nats staked-out Shepherds lookout. But this year I have a much better spot to view the migration. I will take you to a little known site near Angle crossing, (South of Canberra) that funnels the migrating birds. We are likely to see hundreds of white-naped, yellow-faced and white-eared honeyeaters. Also possibly some fuscous. Other birds should include red wattlebirds, silvereys, even little ravens. If the weather is good it is

possible to see up to 8000 birds in half a day, but don't expect too much. Last year we saw 2000. We will sit and absorb the migration for an hour or so.

Afterwards we will visit Tharwa Sandwash. A good spot for birds in the ACT, at any time of year. Walking is easy. Bring a chair, sunscreen, hats, binos and cold and wet weather gear. Don't miss it. Car pooling from Canberra- Call Benj on 62544 556. Or meet at Williamsdale turnoff at 9:30am. Directions- About 10km S of Canberra, along Monaro Highway, turn Right at Williamsdale at the sign for Angle crossing. Map of Murrumbidgee corridor- [http://www.environment.act.gov.au/\\_\\_data/assets/pdf\\_file/13636/Pages\\_from\\_WEB\\_MRC\\_brochure.pdf](http://www.environment.act.gov.au/__data/assets/pdf_file/13636/Pages_from_WEB_MRC_brochure.pdf)

## Book review

### *Gum, the story of eucalypts and their champions* by Ashley Hay (Duffy & Snellgrove, 2002)

Working largely from first sources, Hay gives a sweeping and occasionally sardonic commentary on human interaction, for good or ill, with eucalypts and *Corymbia*.

She begins with the Aboriginal legend of the seven peacekeepers, continues with stories of the early explorers, colonists and botanists (Banks and Solander, Major Mitchell, Robert Brown and George Caley, and later Baron Ferdinand von Mueller) and moves on to the artists (John Lewin, John Glover, Louis Buvelot, painters of the Heidelberg School, Hans Heysen, Albert Namatjira, Fred Williams and Rosalie Gascoigne), authors (DH Lawrence, Patrick White and Murray Bail), photographers (Harold Cazneaux and Peter Solness), author/artist Mae Gibbs and botanist/artist Stan Kelly.

She tells of foresters - especially Max Jacobs of the Forestry School in Canberra during the 1950s and 60s when eucalypts were considered a virtual panacea for the world's economic, medical and other problems - of the 1970s development of the timber pulp industry and the 1980s re-evaluation and growth of the environmental movement (Geoff Law being seminal in the save-the-forests battle in the Styx valley in Tasmania). She discusses Bob Hawke's One Billion Trees program and bushfires ("The smell of burning eucalyptus leaves had been in Australia's air for more than 35 million years") and includes some fascinating trivia including mention of a c1999 study for the Melbourne museum which found that a single river red gum on the Murray river was home to more than 4000 insects and vertebrates - more than 320 different species of living things dependent on it.

"In all the stories... you find one set of words: adaptable, diverse, tenacious, interactive, opportunistic, unique. Take them for these people, this place. Take them for the trees." (p239)

Not a new book, but recommended. It is in the ACT Public Library.

Maureen Bell

# WHY BIRDS SING

## Rosemary Blemings

I came across a book *Why Birds Sing*. Rothernberg, David Penguin, London, 2005

I haven't finished it yet but was rather taken with this from Chapter 5 Your tune or mine?:

The sparrow-sized European Marsh Warbler *Acrocephalus palustris* breeds in the 'wet meadows' and 'thickets' of Northern Europe including Southern England. The male, after arriving on a migratory journey from Eastern Africa perches in a bush and streams out a short but repeated song. It was realised that the bird, about the size of but duller than 'our' Clamorous Reed Warbler, repeated the calls and songs of many of the birds that shared its habitat. It was assumed that the second half of its song was the Marsh Warbler's tune. However Francoise Dowsett-Lemaire followed a 'hunch' that this wasn't so. From Liege, in Belgium, she journeyed to East Africa where she learned the sounds of the common birds in the Marsh Warbler's wintering grounds. The Marsh Warbler, she found, compiles a blend of songs and calls from its two main habitats and journey and this is the basis of its complex song. We're lead to wonder why this small bird has this extraordinary ability? Lemaire found that female Marsh Warblers are not particularly interested in the male's song, choosing mates on the basis of territory size rather than on singing qualities.

If this mimicry isn't enough of a puzzle, Lemaire also suggests that when 'off-duty' male Marsh Warblers join together in a form of chorus. She suggests this is social play rather than song challenges and that the birds actually enjoy singing.

### FIELD NATURALISTS ASSOCIATION OF CANBERRA PRIZE - 2006

We have recently heard that Catherine Hayes has been awarded the FNAC Prize for 2006. The prize is awarded annually to the student who achieved the best results across all the relevant courses. Catherine's enrolled in the Bachelor's degree offered by the Faculty of Science which includes being enrolled in Plant Science, Zoology, Ecology and Evolution courses. Catherine plans to be present at the next meeting.

## MULTI-GENERATIONAL SCIENCE

The CSIRO's Double Helix has begun a project to have young people involved in observations about the introduced Portuguese millipede *Ommatoiulus moreleti*.

The species was introduced, appearing at Port Lincoln, South Australia in 1953. It has now spread to other parts of S A, Tasmania, the A.C.T., southern NSW and Western Australia around Perth. I've only seen them outside but they can invade houses in large numbers from time to time

The millipedes are shiny black & in my experience appear after significant rain. At other times they hide under rocks, in leaf-litter or in the soil. The aim of the project is to find out where the Portuguese millipede is established in Australia now. I heard about the project because the granddaughters are Double Helix members. We've recently received the Millipede Mayhem kit which contains collecting tubs & details of what's required. There's no age-limit for participants & the useful addresses are:

[www.csiro.au/education/MillipedeMayhem.html](http://www.csiro.au/education/MillipedeMayhem.html) and [www.csiro.au/helix](http://www.csiro.au/helix) (follow the links to Millipede Mayhem)

There's quite a bit of information on millipedes through the link so some of my initial questions were readily answered.

Rosemary Blemings



*O. moreleti* enters houses, which is not surprising given that Portuguese millipede populations in some backyards are of the order of 1000 - 5000 individuals. Nevertheless, it is highly unusual to find *O. moreleti* more than half a kilometre from a Europeanised habitat,

## I AM A TREE

*Albert Morris (1886-1939) cultivated a desert garden in Broken Hill and experimented with a wide range of plants from dry areas, including Arizona and South Africa. He found that species grown from seed collected locally withstood drought conditions better than others. In 1920 with W. D. K. MacGillivray he helped to found the Barrier Field Naturalists' Club. Numerous field expeditions in his spare time greatly increased his knowledge and his collection to over 5000 pressed specimens. Strongly practical, he gave away hundreds of trees and shrubs to public bodies and worked to preserve the Aboriginal paintings and rock carvings at Mootwingee from vandalism. Until 1936 no mining company was willing to control sand drift by implementing Morris's idea of a green belt, which he asserted would 'not only help, but will wholly remove the problem ... providing you fence a fairly large area with stock and rabbit-proof fencing, and give some help for the first few years'. W. S. Robinson, managing director of the Zinc Corporation Ltd, decided to support Morris, who showed a remarkable understanding of the three basic principles of natural regeneration: the exclusion of grazing animals and rabbits; careful positioning of fences to protect trees from prevailing winds; and choice of local plants well adapted to the hot, dry conditions. In May 1936 the company established a twenty-two-acre (9 ha) plantation, later named the Albert Morris Park. Morris provided seedlings and advised the planting of native grasses, gum trees and old man salt bush, a species that had almost disappeared. Within eighteen months the results were so impressive that the North Broken Hill and Broken Hill South companies joined the scheme.*

*The statement below comes from a plaque on the Albert Morris Memorial Gates.*

### A TREE

YE WHO WOULD PASS BY AND  
RAISE YOUR HAND AGAINST ME  
HARKEN ERE YOU HARM ME.  
I AM THE HEAT OF YOUR HEARTH  
ON COLD WINTER NIGHTS, THE  
FRIENDLY SHADE SCREENING YOU  
FROM THE SUMMER SUN AND MY  
FRUITS ARE REFRESHING DRAUGHTS  
QUENCHING YOUR THIRST AS YOU  
JOURNEY ON. I AM THE BEAM THAT  
HOLDS YOUR HOUSE, THE BOARD OF  
YOUR TABLE, THE BED ON WHICH  
YOU LIE AND THE TIMBER WHICH  
BUILDS YOUR BOAT. I AM THE HANDLE  
OF YOUR HOE. THE DOOR OF YOUR  
HOME, THE WOOD OF YOUR CRADLE  
AND THE SHELL OF YOUR COFFIN. I  
AM THE BREAD OF KINDNESS AND THE  
FLOWER OF BEAUTY. YE WHO  
PASS BY LISTEN TO MY PRAYER.

“HARM ME NOT

I AM A TREE”

## Metal in Feathers Could Provide Migration Clues

Measurements of different forms of the metal strontium found in bird feathers could unravel mysteries of their migration patterns and help predict the arrival of avian carried diseases such as bird flu. The news is reported in the latest edition of the Royal Society of Chemistry's *Journal of Analytical Atomic Spectrometry*.

Concerns about the spread of bird flu means there is an urgent need to find better ways of monitoring the movements of migrating birds. Dr Laura Font and a team at the University of Durham have developed a technique that can measure very low concentrations of strontium isotopes in bird feathers. (Isotopes of an element have the same number of protons but different numbers of neutrons in their nucleus)

The team measured strontium isotope levels in the feathers of the sedge warbler, and mapped how this changed with geographic location. Dr Font said: "The routes of migrant birds have previously been studied using a variety of techniques, such as marking individuals with metal leg rings, radio or satellite tags, or simply counting bird numbers at migratory stop over points. But these labour intensive methods generate relatively little data and often do not reveal the origin of individual birds."

Migratory birds regularly renew their feathers, often prior to migration and the feathers tend to reflect the unique "isotopic signature" of the region in which they were grown. Although analysis of other isotopes can give a rough idea of the birds' origin, strontium isotope ratios in the bones, claws and egg shells of birds tend to provide a much more precise location.

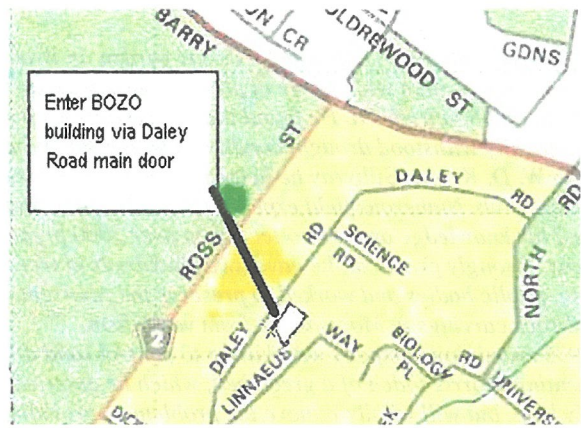
Unfortunately, bone analysis is too invasive for routine use. But Dr Font's technique has finally made accurate analysis of strontium in feathers a viable option for tracking birds. Dr Font said:

**Field Naturalists' Association of Canberra**

**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 w 6272 3192 h 0409 544 557  
**Secretary:** Rosemary Blemings, tel 02 6258 4724  
**Website:** [www.geocities.com/fieldnaturalist/index.html](http://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 116, Daley Rd, Australian National University. Park (occasionally the adjacent building 44). 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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**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: