

March 2009
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OBJECT: To foster an interest in nature

MEETING THURSDAY March 5
7:30 pm Australian National University
Meeting details back page



Speaker: Frank Ingwersen

Frank was for a long time an ecologist with the ACT Parks and Conservation Service. He has undertaken many vegetation surveys in the Canberra region, including vegetation of the Ainslie—Majura reserve, as well as Jervis Bay, and has carried out studies of various fauna species, including the striped legless lizard, and the morabine grasshopper. .

Frank looked at the vegetation types that are to be found in the ACT as part of his PhD studies, and he will be talking to us on this subject.

Tallaganda NP and State forest walk- Sunday Mar 22nd

Brochure available from the Queanbeyan Visitor Information Centre.

Please note the changed date from our usual arrangement

Tallaganda NP and State Forest straddles the Great Dividing Range beginning about 10km south of the Bungendore/Braidwood Road, and extends down the range for a distance of nearly 50kms. There is a great variety of vegetation, ranging from dry, open woodland, forests of scribbly gum, ash and peppermint to forests of brown barrel, messmate and ribbon gum.

This area is also host to a variety of native animals including birds, with the rare olive whistler and lyrebirds possible sightings.

Tallaganda is a wet forest and is generally wetter, cooler and more humid than Canberra in summer. This trip follows up the excellent speech by Dave Rowell in February and our focus will be on invertebrates this time.

From Queanbeyan go along Bungendore Road, right to Captains Flat. We will meet in Captains flat at 10:30am or carpool (ring Benj on 0400 250 230, or at work on 6272 3192). Bring your lunch, sunscreen and wet weather gear/jumpers.

Benj

NOTE NEW 7:30 PM START

FEBRUARY MEETING: SPIDERS WITH PROF. DAVE ROWELL

We welcomed 35 people to Dave Rowell's talk on spiders and they, including four newcomers, were not disappointed. He prefaced his presentation with responses to some FAQs before bringing out fascinating science, ecology, genetics and aspects of his intriguing studies in Tallaganda's temperate sclerophyll forest.

The ubiquitous Daddy-long-legs spiders that share our homes have the reputation of being the most venomous of spiders but lack the mouthparts capable of inflicting bites on people.

No toxicity studies have been recorded to support this perception and the "dizzy-when-disturbed". Daddy-long-legs include red-backs, bees and slaters in their diets.

Bacteria transferred from the environment may be responsible for necroses that follow some White-tailed Spiders' bites. There are very few deaths from Red-backed Spiders' bites. Victims need to be monitored for sweating over the bite and should diarrhoea develop hospitalization is essential. Funnel-webs' bites might kill. First aid involves immobilization and pressure at the site before hospitalisation. There are 42 known Funnel-web species in Australia. The South American Wandering Spider is 2/3 times more venomous than Funnel-webs. (Death is more likely from lightning strikes than being poisoned by an animal. Bathtub mishaps accounted for 44 deaths in 2006 and 18,000 died from the effects of smoking).

Spiders are interesting but "don't fool with them".

- Funnel-webs belong to a group called MYGALOMORPHS which includes trapdoor spiders, American tarantulas and Australian bird-eating spiders. There are no Funnel-webs in the Australian tropics.
- Understanding Tallaganda's Funnel-webs has lead to information about the areas past climate

since they don't move very far. For 50-70 million years it's been a geologically stable area and was ice-free during the Pleistocene. Tallaganda's Funnel-webs look the same but their DNA types vary.

- Numerous Funnel-web characteristics remain from 450 million years ago leading to their being labeled 'primitive'.
- Niches exist for investigating the plant species of the 5 areas of Tallaganda that provide habitat for the spiders to see how plant communities have altered over time and are changing.
- Each of the 5 different DNA types amongst Tallaganda's Funnel-webs shares specific habitats with Springtails (*Collembola* sp), Millipede-like, Terrestrial flatworms, Velvet-worms (*Onychophorans*) These communities exist in 5 different drainage systems and are separated by high ridges. Inferences can be made about climate change in the past as there have been environmental and tree-population changes.
- Long burrows allow some Funnel-webs to be adapted to living in deserts but the majority inhabit the wetter parts of Australia and/or become active only after rain. Some take-over Cicada burrows.
- With each moult Funnel-webs grow in size. Funnel-web females can live up to 30 years. They eat males who may only live 3 years. Perhaps females mate only once?
- Estimated populations in Tallaganda are between 15-20 per square metre. They're one of the countless invertebrates whose behaviour includes burrowing into dead or decaying trees.
- Book-lungs, four structures shaped like the pages of a book, maximize the exchange of gases and enable the spiders' lungs to be constantly moist.

Rosemary Blemings

2009 is International Year of Astronomy

The International Year of Astronomy, (IYA2009), will be a year-long, worldwide, public celebration of astronomy, held to mark the 400th anniversary of Galileo turning a telescope to the sky. The Year has been endorsed by UNESCO.

