

Field Natter

Newsletter of Field Naturalists Club of Canberra



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

A natural history of Africa's largest alpine area - in Ethiopia's Bale Mountains

By Dr Roger Farrow Tilembeya Consulting via Queanbeyan

MEETING THURSDAY November 1

8:00 pm Australian National University Meeting details back page

INSIDE THIS ISSUE:

Outings	2
Molonglo Valley development plans	3
Mulligan's Flat outing report	3
African safari	4
Ancient plant has hot, stinky sex	5

The **Bale Mountains** (also known as the **Urgoma Mountains**) are a range of mountains in the Oromia Region of southeast Ethiopia, south of the Awash River. They include Tullu Demtu, the second-highest mountain in Ethiopia (4377 meters), and Mount Batu (4307 meters). The Bale National Park covers 2,200 square kilometers of these mountains.



Ethiopia's Bale Mountains

The Bale Mountains are home to many of Ethiopia's endemic animals, notably the Ethiopian Wolf, (*Canis simensis*). The park also contains the Hareenna Forest, situated to the south of the mountains which is a largely unexplored area thought to contain many undiscovered species of reptile as well as lion, leopard and various types of antelope.

From wikipedia

125



2pm Sunday November 11 City Walk

Join the Walk this year in asking the next Government to lift the limitations on our future. Nuclear, dangerous climate change, or renewable energy now. It's our choice. Vote with your feet and Walk Against Warming.

www.consact.org.au
(Conservation Council ACT)



OUTINGS

Field trip- Hall hill- Sunday 4th November 2pm

A small, but great site and one of only a few sites in the ACT that is flowering well this year. I checked it out, and although it's prime flowering was a month ago with leopard orchids (*Diuris pardina*) and yam daisies (*Microseris lanceolata*) already finished, there hopefully will still be many flowers. Cute, white flowering *Daphne* heaths, yellow flowering urn heaths, billy button daisies, and scaly buttons, heaps of amazing trigger plants, and still some purple *Indigofera*, *Hoveas*, *Glycine* and *Hardenbergias*. Flowers were as far as the eye could see and hopefully the site will still be like that. Birds I saw included: sacred kingfishers; dollar birds; collared sparrowhawk; noisy friarbird, and even a white-throated tree creeper on a nest. The only major problem is that you have to scramble over a high gate, so access isn't easy. Meet at the corner of Victoria St (the main street in Hall) and Campbell St. The site is only small but the walk should be about 2 hours. Bring good walking shoes, binos, camera. For further information, contact **Benj Whitworth** on 62544 556.

Australia Day Long Weekend Kangaroo Valley

Why not spend the Australia Day long weekend in Kangaroo Valley? This beautiful valley, surrounded by steep escarpments, is not much more than a 2 hour drive from Canberra. Less than 5km from town lies the property of Chakola (Aboriginal word for Lyrebird), an 80-acre wildlife refuge managed by Conservation Volunteers Australia. You will be struck by the peace and quiet of this special nature retreat. Chakola is home to a wide range of wildlife including the endangered brush-tailed rock wallaby, bats, wombats, possums and a host of native birds. A survey in 1999 identified seven different vegetation types and there are some stunning views to be seen. There are bushwalks around the property but if anyone knows the Kangaroo Valley area and would like to lead a walk please let Paula know.

The 15 small rustic cabins are basic but comfortable and range in size from single, twin share and double to 4-share dormitory-style rooms. Amenity blocks with shower and toilets are a short stroll from the cabins and there's a commercial kitchen and dining room that can cater for up to 40 guests. Accommodation will cost \$60 per person- that's for two nights, Saturday 26th and Sunday 27th January. **We need at least ten people to pay so that we can confirm the booking so, as an incentive, first choice of room will be given to those who pay first. Please bring your \$60 to the November meeting!**

For further details, please talk to Paula at the November meeting or call her on 0428 654 044. Those who pay will receive further details in January. Car-pooling will be encouraged.

Mulligans Flat Nature Reserve — October outing report

Although it had been a warm day, the wind had picked up and the temperature had dropped considerably by the time we met in the carpark. There was plenty to see as we waited for latecomers to arrive. A Superb Parrot sat in the open grass on the other side of the fence. It was chased off by a couple of Noisy Miners and we then watched three young Miners huddled on a branch together. We also took the opportunity to listen to recordings of the calls of the seven species of frog that had been heard at Mulligan's Flat during the 2006 Frogwatch Survey.

As we walked into the reserve, we saw more birds making the most of the fading light, including Galahs and White-winged Choughs. A carpet of Creamy Candles (*Stackhousia monogyna*) was another reason to pause along the way.

We found ourselves wading through deep bulldust which apparently had been caused by the large trucks which were bringing logs into the reserve as part of an experiment. We could see one positive side to the dust though – those bringing up the rear spotted some interesting tracks and pondered over what could have made them. In the fading light, Christian spotted the likely culprits - two echidna. We noted that one appeared much larger than the other as they ran for cover behind a large log. We discussed what they might be up to! As usual, there were countless roos all around us - many of which had pouch young.

By the time we arrived at the first dam, we could already hear four species of frog calling. We identified them as *Crinia parainsignifera* (Plains Froglet), *Crinia signifera* (Common Eastern Froglet), *Limnodynastes tasmaniensis* (Spotted Grass Frog) and *Litoria peronii* (Peron's Tree Frog). Like last year, the Plains Froglet was the most numerous species that we heard. We moved on to a second dam and heard the same species minus the Peron's Tree Frog. Although the action was hotting up, as we approached the best time for frog calls, people were starting to feel the cold and we decided to call it a night. As we returned to the car park, we hoped that the current residents at Mulligan's Flat wouldn't be too affected by their new neighbours – the new suburb of Forde is disturbingly close to this precious reserve.

Paula Banks



Echidna



MOLONGLO VALLEY DEVELOPMENT PLANS

The National Capital Authority has published *National Capital Plan Draft Amendment 63 - Molonglo and North Weston* to enable urban development to occur within the Molonglo Valley. The ACT Planning and Land Authority has published *Draft Variation to the Territory Plan No. 281* and a *Preliminary Assessment* to change the non-urban land use policies applying to those same areas. Written comments on the drafts in relation to the plans for the valley are invited by 23rd and 26th November respectively.

FNAC members and colleagues in COG, FOG, ANPS, the Herpetologists and the public have written to MLAs in such large numbers that an NCA staffer has remarked they'd "**received unprecedented opposition**" to development plans for the Central Molonglo Valley (South and West of Hawker, Higgins & Holt).

Congratulations on the effect you have caused!!

The Conservation Council is embarking on a campaign to prevent "the clearing of hundreds of hectares of critically endangered Yellow Box Red Gum Grassy Woodland for the development of Central Molonglo" and "We will not allow this development to destroy the vital corridors which provide connectivity for migrating birds and other animals...".

We can join in this by sending letters saying simply **NO CENTRAL MOLONGLO DEVELOPMENT** and **NO NEW LAKE ON THE MOLONGLO RIVER**

Submitted by Rosemary Blemings

AFRICAN SAFARI 2007 by Kay Hahne, September 2007

In Kruger we went on open-air drives, twice in the black of night;
On the first we found a white rhino, on the second we got a big fright.
A matriarch elephant on the road, faced us and stood her ground,
The driver stopped – they eyed each other and we didn't make a sound.

Her ears spread wide, swaying to and fro, she trumpeted and charged ahead.
The driver honked, yelled and backed up some – my word, I thought we were dead!
Our hearts were thumping, our mouths went dry, the driver pulled out his gun;
We came to see birds and animals, but that was too close for fun!

We're enjoying the tents at Punda Maria; they're spacious, comfy and new;
With a sturdy frame, canvas top and sides, and a veranda with a view.
Outside is the sink, cupboards and fridge and space for a washing line;
Handy barbeques, a Civet at night, we could stay for a week just fine.

Now we're at the Border Crossing, waiting in a huge long queue,
Behind hundreds of black people, not one busload but two.
But our papers are in order; we got our visas back in Canberra,
Now we're travelling in Africa, into Zimbabwe from Botswana.

The countryside is in a drought, it's at the end of winter;
It's brown and dry and dusty, and not enough grain for flour.
No bread is on the empty shelves, no drinks, not even beer;
We take our petrol with us, the pumps are dry or way too dear.

But Pelican Safaris know the ropes, and where to go;
We're off to Hwange National Park after staying in Bulawayo.
The Main Camp is nearly empty, except for birds, that is:
Myer's Parrots, Crimson Shrikes, Thrushes and Village Weavers.

Not to mention Banded Mongooses that flop on our front doorsteps;
They nose around in little groups and make you wish they were your pets.
The Baboons can be a nuisance, the staff frightened them away;
We were warned if we heard gunshots not to be alarmed or in dismay.

In the mornings it's off in the Kombi bus to Platform No. One;
There is a passing parade of animals in the heat of the African sun.
The water is low and thick with mud where the elephants have a wallow;
Then Giraffe and Zebra and Antelope try to take a dainty swallow.

An Elephant creche, heads together, what are they planing to do next?
If I were an older sister or aunt I'd want a lie-down and a Bex,
Juveniles like to show their oats with some push and shove and grumble;
Now we know where the saying comes from - "let's go and have a rumble".

We've seen Sable and Roan, Impala, tiny Duiker and Kudu,
Cape Buffalo by the hundreds, Hyenas and Wild Dogs too.
Plus the very best at sunset time, a wonderful surprise,
A beautiful female Leopard, with watchful golden eyes.

She lay so still, our camera's clicked – at last a dream come true.
We've been three times to Africa, before we got this view.
She slowly walked to a different spot between an ant-hill and a tree,
And lay down, unconcerned by us, but yet so wild and free.

Allan has 3500 birds, but the Boulder Chat is new;
Cheryl had a "power surge" when the Leopard we did view.
Neville and Horst are photographing as if in a competition;
Lesley's busy sketching, Kay's taking notes for a composition.

At last we are at Chobe, on an excursion on the river
Full of Hippos and Nile Crocodiles, both could make you shiver.
Spoonbills, Herons, Egrets – pink, purple, slaty, black and white,
Kingfishers and Bee-eaters flashing brilliant colours in the light.

Funny, strange brown Hammerkops, yes, hammerhead is their name;
Beautiful African Jacanas, of "walking on water" fame;
Yellow-billed and Openbill Storks, each with a different look,
And Skimmers with their long lower bill, why it's just like in the book!

And lastly at Victoria Falls, one of the seven natural wonders,
It's high and wide and beautiful, it's misty and it thunders.
Our trip is sadly over, our companionship is drawing to a close,
But our memories will linger on – till the next time, I suppose!

Thanks to Mark and Jean of Pelican Safaris for a wonderful, adventurous,
productive trip....you are the best!! Horst and Kay Hahne



Mike Kneebone snapping an orchid on Gossan Hill on a recent fnac walk.

Photograph Maureen Bell



Maureen Bell snapped these rosellas who nested this year in ventilation holes on the western side of their house in Cook.



On the frog walk—see page 3

Ancient plant has hot, stinky sex

The evidence comes from an Australian cycad that uses a nasty odour not only to lure tiny insects into collecting pollen, but also to repel them into visiting potential mates.

"It takes your breath away," says Irene Terry from the University of Utah, Salt Lake City, US, of the smell of the palm-like cycad. "It's a harsh, overwhelming odour like nothing you ever smelled before."

Cycads predate flowering plants. They are thought to have appeared on earth at least 280 million years ago. They resemble palm trees – although they are not related – with a crown of large leaves.

Birds and bees

At the centre of the crown, perched above the trunk, stands a single, large male or female cone. To reproduce, pollen from male cones must reach the interior of female cones.

Australia is home to a species of cycad, called *Macrozamia lucida* which has cone scales that are too close together for pollen to be blown in by the wind.

Instead, in 2004, Terry and her colleagues showed that tiny flying insects called thrips carry the pollen from male to female cones. The thrips eat the male pollen and get covered in it. Occasionally they end up in female cones as well.

The key is a pungent odour emitted by the male cycad cones during the mating season.

Hot and smelly

For approximately four weeks a year, cycads go through a pollination period. During this time, male cones use energy stored within them to raise their temperature every morning. For four hours, their temperatures can rise by as much as 12 °C.

As they heat up, the odour increases. The tiny thrips desert the cones en



Macrozamia lucida. This photograph shows the female cones like small pine-apples at the base.

masse, returning only after the smell-fest has ended.

To see if the stench is what drives the thrips out of cycad cones, the researchers ran them through an odour maze. At one opening of a Y-shaped tube, they placed samples of smelly male cone scales, and at another an empty dish. The thrips entered the tube through the third arm and chose between the scales and the empty dish.

The insects' choice depended on the time of day. At midday, when the

scales were smelliest, the thrips avoided them. But early in the day and in the late afternoon, they appeared to be attracted by the smell.

Deadly attraction

The researchers found that the smells mostly came from a single chemical called beta-myrcene – a substance that is widely used in the cosmetic fragrance industry. Further experiment showed that low levels of beta-myrcene attract thrips, whereas high levels repel and even kill them.

Female cones smell similar to male cones – although they never reach the same pungent levels. The researchers think that by driving pollen laden thrips out of male cones the cycads fool them into crawling inside female cones. There, they pollinate the cycad eggs.

The whole cycle starts again the following day until the males wear out and the females are happily pollinated

She and her colleagues believe that the unique way in which the Australian cycad uses smells to repel and attract pollinators may represent the evolutionary transition between plants using smells to repel pests and others using smells to attract pollinators.

Journal reference: Science (vol 318 p 70)

Submitted by Dierk von Behrens



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:

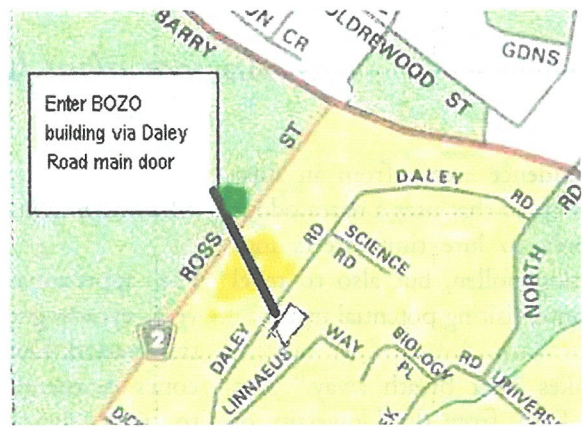
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Published and distributed by Philip Bell



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.

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Print Post Approved
PP 233744/00022

MEMBERSHIP APPLICATION OR RENEWAL

Family name: First name:

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

.....

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Work phone: Email address:

Subscription enclosed: \$.....(Single/Family \$20) Donation: \$.....

How did you hear about FNAC? Please circle: FRIEND? OTHER? Please specify:

