

The Ballarat Naturalist

October 2007



Trailing Goodenia
Goodenia lanata
(Club Logo)

BEN Reserves – Mt Doran area Excursion Saturday 8 Sept.

The Ballarat Environment Network manages about 50 reserves around the district. The full list of the reserves and locations can be found at www.bird.net.au On a warm spring day 11 people set out to explore 4 reserves between Mt Doran and Elaine.

Travelling along Blue Bridge Road we stopped at the recently repaired basalt rail bridge. The arch section has recently been reinforced with a layer of concrete but we admired the work of stonemasons clearly visible on the exposed faces.

Our first stop was at the Mt Doran or Barker's Wetland. This reserve of 4 hectares contains a dam with a cover of Tall Spike Rush and other aquatic plants but only a small patch of water. Swamp Gum has nearly finished flowering but White-plumed and White-naped Honeyeater were still present. Around the high water level there is dense regeneration of Swamp Gum. On the higher ground were some very old Messmate surrounded by good regeneration of young trees. We were able to distinguish Manna Gum *Eucalyptus viminalis* ssp. *Viminalis* from Rough-barked Manna Gum *Eucalyptus viminalis* ssp. *cygnetensis* (the rough barked sub species has scaly bark on the trunk and the buds are often in groups of 7 rather than 3's). Kookaburras and Grey Shrike-thrush were heard and seen. Smaller plants in flower included Early Nancy *Wurmbea dioica*, Thin-leaf Wattle *Acacia aculeatissima*, Nodding Greenhood *Pterostylis nutans*, Gnat Orchid *Cyrtostylis reniformis* and Peach Heath *Lissanthe strigosa*.

We next visited Mt Doran Recreation Reserve, which is a fenced 2 hectare area which is visually little different to the adjoining private property.

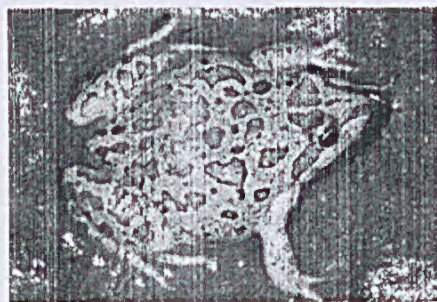
A Manna Gum just inside the gate supported several clumps of Drooping Mistletoe. One clump had died but the tree lived on in good health. A double-trunked Swamp Gum had split, fallen over and several vertical branches up to 30cm diameter had developed. We found the old concrete cricket pitch that had not seen a game for many years because alongside the pitch a Black Wattle had grown to a height of 5 metres and the out-field was covered in regenerating Swamp Gum of similar height.

We made brief stop at the 1 hectare Mt Doran Scenic Reserve. This reserve was the only one with a significant weed problem. We saw Sweet Pittosporum *Pittosporum undulatum*, Gorse *Ulex europaeus*, Bluebell Creeper *Sollya heterophylla*, Sweet Briar *Rosa rubiginosa*, Montpellier Broom *Genista monspessulana*, Cape Weed *Arctotheca calendula* and Cleavers. A bundle of sticks and strands of stringy bark was found in a Messmate from which the bark had been collected – probably the drey of a Ringtail Possum.

We ate lunch in the bushland adjoining Morrisons Racecourse Reserve. This 30 hectare reserve has extensive grasslands with Swamp Gum, Yarra Gum, Manna Gum and Scentbark on the rising ground. The reserve began with horse racing and cricket in 1860 and races continued until the 1920's. We found remnants of a post and rail fence and posts along the line of the inner and outer running rails. On the grassland we found Yellow Stars *Hypoxis vaginata*, Golden Moths *Diuris chryseopsis* and a buttercup flowering. Leaves of many plants such as wood rush, bear's ears, buttons, lilies and beauty heads will develop into a colourful display through spring and early summer. At a small dam we heard "plock" like two stones being struck together. We saw several floating foam nests and could see dark spots which were developing tadpoles. Near one raft we saw the eyes and head of a frog. Listening to a CD of frog calls the next day I identified the frogs as Spotted Marsh Frog *Lymnodynastes tasmaniensis*.

John Gregurke

Spotted
Marsh Frog



Fighting Fire with Fire: Is hazard reduction bad for biodiversity?

Dr Alan York, Senior Research Fellow: Bushfire R & D Group, School of Forestry and Ecosystem Science, University of Melbourne, Creswick.

Dr York covered a wide range of aspects of the impact of fire on biodiversity with particular reference to studies being conducted by staff at the School of Forestry and Ecosystem Science at Creswick in an area of heathy stringybark woodland near Casterton. This area is the home of endangered red-tailed black cockatoos and prescribed burning has been used to preserve the environment preferred by this species. The presentation was illustrated by photographs and graphs of data, providing an engaging and interesting talk.

Terms associated with fires were defined including:

- Wildfire: An unplanned fire.
- Burn off: Fire to remove unwanted vegetation.
- Back burn: Deliberately lit fire to remove fuel in front of an uncontrolled fire.

Prescribed burn: Application of fire under prescribed environmental conditions to remove slash, fuel reduction or for specific environmental purposes.

Currently the code of practice for prescribed burns has zones for asset protection, strategic wildfire management, ecological management and fire exclusion.

The commencement of broad thinking about fire and promotion of concern about the effects of fire can be aligned to the 1940's Disney film where Bambi was shown avoiding a fire. In America Smokey Bear was created with posters promoting fire awareness and there is still a website (smokeybear.com). Australia's alternative, Smokey Joe, is not so well known.

For fire to occur fuel, oxygen and heat are required and these are referred to as the 'fire triangle'. Fires are controlled by breaking the triangle through the removal of one element, for example the use of water to remove heat from a fire. Prescribed burning for hazard (fuel)

removal is now a major component of land management. An example of a prescription for a burn might be to reduce fine surface fuels from 15 to 8 tonne per hectare with burning to 70% of the surface and no canopy scorching. Examples of the build up of litter showed 15 to 22 tonne per hectare with no burning and 5 to 17 tonne per hectare with regular prescribed burning. Build up of litter after a burn could be relatively quick as micro organisms in the soil could be killed by fire, slowing down decomposition.

The red-tailed black cockatoo seems to prefer brown stringy bark which grows on the infertile ancient sands around Casterton. Research is being conducted to investigate the effect of fire regimes on fauna. Fire regimes include aspects such as intensity, frequency, season, type and extent. Areas with varying fire frequency and time since the last fire have been investigated. Fire frequency is the number of fires in the last 40 years and the time since the last fire is grouped as recent (4 to 10 years), medium (11 to 25 years) and long (25+ years). Trapping used to capture creatures involved hair funnels, Elliot traps and pits at 33 sites with 27 traps per site over 4 nights giving 3564 trap-nights. The results were 7 species: 28 silky mice, 11 heath mice, 1 swamp antechinus, 11 yellow footed antechinus, 2 bush rats, 1 swamp rat and 2 house mice. For some time the heath mouse (rat) was thought to be extinct but was rediscovered in the Grampians in 1961.

The abundance against time since last fire was analysed. Yellow footed antechinus were more prevalent in the less burnt areas (11- 25 and 25+ years since the last burn). With the silky mouse and heath mouse there was no difference and all three creatures were found in all the areas. There was insufficient data to comment reliably on fire frequency effects.

A second experiment in June 2007 used more traps giving a total of about 5000 trap nights. Sampling involved the collection of invertebrates with 70,000 specimens being collected. These included 76 species of ants and 7 species of bull ants. The different fire age classes did generally not have unique species with only one species being unique to the 25+ years class. However, some species were more abundant in a particular class.

Interesting asides in the talk included the fact that there are more than 1,200 species of ant in Australia and that a lot of native creatures eat fungi. On survival in fires the comment was made that silky mice have deep bur

rows which contribute to survival in fires and that fires result in lots of seeds which contribute food for ants.

On the matter of the impact of hazard reduction on biodiversity conservation it was stated that "Management must develop strategies to maintain a full range of age classes and consider the spatial arrangement".

Alan's research is continuing with further monitoring later this year and this would seem to be important as not enough seems to be known about the impact of prescribed burning on animals and birds.

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Peter Dalman

Nerrina Reserve mid month excursion

Six members visited the Nerrina Reserve on Tuesday 25 Sept 2007. The reserve is located on Hillcrest Road with an entry point just over Little Bendigo Creek and opposite the Ainley Street intersection. The reserve extends through to the bypass freeway. The excursion was informally led by Gavin Cerini who had an excellent knowledge of the history of work on the reserve. The group was easily able to walk around the perimeter of the reserve including along the freeway fence. There are three areas where there is water and other low areas that would contain water in wetter years. A lot of work has been done in removing gorse in particular and other weeds but there is still a good collection of these which, as well as the gorse included pines, Spanish heath, two species of broom, paterson's curse, and blackberries. Along the adjacent freeway reserve there is pampas grass, japonica, briar rose and fruit trees. On a brighter note, it was nice to hear the frogs in the dams and see a few birds including bron-zewing pigeon, greenfinch and New Holland honeyeater. It was good to see the work that has been done on this reserve and it is hoped that it can be sustained so the gains are not lost.

A brief stop was also made in Ainley Street near the Yarrowee where Gavin had observed "tunnels" through the grass which may have been created by native rats. A rat was disturbed and glimpsed, but whether it was native could not be seen.

Thanks to Gavin for leading the group.
Peter Dalman

Minutes of the General Meeting of the Field Naturalists Club of Ballarat
Held at the Ballarat Horticulture Centre on the 7th September 2007.

The President opened the meeting and welcomed 25 members and visitors.

Apologies were received from Greg and Genny Binns, Maureen Christie and Avis Barlow. Accepted on the motion of Claire Dalman, seconded Peter Billing.

Minutes of previous meeting: Tabled and summarised in Ballarat Naturalist.

Confirmed on the motion of Bill Murphy, seconded Carol Hall.

Business Arising from previous Meeting.

Herbarium: The extensive collection of herbarium specimens collected, named and arranged by the late Pat Murphy was exhibited for members inspection before it is donated to the Melbourne Herbarium.

General Business

Members were asked to send articles for the Ballarat Naturalist to Val Hocking who will edit the October edition.

Syllabus: Members were invited to contribute suggestions for speakers and excursions for 2008-09.

Correspondence.

IN:

Geelong FNC: Geelong Naturalist, August 2007.

Bendigo FNC: Whirrakee, August 2007.

FNCV: Field Nats News, September 2007; Australian Natural History Medallion awarded to Jeanette Covacevich.

Castlemaine Field Naturalists Club: Castlemaine Naturalist, August 2007.

Threatened Species Network: The Web, Winter 2007.

Environment Victoria: Receipt for Membership.

Angair: Wildflower show, 22 & 23 September.

University of Ballarat: Room hire.
Bendigo Bank: Statement.
City of Ballarat: Ballarat Treasures Register launch.
DSE: Ballarat Planning Scheme Amendment; 2007/2010 Bendigo Fire Operations Plan; Midlands Draft Fire Operations Plan.
Martin O'Brien: Paddys Ranges plan submission.
Corangamite CMA: Grants; Certificate V Business/Governance; Victorian Landcare Winter, 2007; Australian Landcare, June & September 2007.
CFA: On the Land – Agricultural Fire Management Guidelines.
Outback Beds: tourist information.
Tourism Top End: Top End Holiday Guide.
Victorian National Parks Association: Appeal.
Lisa Smallbone, Charles Sturt University: Urban ecology research project.
Allison and John Williams: Travels around Australia.
SEANA: Minutes and Agenda.

OUT:

Graeme Reynolds: Sympathy card for death of mother.

That the inwards correspondence be received and outwards correspondence be approved: Moved: Anna Baulch; Seconded: Paul Norquay. Carried.

Business Arising from correspondence: Nil

Charles Sturt University urban ecology research project: Several members and friends agreed to be involved. Secretary will forward contact details to CSU.

Reports

Treasurer's Report: Opening Balance 19/7/07 \$4402.16, Income \$47.00, Expenses \$86.20, Closing Balance 19/08/07 \$4362.96
Received on the motion of Les Hanrahan, Seconded: Bill Murphy.

Wattles of Ballarat: The sub-committee has begun selecting photographs of the 24-26 species of wattles that are indigenous or naturalised within a 40 km radius of Ballarat. A list of the wattles and photos required is available.

Show and Tell

Lyndsay Fink showed a seedpod of *Grevillea glauca*. Early settlers used these as clothes pegs.

Belinda Taylor exhibited a bird's nest found among debris in an orchard. The nest, probably a Superb Fairy-wren or Brown Thornbill nest, contained pieces of polypropylene twine. Remember that cleaning up can make it hard for birds.

Gavin Cerini displayed a nest found in a closed, dark shed. The nest was built of stems of common reed in the centre of a coil of fence mesh. May be the nest of an introduced rat.

Carol Hall: graph of annual rainfall 1990-2006 showing the long run of dry years since 1997.

Field Reports

Gavin Cerini: Brolga nest at Clunes common with one egg. Cape Barren Geese nesting on top of round bale near farmhouse south of Cressy. First European Wasp queen for the season seen on 28 August in Eyre St, Ballarat.

-*John Mildren:* Eastern Bristlebird at Lavers Hill. Pair of Masked Lapwings at Creswick Road-Webster St runabout.

Carol Hall: Eucalypts trees recently planted along Creswick road appear to be effected by either drought or frost. Wood Duck seen at Grammar lagoon and on chimneys along Forest Street.

-*David Marr:* Pair of Black Swans with 3 cygnets seen on eastern side of Lake Wendouree.

-*Les Hanrahan:* Three Wedge-tailed Eagles circling at Bungaree.

-*Paul Norquay:* Thornbill or scrubwren nesting in an orchard sprayer at Mt Egerton.

Excursion arrangements

Saturday 8 September leaving Ballaraḡ Market Place at 9.30 am for BEN

reserves at Mt Doran and Morrisons Racecourse. Leader: John Gregurke.

Syllabus Item

Alan York from Bushfire R&D group, School of Forest and Ecosystem Science, University of Melbourne (Creswick) spoke on "Fighting Fire with Fire". He used results of research being conducted around Casterton to show the effect on fire of a number of different species including Red-tailed Black Cockatoo and Silky Mouse. Peter Dalman thanked Alan for his informative presentation.

Supper

Book Review

"The Last Tasmanian Tiger" (1)

The history and extinction of the Thylacine

Written by Robert Paddle of the Australian Catholic University.

First printed in 2000 by Brown Prior. Anders Publisher "Cambridge University Press" with a note from Tim Flannery, Director of the South Australian Museum.

The sad story of an animal that just appeared 55,000,000 (2) years ago. Allied to the South American Dudelphis and just called Dudelphis CYNOCEPHALA (Latin). The last one died on 7th September 1936.

Called now Thylacine CYNOCEPHALUS (Greek) from the Greek THYLAKOS, a leather pouch, and CEPHALUS, dog headed or the pouch of a wolf with the head of a dog

There are five Genera found in ancient deposits. BADOLINUS, MURABACINUS, NGAMALACINUS, NIMBACINUS, WABALACINUS.

I thought this book was worth reading.

Lyndsay Fink

(1) In the Ballarat Library

(2) Fossils on Queensland Dated 55,000,000 years old

Thylacines as we know them were 24,000,000 years old in that form.

SEANA Peninsula Camp 5th- 7th Oct 2007 notes

The camp was held at "The Briars" Mount Martha. This property, operated jointly between the National Trust and Mornington Shire was one of the first farms in Victoria started by Europeans. About half of the group stayed on site at the camp and all shared in the catered evening meals.

An early morning walk revealed some of the birds seen on the property— kookaburras, rainbow lorikeets, eastern rosellas, masked lapwings one pair having 3 babies (swooping), noisy miners, magpies, crested pigeons, blue winged parrots, wood ducks, a yellow robin.

On Saturday, I joined 40 of the group on a tour of French Island in Western Port Bay with French Island Eco tours. French Island has a population of about 80 people. About one third is private property and the remainder, national park.

There is a small primary school with 6 students. It is annexed to Stony Point Primary, where the students spend each Friday.

After a cuppa, we drove, then walked to a coastal area on the eastern side of the island. Birds seen either in the estuaries or at the sea edge were White Fronted Chats, Cape Baron Geese, Shell ducks, black swans, lots of Ibis, a pair of Caspian Terns, Pied Oyster Catchers, Red necked Stints, a Spoonbill with breeding plumage

In the afternoon we visited an area on the north side of the island known for orchids. Here we found quite a few Brown Beak orchids, Wax Lip orchids, a few Leek orchids and Salmon orchids in bud, as well as some other native flora. At 4.30 pm we took the 20 min ferry ride back to Stony Point finishing a very pleasant day to an area I knew little about.

Val Hocking

Brown beak orchid



Stony Point

An area of rail reserve at Stony Point has been appropriately slashed to maintain areas of grassland. In this area 8 species of orchid were found – 3 leek orchids, 2 sun orchids, donkey orchid, onion orchid and Rabbit Ears. Other plants in flower included Blue Squill, Milkmaids and Grass-leaved Trigger Plants. A Spotted Pardalote with a beak full of food dropped into an echidna hole and fed its young in a

small tunnel.

Langwarrin Flora and Fauna Reserve

This 200-hectare reserve was used as a military camp from the late 1800's to after World War One. Regeneration has occurred but often with native weedy species such as Coast Wattle, Coast Banksia, Coast Teatree and Mahogany Gum. The friends group is tackling the task of removing weeds and encouraging growth of indigenous plants.

Balcombe Creek

The walk from The Briars along Balcombe Creek to Port Phillip Bay is about 4 kilometres. Nearly half this distance is on elevated boardwalk. This linear reserve has suffered weed invasion but remedial work is underway. A recently released rust organism is severely affecting Bridal Creeper. About 20 species of birds were seen on the walk including an Eastern Yellow Robin sitting on a nest in a Weeping Pittosporum and a Grey Fantail building a fine nest including spider web in a Swamp Paperbark.

John Gregurke

Upper Mt. Emu Creek Landcare Network and
Glenelg Hopkins CMA are proud to present:

The Secret Life of Bats

Dr. Lindy Lumsden, fauna ecologist from the Arthur Rylah Institute will provide fascinating insights into Australian Bats and the value of remnant vegetation including scattered trees

Where: Lake Burrumbeet Hall

October 29th

8.00 pm

Followed by a light supper and a farm visit to check Bat Traps set to catch bats in farmland remnants

Friends and neighbours interested in Landcare are welcome to attend

Please RSVP to Bernadette Cincotta (Community Landcare Facilitator, Glenelg Hopkins CMA) for catering purposes and directions.

PH:

MOB:

CALENDAR

October

- Fri 12 Michael Marmach—The Pibara and Northwards.
Sun 14 Bull Gully Rock wells & Battery Dam—Peter and Claire Dalman
Sun 14 Men & Boys Expo Stockland Wendouree
Wed 17 Mid month excursion Basalt block— wattle photography
Tues 23 Committee meeting— Gregurke's 7.30 pm

November

- Fri 2 **Stella Bedggood Memorial Lecture—**
Ian Morgan -Naturalist and photographer
Birds of the Wimmera
Sun 4 Bamganie— The Cameron Property
-Greg Binns

Committee

President	Mr Peter Dalman
Vice-President.....	Mr Greg Binns
Secretary	Mr John Gregurke
Treasurer.....	Mr Les Hanrahan
Miss Helen Burgess.....	Mrs Claire Dalman.....
Mrs Carol Hall	Mrs Val Hocking.....
Mr John Morrish	Ms Nina Netherway (editor).....

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Editor: Nina Netherway,

Website: www.ballarat.yourguide.com.au Click on *Local Info. Search Environment*

Meetings are held at 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 9.30am unless otherwise specified.

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