IYA2009 is being coordinated by the International Astronomical Union, the international body that represents the world's professional astronomers. However, almost all activities will be organised at the level of a country or region. Australia is one of the 63 countries signed up to participate.

Each country has a "national node" to coordinate that country's activities. In Australia it is the Anglo-Australian Observatory and CSIRO Australia Telescope National Facility (their headquarters are co-located in Sydney). An advisory group has been convened to help guide the development of activities for the year.

IYA2009 is a chance to shine a spotlight on astronomy — a chance for those who love astronomy to communicate their excitement to the rest of the population.

IYA in Australia has four goals:

(Continued on page 3)

CONSERVATION NEWS

FROM THE CONSERVATION COUNCIL ACT REGION.

The Conservation Council's Biodiversity Working Group has been meeting, usually monthly, to discuss and devise action-strategies for regional biodiversity issues for several years. Members are drawn and bring expertise from COG, NPA, FOG, FNAC, ANPS, Park-care Groups, The Limestone Plains Group, the ACT's three Catchment Groups and individuals interested in conservation issues.

There was a Strategic Meeting in late January participants' first such meeting with the CC's new Executive Director, John Hibberd.

The Tidbinbilla Discussion Paper – New Plan of Management was presented by staff from the Territory & Municipal Services' Environment and Recreation section. Submissions are due by 26.02.09 following Public Workshops.

The Strategic outlook for 2009 included discussion and action over that time on a huge range of topics emphasizing the significance of the ACT's environment and the complexity of threats to natural areas, wildlife and specific places in our region:

- Grasslands including the Commissioner for the Environment's Report, the Grassland earless dragon and Broadacre use of grasslands.
- Kangaroo management plan.
- Molonglo Valley: the river corridor, *Aprasia* habitat, East Molonglo's remnant trees, Conservation leases and the related Land Management Agreements.
- Native Vegetation Conservation mechanisms and Connectivity.
- Urban Reserves. Broader connectivity.

- Eucalypts in urban areas and Urban Forest review.
- Fire Management Plan including sub-region management
- Community engagement.
- The Environment Protection and Biodiversity Conservation Act and the Act under review.
- Places such as Throsby, Kinlyside and their new suburbs. East Basin/Jerrabomberra Wetlands

Watching briefs:

Goorooyarroo, Cat Containment Policy, Threatened Flora and fauna, The Kosciuszko to Coast project, The Australian National Botanic Gardens' Review, Alpine Vegetation research, STEP, The Cotter Dam and Capacity Building in Member groups/Lobbying.

Additionally COG has written to the ACT Minister for the Environment about concerns that significant habitat trees for Superb Parrots were felled in Harrison, Gungahlin to make way for sports fields. Habitat pressures for this species in Northern ACT including Belconnen and central Molonglo were also of concern.

Another excellent and detailed letter from NPA and COG expresses grave concerns about the management of the ACT's parks and reserves under such headings as lack of funding and insufficient resources for appropriate staffing, dogs in Nature Parks, timber removed for firewood, mountain bike and trail-bike activity, weeds management, feral animals (in particular rabbits) and rubbish dumping.

Recommendations reiterate our on-going alarm at the lack of adequate resources for the basic maintenance of the ACT's natural estate and members' disquiet about these issues.

Rosemary Blemings, February 2009.

(Continued from page 2)

- Raise awareness of Australia's contributions, strengths and role in astronomy.
- Use astronomy to encourage people, particularly young people, to engage with the natural world and deepen their understanding of it through education.
- Promote understanding of how science is done, using astronomy as an appealing example.
- Promote appreciation of the scientific and technological skills that enable discovery in astronomy and are themselves driven by its challenges.

More information about IYA can be found at www.astronomy2009.org.au, from which the above is obtained. During the year we hope to have a meeting that focuses on matters astronomical, and an outing to look at the heavens. I will also be looking out for any local events to celebrate IYA2009 (I have already found many for NSW). I will provide details of these in the Field Natter if I learn of them in time or put them in NATChat. If any member would like to be added to our chat group please contact me at tlawson@home.com.au.

Incidentally, if you want to learn more about matters astronomical there is a Canberra Astronomical Society that meets at the Mount Stromlo Observatory on the Third Thursday of the month - see <http://msowww.anu.edu.au/cas/>. Vince Ford, who used to be a prominent member of the Field Nats, is giving a talk on '40 years of astronomical change'.

Tony Lawson

P.S There will be a number of local events as part of the International Year of Astronomy. You can find details of these events on the Canberra Astronomical Society website at: <http://msowww.anu.edu.au/cas/IYA2009.html>.

Invitation to STEP Tree Planting Ceremony

In 2002 some members of the Canberra Branch of the Australian Native Plants Society and Friends of Grasslands had the idea of creating a regional botanic garden focussing on the vegetation of the Southern Tablelands - STEP. The Field Nats have been a long time supporter too.

It has taken a lot of work by a dedicated group to bring this idea to fruition. STEP has recently received the go ahead from the ACT Government to display and provide educational programs for some key ecosystems for the Southern Tablelands in a section of the Canberra International Arboretum and Gardens. The first plantings of overstorey trees will be on 15 March. This will be followed by understorey plantings and ground cover plants in ecosystem groupings. STEP's long-term objective is to create a regional botanic garden, education and ecosystem recovery centre, then to manage and enhance it. The eventual centre will hopefully become a major centre of interest in the region, an institution of excellence, and a tourism and recreation site. Further details about STEP can be found on its' website: www.step.asn.au/.

In the first instance STEP has been allocated one of the 100 Blocks in the Arboretum, but eventually it hopes to get 2 more adjacent blocks to manage, as well as some adjoining grassy woodland in the Molonglo sub-division. We are also having discussions about proposed plantings of Australian natives adjoining the Prior Arboretum on the lakeside of Lady Denman Drive.

You are invited to attend a ceremony to mark the planting of the first trees in the Southern Tablelands Ecosystems Park (STEP) at 10:00 am on Sunday 15th March in the Canberra International Arboretum and Gardens (CIAG). The tree planting is part of the first *Festival of the Forests* to be held at the same venue. There will also be an opportunity for groups to exhibit at the Festival, which has the theme of promoting sustainability, conservation and biodiversity.

We also hope that you will want to participate in STEP. There will be lots to do, starting with the planting of over 500 overstorey trees this autumn. There will be subsequent plantings of understorey vegetation and groundcovers. The block(s) will have to be maintained, so there will be weeding and mulching and watering. There will also be interpretative signage required. By participating you should get to learn a lot more about the region's vegetation, and of course we hope that the local fauna will enjoy the habitats that we will be creating.

If you would like to attend the tree planting ceremony, please advise me by please advise ASAP (we need to know how many buses are needed to take participants to the Arboretum - there will be no car access). My contact details are tlawson@homemail.com.au or 02 6161 9430. If you would like to help in the project also please contact me.

Tony Lawson

TASSIE DEVIL STILL IN STRIFE

The Tasmanian devil population has declined by more than 60 per cent in the last 10 years as a direct result of the Devil Facial Tumour Disease (DFTD). On current information, it's expected to drop a further 70 per cent over the next decade.

The Tasmanian devil has just been listed as Endangered on the 2008 IUCN Red List – the benchmark for the global conservation status of plant and animal species.

The Red List of the International Union for the Conservation of Nature and Natural Resources (IUCN) is widely considered the most authoritative and objective system for classifying species in terms of their risk of extinction.

Seven Tasmanian devils caught during a trapping trip near Guildford (35kms north west of Cradle Mountain) have tested positive to DFTD, the furthest west in the State recorded so far.

DFTD is a contagious cancer that spreads between individuals through biting. Small lumps in and around the mouth develop

(Continued on page 5)

Cavorting Butterflies



The attached photos were taken in the Lawson backyard by Charmian.

To me it looks like 2 different species - size, colour and shape are different. But the black & white one seemed fascinated by the bigger whitish one.

Are the species the same? If not why were they 'cavorting together'? And what species are they?

One benefit of their behaviour was that they were in the same spot for quite some time rather than fluttering all over the place like most of the butterflies that we see in our garden.

See the back page for the answers.

Tony Lawson

(Continued from page 4)

into large tumours on the face and neck. Once the cancer becomes visible, death invariably follows, usually within months. The foreign cells of the tumour aren't rejected by the individual's immune system because of a lack of genetic diversity among Tasmanian devils.

In December another 30 Tasmanian devils went to mainland zoos as part of an insurance population aspect of the Program.

The insurance strategy, developed with the Australasian Regional Association of Zoological Parks and Aquaria, indicates that we may need to manage around 1,500 devils over a period of up to 25-50 years if we hope to preserve the genetic diversity of the species. For this reason, the Save the Tasmanian Devil Program will be further exploring and testing the concept of large, free-range enclosures within Tasmania over the next year.

Chris Bunn

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 02 6272 3192
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Website: www.geocities.com/fieldnaturalist/index.html

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

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Monthly meeting venue: Division of Botany and Zoology, Building 116, Daley Rd, Australian National University. Park (occasionally the adjacent building 44). Meetings start at 7:30 pm and are followed by refreshments.

Cavorting Butterflies (from page 5)

Tony sent the photos to the COG chatline and received these replies:

Think your impressions were spot on Tony. They are Orchard/Citrus Butterflies, *Papilio aegaeus*. The whitish one is the female, checking out suitable food plants to lay her eggs on. The dark one is the male, wanting some input into those eggs. Females are typically a bit larger than the males. (Ian Fraser)

These are Orchard Swallowtails *Papilio aegaeus* - a male (the smaller, darker one) and a female. I'd say you were watching courtship behaviour. The female may well have been trying to lay eggs, what was the plant she was fluttering around? They lay on a wide variety of plants in the family Rutaceae including garden *Citrus*. They were on a deciduous azalea - not a known plant to lay eggs on. (Steve Holliday)

(For further information see Michael Braby's book "The complete field guide to Butterflies of Australia" pages 118-119)

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: