

MAY 2010  
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OBJECT: To foster an interest in nature

**MEETING THURSDAY May 6 2010**  
**7:30 pm Australian National University**  
Meeting details back page



# Biodiversity & Conservation in the ACT Region

We plan to have a number of introductory speakers and then open the night for discussion. Four main areas will be explored:

- An overview of biodiversity
- Biodiversity and conservation in the ACT
- Stimulating developments in conservation
- Our role in biodiversity and conservation

Also at the meeting will be a presentation to our student winner Kristen Walker

## EDITORIAL

For the next two months I will be the temporary editor for the newsletter. So apologies for the lesser quality from the high standard set by Margaret.

First of all a major grumble. You may have seen recently advertised in the *Canberra Times* a new release of home sites in Watson adjacent to Mt Majura Nature reserve. This is after a prolonged fight by community groups failed. The site takes in the deserted Heritage village, but also involves removal of a patch of grassy woodland including a number of mature eucalypts. Community groups have negotiated a number of concessions including a 24-hour cat curfew, a fence capable of restraining dogs and funding for interpretive displays. But none of this explains why a development on the edge of the city pushing into bush has been approved when more degraded land closer to the city remains untouched. (The reason I am told is that it improves financial gains for the government in the future.)

A speculation about Rainbow lorikeets. Sitting and watching these birds on the coast I wondered how some animals can adapt to their 'non-native' environment and others struggle. The generic name for the rainbow lorikeet *Trichoglossus* refers to the brush-like papillae at the tip of the tongue adapted for feeding on flowers. However these birds have adapted to have a wide range of food items. For example in Perth they feed on pollen and nectar, foliage, fruit, the seeds of pines *Pinus* spp. and sheoaks They also glean invertebrates from the leaves and twigs. When tree hollows are not available they also commonly nest on platforms formed by the fronds of date and cotton palms, where they sometimes excavate a Nest. Rainbow lorikeets have been observed chasing common mynahs and pied currawongs from potential nest sites.

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# Outing: Mt Jerrabomberra Bushland Reserve

## Sunday 9th May

We don't often get out East so this month we will be visiting Mt Jerrabomberra and also so we can become better aware of this site as it may be affected by development in the future. From what I recall it is red stringybark and mannifera forest. There is a very good list of birds recorded from the site including the following Uncommon Species (Provided by Maurits Zwankuizen): Common Bronzewing, Wedge-tailed Eagle, Gang-gang Cockatoo, White-throated Needletail, Speckled Warbler, White-throated Gerygone, Yellow Thornbill, White-eared Honeyeater, Fuscous Honeyeater, Brown-headed Honeyeater, White-naped Honeyeater, Eastern Spinebill, Scarlet Robin, Eastern Yellow Robin, Varied Sittella, Rufous Whistler, Satin Flycatcher (on passage), Grey Butcherbird, Mistletoebird. The following birds have also been recorded from there: Chestnut-rumped Heathwren and Spotted Quail-thrush being found there. I have seen quail-thrush only a kilometre or two away by the Qnbyn-Cooma road. Reptile Species (1): Eastern Bearded Dragon. **Go up Jerrabomberra Hill Rd meeting at 10:30 am Sunday 9<sup>th</sup> May.** My new mobile is 0402 307 695. Benj

### **NPA Symposium : National Parks - can they take the heat?**

**Friday 7 May 2010, 1pm - 5pm    Saturday 8 May 2010, 9am - 5pm**

**Dinner Friday night**

**Discovery Centre, CSIRO, Clunies Ross Street, ACTON**

**Contact: Kevin McCue: [kmccue@grapevine.com.au](mailto:kmccue@grapevine.com.au); phone: 02 6251 1291 .**

**Online registration and further details, including program and speakers, available at [www.npaact.org.au](http://www.npaact.org.au) .**

This is the Year of Biodiversity yet neither the Federal nor State Governments have taken convincing action to protect Australia's biodiversity. Symposium speakers will produce their latest research findings on different aspects of the environment, enabling recommendations to be made. A good attendance indicates people care about the environment and are concerned.

***You can come for one or both days . Registration fees are low to encourage community and NPA member participation.***

***Please register NOW on [www.npaact.org.au](http://www.npaact.org.au)***

#### **SOME DATES TO REMEMBER**

22nd May *World biodiversity day* Unfortunately Australia has not advertised any activity at this stage (The UNEP only mentions activities in Germany, Guinea-Bissau and the UK

June 5 *World Environment Day Many species, one planet, one future*

A worldwide celebration of positive action for the environment. Initiated by the United Nations the aim is to stimulate worldwide awareness of the environment and encourage action. On June 4 the *Canberra Times* will be publishing a special feature about activities that are contributing to a greener Canberra.

