

Ballarat Naturalist



Trailing Goodenia
Goodenia lanata
(Club Logo)

Bats Around Ballarat

Speaker: Matt Gibson

Centre for Environmental Management, University of Ballarat

Matt has over 10 years experience dealing with bats, and in the last 2 years has been trapping them with the involvement of Landcare. His work has been with microbats, ones which are far less well-known to the general public compared with the publicity given to the large flying foxes.

Why are bats important?

- They form a large proportion of the mammal fauna; 8-10 species are abroad each night.
- They are insect predators, eating half their body weight each night.
- They can use habitat fragments and revegetated areas as they have the ability to fly over open paddocks to reach suitable areas.

They need foraging habitats with insects on the wing, water; summer roosts for day and night, and winter roosts where they become torpid. However they can become active in unseasonal warm periods.

Bats can be divided into two groups based on their flight characteristics:

- a) Those with short broad wings which fly through the understorey and are highly manoeuvrable
- b) Those with long narrow wings, capable of fast flight through the open spaces above vegetation.

As nocturnal creatures, bats need a method of navigating around obstacles, and use echolocation to do this. The bats emit ultrasonic pulses of sound of between 30-70-kHz which is inaudible to the human ear - we can hear up to 15kHz. Different species of bats use different frequencies, so species can be distinguished on this basis. The pulses reflect off nearby surfaces including prey, enabling the bats to navigate and hunt for food.

Anabat detectors are used to record the bats' sounds and convert them into sounds audible to us. The nature of the sound pulses can be displayed on the computer with their shape indicating parameters such as duration and frequency. The Eastern Horseshoe Bat uses pulses of 60kHz, the Chocolate Wattle Bat 50kHz and the Lesser Long-eared Bat 40kHz or above.



How are surveys carried out? Early surveys simply involved shooting them! Now this is only used as a last resort if they cannot be caught. Principally harp traps are used, set along a flyway often near water. Bats hit the vertical strands of fishing line, fall into a bag and climb into the overhanging flaps where they are found and checked during the night and early morning. Peak activity for bats is at dusk and dawn. However this method may not catch high-flying bats. Other methods include spotlighting (but it's difficult to identify them), mist nets and trip lines. Typical measurements used when recording individuals include the length of the forearm, and weight.

Bats found locally include:

- Watted bats - Chocolate Watted Bat- remains active over winter; forearm 35mm.
Gould's Watted Bat.
- Forest Bats Large Forest Bat - weighs 7g
 Southern Forest Bat - 5g
 Little Forest Bat - 4g
- Eastern False Pipistrelle - weighs 22 gm, forearm 50mm
- Southern Myotis - feeds over water, catching tiny fish and surface insects.
- Freetail Bats such as the White-striped, which is audible at 11kHz; weighs 37g
- Long-eared Bats - Lesser Long-eared Bat widely distributed in Australia, able to roost in a wide variety of situations.
- Gould's Long-eared Bat is characteristic of wetter forests like the Otways.
- Common Bentwing Bat - typically roosts in caves, of which there is a limited quantity suitable for breeding.

Other survey methods may include radio tracking but this has its difficulties, and the fact that they're nocturnal doesn't help!

How can landowners assist?

- Protect remnant vegetation especially old trees.
- Revegetate cleared land.
- Provide artificial hollows; bat boxes have been trialled in the Organ Pipes National Park over 20 years.

Matt showed us illustrations of the bats listed above and many members of his audience were surprised at the small size of these creatures. If only we'd had a live specimen to look at! This writer has previously seen one of the microbats and has been amazed how wonderfully soft their fur-cover is, how they love meal-worms and have a body-size smaller than a mouse.

Carol Hall.

FNC Ballarat

Minutes of General Meeting

6 May 2005

The President welcomed 31 members and visitors

Apologies have been received from: Ken Hammond, Bob Curtain, Maureen Christie, Genny Binns, Helen Burgess, Margaret Martin, Anna Baulch, Val Hocking.

M: Elizabeth FitzPatrick

S: P. Billing

Minutes of previous meeting. Accepted

M: Ken McDonnell

S: Paul Norquay

Business Arising: Nil

Among Correspondence.

IN:

- Summary of Insurance Survey Responses (email)
- DSE Draft Fire Protection Plan for Ballarat Fire Region. Submissions due June 20 2005.
- State of Australia's Birds 2004 - Birds Australia report.

OUT:

- Amended information for Ballarat Recreation Guide.

That the correspondence be accepted: Moved: John Gregurke. Seconded: Pat Murphy.

Business Arising from correspondence:

- Committee to discuss Draft Fire Plan and make a submission if required. Elspeth Swan asked on behalf of DSE, for any lists of plants, birds etc. that the Department may not already have, and that people let the Dept. know if there are areas which need burning for wildfire prevention.

Reports

Treasurer's Report: Opening Balance -\$3819.22 Closing Balance -\$4050.86

Moved: Les Hanrahan Seconded:

- Les reported that he had cancelled the Fungimap cheque and would send another.

General Business

- Volunteer to write up excursion report for the Newsletter .
- Volunteer as lecture scribe for next month.

- Invitation to attend a meeting re Dereel Swamp at Dereel Hall on Wednesday May 18 3pm. Pat Murphy, Greg Binns and Carol Hall expressed interest.
- John Gregurke has booked Gold Bus for the Herbarium visit in July \$12 per head. Names needed by next meeting at the latest.
- Reminder about our *Discovering Ballarat's Bushland* books still available for sale.

Show and Tell

- John Williams : a Goat Moth pupa.

Field Reports

- On 6/5/05, C.Hall, J.Gregurke and P.Guay: 4 cygnets 2-3 weeks old near BGS boatshed.
- 2/4/05, Greg Binns: central Ballarat: waves of flocking Silvereyes moving through foliage: 50+ birds.
- Tony Johns: early April at Colignan, pair of Wedgetailed Eagles and Darters; at Waubra echidna scampering off grassy verge into long grass.
- W.White: Wedgetailed Eagle over Mt Callender, 2 Broilgas Dobson's Bay.
- Les Hanrahan: at Bungaree, a Wedgetailed Eagle, and Eastern Spinebill in garden.
- Paul Norquay: at Mt Egerton 2 pairs of Wedgetailed Eagles overhead.
- John Mildren: North Gardens, a pair of mating Black Ducks diving for a distance of 3-4 metres.
- Belinda Taylor: at Lake Hattah, dozen Regent Parrots, at Lake Tyrell Blue-Winged Parrots, at Echuca 16+ Black Kites at ploughed paddock.
- Frank Harrap: Koala in Mt. Helen garden in daylight disturbed by dog.
- John Gregurke: at Paul's Wetland, a pair Wood Duck with 9 ducklings hatched mid-April and on the steel rails above inflow drain 17 White-faced Herons perched.
- Claire Dalman: Report of a pair of Peregrine Falcons back at the Mechanics Institute, nesting in an architect-designed box!

Excursion arrangements: *Saturday! Tomorrow!* Visit Long Point Flora Reserve in morning, lunch at St George's Lake, Ken McDonnell to lead us through Lincoln Gully, Creswick Regional Park in afternoon.

Syllabus Item: Matt Gibson spoke on *Bats of the Ballarat Area*. He was thanked by Peter Dalman.

Supper.

Apology from the editor to the author of May newsletter article - *What's in a name?*
glossy-beaked should have read *glossy black*
 and *aerial acrobats* as *aerial acrobatics*

Creswick May 2005 excursion.

Leader Ken McConnell

Long Point Flora Reserve at the Gillies and Creswick-Ascot roads intersection was the first stop on our excursion. This three-hectare area was mined by Chinese miners using water brought to the site by a 2km water race. Mineshafts and quartz rock piles are remnants of the mining. There is an unusual association of Candlebark, Black She-oak and Silver Banksia trees. The largest of the banksias have trunks 60cm in diameter and are 10m tall. Some of these banksias were flowering. It was interesting to see the regeneration of banksia and candlebark trees. Maybe the heavy rain in February helped to germinate them. A few flowers were also seen on cranberry and beard heath plants. Striated Pardalotes were seen entering and leaving holes in a clay-pit edge. Brown Thornbills, a male Golden Whistler and White-eared Honey-eater were also seen.



Long Point Flora Reserve -Club members view birds from edge of clay pit.

The second stop on the excursion was St. Georges Lake east of Creswick. It was named after the St. George mining company that had a claim in the area. Previously it was called Government Dam. The embankment was constructed in about 1900. The lake has an area of 18 hectares. Its deepest spot is 13 metres deep and it has a volume of 615 megalitres.

Yellow-tailed Black Cockatoos were screeching in the tops of pine trees when we arrived. We walked around the lake before lunch. Three species of fungi were seen in the pine plantations. They were the Fly Agaric (*Amanita muscaria*) with white flecked red caps, 'Slippery Jacks' (*Suillus luteus*) which have a slimy brown cap and fine lemon-coloured pores underneath, and Saffron Milkcaps (*Lactarius deliciosus*). These last ones when mature have a reddish-orange funnel-shaped cap with gills decurrent down the stem.

On the water were a few White-eyed and Musk ducks, Coots, Swans and Dusky Moorhens. An area on the South side was popular with birds. Birds seen here included Crimson Rosellas, Spotted Pardalotes, Blue Wrens, White-eared and New Holland Honey-eaters, White-throated Tree-creepers, Striated Thornbills, a Grey Thrush and a White-browed scrub-wren. A flock of fifty Yellow-tailed black Cockatoos wheeled overhead while we were having lunch.



Fungi which had forced their way through the rocky road surface.

After lunch we drove to Lincoln Gully road. As most of the understorey plants were not flowering it was hard to identify some of them. Ones identified included the Trailing Shaggy-pea, Common Wedge-pea, Grey Everlastings, Thin-leafed Wattle, Red-anthered Wallaby grass and Wattle Mat-rush. Slender Dodder-laurel (*Cassytha Glabella*) a twining parasite, was growing on a Narrow-leafed Bitter-pea.

A water race from the Lincoln Gully dam was used for mining. The race was breached in one spot resulting in a badly eroded area. The gully itself is full of Gorse.



Greg Binns reluctantly has his OAM medals displayed.



A Hyacinth orchid with seed pod was growing near the race. Another one was in bud. Is it early or late? Hop Goodenia was flowering on the dam wall. I found that the Goodenia genus was named after Rev. Samuel Goodenough. Apparently he thought that the name Goodenia was good enough!

John G holding the budding orchid of this or last season?

Les Hanrahan

Dereel Community Plan Dereel Hall on Wednesday May 18th

Greg Binns and Carol Hall attended a meeting of community, shire and DSE representatives at Dereel Hall on Wednesday May 18th. The subject under discussion, as part of the wider Community Plan, was the development of Dereel Lagoon, an ephemeral swamp. It quickly became apparent that all present appreciated the environmental values of the Lagoon (see Site 18 in *Discovering Ballarat's Bushland*).

Suggestions were made for a walking track around the perimeter on the higher ground, part of it to be accessible by wheelchairs and prams. Cars should be left at Dereel Hall where there were toilets and the bitumen road surface should not be extended any further towards the Lagoon. Interpretive signage could be erected here and small guide posts would ensure that visitors followed the preferred track. All participants agreed that development should be low key.

The Golden Plains Shire representative - the Recreation Officer - indicated that its Parks and Trails policy included the swamp in its recreation plans as there was local demand for interesting walks, a comment re-iterated by the community nurse. Tim D'Ombrain offered the services of Ballarat Environmental Network to underwrite the cost of weed removal. Bird and plant lists would be obtained from relevant sources. Participants were invited to join a sub-committee to set the wheels turning.

Carol Hall.

Calendar

June

- Fri. 3 Meeting: Attila Kapitany – *Succulent plants of Australia*
Sun. 5 Excursion: *Fungi* with Les Hanrahan
Tues 21st Committee Meeting 7.30 pm at Greg Binn's place

July

- Fri. 6 Meeting: *Natural History of the Arctic* by Helen Burgess
Sun. 7 A bus trip for Excursion: *Fungi at the Herbarium*, with guide, Tom May

Supper duty: June: Helen Burgess July D.Brooke
Note-taker June: volunteer please

Committee

President Mr. Peter Dalman
Vice-President Mr. Greg Binns
Secretary Mrs. Carol Hall
Treasurer Mr. Les Hanrahan

Miss Helen Burgess.....
Miss Maureen Christie.....
Mrs. Claire Dalman.....
Ms Fran Hanrahan (Editor)
Mrs. Pat Murphy.....

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Meetings are held at the Ballarat Horticultural Centre, cnr. Gregory & Gillies Sts (VicRoads 254 F8) on the first Friday of the month at 7.30pm.

Excursions: Depart from Ballarat Market Place (formerly Creswick Plaza) Creswick Rd., Ballarat (VicRoads 255 M10) at 9.30 am unless otherwise specified.

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