**One action we can all do on that day is to plant a shrub or tree.**

Jervis Bay World Enviro Fair 2010 -Jervis Bay will unite the celebrations of World Environment Day and World Ocean Day focusing on the links with all species on our planet and the changes we can make to care and nurture these connections. Jervis Bay World Enviro Fest will be held on Saturday 5 June 2010 at the Lady Denman Heritage Complex Huskisson from 9-am until 2pm.

# The Platypus -studying its health and habitat

The platypus, *Ornithorhynchus anatinus* is a monotreme; an egg laying mammal with one common opening for the reproductive, urinary and digestive systems and with abdominal testes in the male. They are distributed throughout the streams and lakes of eastern Australia, from Cooktown to Tasmania. Platypuses rely on relatively undisturbed stream banks to support their resting and nesting burrows and have home ranges of one to seven kilometres.

This unique creature remains surprisingly understudied with a lack of information on its abundance and health status. Although assumed to be common across their range, numbers are declining in some areas with no sightings reported in the last few decades. Many infectious agents and parasites are recorded, but of particular concern are the diseases caused by the fungus *Mucor amphibiorum* (mucromycosis) and the bacterium *Leptospira* (Leptospirosis). Other major threats to the platypus include predation by introduced animals and other misadventure, starvation/exposure of dispersing juveniles, droughts and human impacts on their environment.

Dr Joanne Connolly and others from Charles Sturt University, are researching the platypus in the Murrumbidgee catchment. The project will be the first comprehensive study of the platypus populations in this catchment. The aim is to compare the health of free-living platypuses from agricultural and undisturbed environments determining the extent to which detrimental changes in their environment impact on their health status.

Agricultural sites between Yass and Narrandera and undisturbed sites in the upper Murrumbidgee catchment including Kosciusko National Park are being surveyed. The platypuses are caught using monitored nets and are examined for external parasites and signs of injury or disease. Individuals are weighed, measured, condition scored by tail volume, sexed and aged by spur. Blood samples are collected as part of the health assessment (including blood smears, haematology, biochemistry and leptospira serology). Faecal samples and ticks are collected opportunistically. Each animal is identified by the aseptic insertion of a microchip prior to release. Habitat condition is assessed including riparian condition, stream characteristics, macro-invertebrates, water quality and land use.

The anticipated outcome will be an improved understanding of the impact of habitat on platypus health and abundance. This information will help in the better management of wild platypus populations, such as recommendations for catchment management and farm practices.

From "Tails" the Charles Sturt Veterinary newsletter.



*Mucor amphibiorum*, a fungus isolated from frogs and toads, is being reported from free-living platypus, from rivers in northern Tasmania. This fungus is responsible for a severe ulcerative skin in platypuses.

## Mt Gillamatong

Mount Gillamatong  
is a hill, am I wrong?  
though it rises quite steep 'bove the plains

and yet it's a mountain,  
a remnant, a fountain  
of forest and ferns midst the cattle and grains.

Where man placed himself  
and from dirt sowed his wealth,  
there is one type of green, bless the rains,

but here jades, olives, blues  
frame the 360 views  
I like bouquets for a great wood's remains.

This is an Eden  
where I bask in freedom,  
where I feel that there's green in my veins,

but wallabies scatter,  
the birds cease their chatter -  
and I crawl back to life on the plains.

Maurits Zwankhuizen

## Committee members

Please make a note in your diaries. We meet every odd month on the 3rd Wednesday at 7:30 pm at the Conservation Council Offices. The next meeting will be on **Wednesday 19 May at 7:30 pm.**

Editorial (Continued from page 1)

(Status and impact of the rainbow lorikeet in south west Australia) H Moluccanus 2005 - agric.wa.gov.au) Wow—the secret to survival - eat a wide variety of foods and be aggressive.

Maybe of little concern to people living inland, but recent dolphin deaths in Australia are becoming a worry. Last year in Perth six dolphins died (out of a population of 25). Four were found to have been infected with ‘opportunistic’ pathogens and two had severe skin lesions, indications the immune systems of the dolphins were suppressed. Very high levels of dieldrin in the dolphins have been detected. Two bottlenose dolphins this year in the Port River near Adelaide were reported with having lost most of the skin on the upper parts of their sleek bodies.

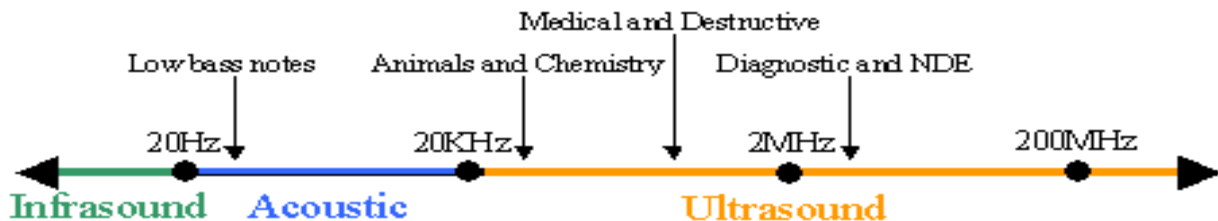
Remember on June 5 – World Environment Day: to plant a tree or shrub.

Chris Bunn

# INFRASOUND

*This article came about from a talk I attended and a query from Tony Lawson. Tony’s question was how do birds such as waterfowl know that water is present in places such as central Australia. The answer from the presenter was that we don’t know but we consider birds react to infrasound and that older birds have memories of where they have been previously* Chris Bunn

**Infrasound** is sound that is lower in frequency than 20 Hz (Hertz) or cycles per second, the normal limit of human hearing. The ear is the primary organ for sensing infrasound, but at higher levels it is possible to feel infrasound vibrations in various parts of the body.



Infrasound sometimes results naturally from severe weather, surf, avalanches, earthquakes, volcanoes, waterfalls, calving of icebergs, aurora, lightning and upper-atmospheric lightning. Infrasound can also be generated by man-made processes such as sonic booms and explosions (both chemical and nuclear), by machinery such as diesel engines and older designs of down tower wind turbines.

Whales, elephants, hippopotamuses, rhinos, giraffes, okapi, and alligators are known to use infrasound to communicate over distances—up to hundreds of miles in the case of whales. It has also been suggested that birds use naturally generated infrasound, from sources such as turbulent airflow over mountain ranges, as a navigational aid. Elephants, in particular, produce infrasound waves that travel through solid ground and are sensed by other herds using their feet, although they may be separated by hundreds of kilometres.

Animals have been known to perceive the infrasonic waves going through the earth by natural disasters and can use these as an early warning. A recent example of this is the 2004 tsunami. Animals were reported to flee the area before the actual tsunami hit the shores of Asia. It is not known for sure if this is the exact reason, as some have suggested that it was the influence of electromagnetic waves, and not of infrasonic waves, that prompted these animals to flee.

Experiments suggest that low frequency sounds can cause people to have unusual experiences even though they cannot consciously detect infrasound. Some scientists have suggested that this level of sound may be present at some allegedly haunted sites and so cause people to have odd sensations that they may attribute to a ghost. One reason being that the human eye resonates at the frequency of 18Hz which can cause optical illusions.

(From Infrasound. (2010, April). In *Wikipedia, The Free Encyclopedia*. <http://en.wikipedia.org/w/index.php?title=Infrasound&oldid=358901055>)

# Learning more about fungi

from Tony Lawson

Fungi mostly live under the ground. But they respond to rain and put out their fruiting bodies - the mushrooms, toadstools, puffballs and truffles that we can see above ground. After the decent late summer rains, this year there were plenty of varieties to be seen - for example at our Kioloa outing. The problem is being able to identify them.

Shown is one of the more colourful stinkhorns seen by a toilet block near Kioloa:

The Stinkhorns are a distinctive group having bizarre forms accompanied by strong, unpleasant odours. The fruiting bodies develop in egg-like sacs that are ruptured by the spore-bearing receptacle as it rapidly expands at maturity. The spore-bearing gleba is a foul-smelling brown slime that is eagerly consumed by blowflies and other insects. Spores are distributed after passing through the insects.



*Clathrus archeri* [= *Anthurus archeri*]

Fruit bodies to 160 mm measured across the 4 to 8 expanded arms that radiate from a short hollow basal tube. It is most common in alpine meadows and woodland but also grows on wood mulch, where fruit bodies grow larger, with more arms, some of which may have divided tips. The malodorous gleba is borne on the upper surfaces of the arms. Flies feed on the spore-bearing gleba

Autumn is usually the best time to see the fruiting bodies of fungi. It is also the time to learn more about them. Heino Lepp is again putting on a 10-week course at the ANBG. It starts on Thursday 6 May at 2:00 pm (with a repeat of the Thursday talk on the following Sunday at the same time), and goes on to Thursday 8 July. The talks are given in the ANBG theatrette.

Further details of the contents of each session are available at <http://www.friendsanbg.org.au/calendar.html>. You don't have to book. Just turn up. There will also be an outing and a microscopy session (needed to distinguish many types of fungi).

**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 6272 3192 W mobile:0402307695

**Secretary:** Tony Lawson, tel 02 6161 9430 fieldnaturalist@yahoo.com.au

**Website:** www.fieldnatscanberra.com

**Newsletter editor:** Chris Bunn <chris\_b@webone.com.au> Tel 02 6241 2968. All 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.

**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: