

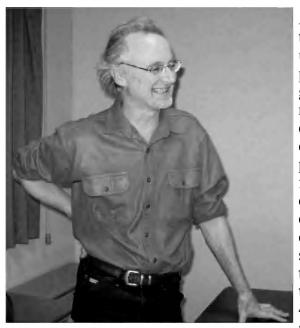
# Ballarat Naturalíst

#### December 2008



#### **STELLA BEDGGOOD MEMORIAL LECTURE: NOVEMBER 2008**

### NEVILLE WALSH, VICTORIAN GOVERNMENT BOTANIST – Threatened Plants in Victoria: Where we are and how we have progressed in looking after them.



averages by 2070.

As well as being a co-editor of the Flora of Victoria, Neville's work at the Melbourne Herbarium has involved surveying threatened Victorian plants and the development of recovery strategies as a member of recovery teams. He commenced his address by presenting facts on changes and predicted changes to Victoria's environment. Despite a net gain vegetation policy, Victoria is losing 4,000 ha per year of forest. Worldwide we are the fourteenth largest emitter of greenhouse gases, the second largest emitter on a per capita basis. Victoria has increased its greenhouse gas emission by 12% since 1990 which is five times the rate for Australia overall. Amongst other facts Neville said that it was projected energy use would increase 40% by 2030, rainfall would decrease 5 - 10%and storm surges could be 2m above current

Historically there has been legislation to protect the environment. Prior to 1988 there was the Wildflower Protection Act but this focussed on protecting plants rather than their habitat. It was illegal to pick a wildflower but there was little protection against habitat loss. In 1988 Victoria passed the State Flora and Fauna Guarantee Act and in 1996 the Federal Environment Protection and Biodiversity Conservation ACT (EPBC) was enacted. These Acts protected all native species so they could continue evolving in the wild. The Acts provided power over private land and considerably increased penalties with fines of \$5 million and jail terms of up to five years. Previous penalties had hardly been a deterrent considering the money to be made from development. However, they created a convoluted process and long queues for consideration of project funding. Under this arrangement there were significant projects. For example the helmeted honeyeater project received \$100,000 per year for 15 years.

In 2000 new criteria were established which made sense federally. Plants were classified as Rare, Vulnerable, Endangered or Extinct under a RoTAP (Rare or Threatened Australian Plants) classification.

Victoria's Herbarium has over 1 million specimens of Victorian plants. There are 4833 taxa (species and sub species), 3596 native and 1237 exotic. Forty five (0.9%) are extinct and 280 (5.8%) are endangered indicating they are likely to become extinct in the next 20 to 30 years if nothing is done. Four hundred and forty seven (9.2%) are vulnerable and 704 (14.6%) are rare. There are 88 (1.5%) extinct aliens and 168 (3.5%) are poorly known.

Plants are considered extinct if they have not been found for 50 years. This has resulted in changes to the number of plants considered extinct as the results of new information. For instance, Willis in 1982 listed 22 species as extinct but subsequently 9 have been rediscovered and 5 have been rejected as not Victorian. In 2007 Walsh and Stajsic listed 45 species as extinct which was 3 less than in 2003. The reasons for these changes include increased survey efforts, particularly in the Mallee, a better understanding of the age and reliability of records and changes to taxonomy.

Examples and photographs of specific plants and rediscoveries, recovery programs and poor management were cited. Mention was made of Senecio behrianus which for a long period was though to be extinct but was found at Shepparton and later in the reserved swamp at Miners Rest. Another rare plant mentioned was the McKenzie River bottlebrush, Callistemon wimmerensis which is a pinkish bottle brush found at Wonwondah.

The effect of fire was also mentioned and in particular that, following the 2003 alpine fires, plants that had not been seen before were found, for example, Pelargonium helmsii and it was noted that much of the alpine area had not been burnt since the 1939 fires. Also, Actinotus forsythia, Ridge flannel flower was first discovered in Victoria in 1981 following fires but was not seen again until the same area was burnt in 2003 and again was only seen in the first year after the fires.

An example of poor management included the seemingly unnecessary widening of a little used road in the Wimmera and subsequent destruction of an example of Pimelea spinescens subs pubiflora, Spiny Rice-flower.

Neville also pointed out that new plants are still being discovered and named. For example Prostanthera arapilensis, the Mt Araplies mint bush was only named this year.

The computerisation of data has greatly improved access to information. All the records of the Victorian and other herbariums are now entered in a data base so it is possible to look up plants and get the notes on the record without actually accessing the specimen. Much of the information is available to the public through Australia's Virtual Herbarium website at <u>http://www.anbg.gov.au/avh/</u>

It was a privilege to be addressed by a Victorian Government botanist and whilst some of the information about the future was disheartening it was good to hear of the work being done by Neville and others to preserve many of Victoria's threatened plants. Thanks to Bill Murphy for suggesting Neville Walsh as a speaker following the SEANA camp at Forrest and thanks to Neville for his preparation and presentation. A bonus was Neville joining us for the next day's excursion. His sharp eyes and patience as he examined tiny plants or small details made me realise how we often just overlook so much.

Peter Dalman

#### Excursion to Bamganie Saturday 8 November 2008 Leader: Greg Binns

After the rain of the previous evening the excursion party grew to 17 by the time we arrived at *Manor Gum House* the property of Neil and June Cameron at Bamganie. We were delighted to be accompanied by Neville Walsh who had spoken at the Stella Bedggood Memorial Lecture. The length of the plant list is due to his expertise in identification and extra information he emailed after the excursion.

We spent the morning inspecting the patch of remnant vegetation surrounding the Cameron's house. There were old Manna Gums with hollows and fallen timber. Grassland patches lead down to a creek. The grasslands had an interesting variety of small plants that were best seen on hands and knees with a hand lens. A cool wind and a few showers limited the bird activity. On the ground beneath a hollow spout was an egg thought to be from a Crimson Rosella. The egg appeared to have been predated. White Ibis, Yellow-tailed Black Cockatoo, Magpie Lark and Welcome Swallow flew overhead. White-plumed Honeyeater were active when the sun came out.

Neville found *Vittadinia muelleri and Dianella amoena*. Finding *Vittadinia* significantly extends its range (nearest previous record is near Bacchus Marsh). The *Dianella* had not been collected from the area since the 1950s and then with only very vague locality information. *Vittadinia muelleri* is a small, purple-flowered daisy. *Dianella amoena* is a newly described flax-lily with much shorter leaves than the common Black-anther Flax-lily.

At a brief stop on the roadside Denis found a Red-bellied Black Snake under a sheet of iron. It quickly escaped down a hole.



## Plant list for Manor Gum House

| <b>Bamganie State Forest plant list</b> Geranium retrorsum Grassland Crane's-bill | Arthropodium sp. 3Sma<br>Astroloma humifusumCrar<br>Austrodanthonia caespitoseAustrodanthonia fulvaCopy<br>labyAustrodanthonia fulvaCopy<br>labyAustrodanthonia geniculata Kr<br>GrAustrodanthonia setaceaBrist<br>Austrostipa mollisAustrostipa mollisSpea<br>Austrostipa semibarbataBossiaea prostrataCree<br>*Briza maxima*Briza maximaLarg<br>*Briza minor*Briza minorLess<br>Brunonia australisBlue<br>Burchardia umbellataMilk<br>Bursaria spinosaSwea<br>Caesia calliaanthaBlue<br>Calocephalus lacteusCalocephalus lacteusMilk<br>Carpobrotus modestusCassinia longifoliaLong<br>Chrysocephalum apiculatumClematis microphyllaSma<br>Convolvulus angustissima spp.<br>Pink<br>Dianella amoenaDiuris chryseopsisGold<br>Diuris sulphureaDiavis sulphureaTige<br>Drosera spSundSund<br>Sund | colate Lily<br>Il Chocolate Lily<br>berry Heath<br>Common Wallaby<br>Grass<br>ber-awned Wal-<br>Grass<br>beed Wallaby<br>ass<br>Ily Wallaby Grass<br>r-grass<br>ping Bossiaea<br>e Quaking Grass<br>er Quaking Grass<br>er Quaking Grass<br>Pincushion<br>maids<br>et Bursaria<br>Grass-lily<br>y Beauty-heads<br>ad Pigface<br>ssinia<br>g-leaved Dogwood<br>Common<br>Everlasting<br>Il-leaved Clematis<br>Angustissima<br>Bindweed<br>ed Flax-lily<br>tey Weed<br>oth Parrot-pea<br>len Moths<br>r Orchid<br>lew<br>tensis Rough-bark | Kennedia prostrata<br>*Juncus acutus subsp. acu<br>Leptorhynchos squamatus<br>Leptospermum lanigerum<br>Lissanthe stingosa<br>Lobelia pedunculata<br>Lomandra filiformis<br>Lomandra longifolia<br>Microlaena stipoides<br>Microlaena stipoides<br>Microtis sp<br>Phragmites australis<br>Pimelea humilis<br>Platylobium obtusangulun<br>Poa rodwayi<br>Poa sieberiana var. sieber<br>Poa sieberiana var. Hirte<br>Poranthera microphylla<br>*Romulea rosea<br>Schoenus apogon<br>Senecio glomeratus<br>Solenogyne dominii<br>Themeda triandra<br>Thelymitra pauciflora<br>*Tragopogon porrifolius<br>*Ulex europaeus<br>Veronica gracilis<br>Vittadinia muelleri<br>Wahlenbergia stricta<br>Wurmbea dioica | s Scaly Buttons<br>Woolly Teatree<br>Peach Heath<br>Matted Lobelia<br>Wattle Mat-rush<br>Spiny-headed Mat-rush<br>Weeping Grass<br>Onion Orchid<br>Common Reed<br>Common Rice-flower<br><i>n</i> Common Flat-pea<br>Tussock Grass<br>riana Tussock Grass |
|---|---|--|---|--|
|---|---|--|---|--|

| Acacia melanoxylon<br>Acacia pycnantha<br>Acaena novae-zelandiae<br>Adiantum aethiopicum | Black Wattle<br>Blackwood<br>Golden Wattle<br>Bidgee Widgee<br>Common Maidenhair<br>Cranberry Heath | Hypericum gramineum<br>Lomandra longifolia<br>Phragmites australis<br>Poranthera microphylla<br>Pteridium esculentum<br>Pultenea pedunculata | Small St.John's Wort<br>Spiny-headed Mat-rush<br>Common Reed<br>Small Poranthera<br>Bracken<br>Matted Bush-pea |
|--|---|--|--|
| Diuris sulphurea<br>Einadia nutans<br>Eucalyptus viminalis                               | Kidney Weed<br>Tiger Orchid<br>Nodding Saltbush<br>Manna Gum<br>Narrow-leaved Pepper-               | Triglochin procerum<br>Veronica gracilis   | Water Ribbons<br>Slender Speedwell   |



We entered Bamganie State Forest from the west and drove down to a picnic area alongside the Woodburn Creek. A Black Wallaby hopped away as we approached. While having lunch several birds were seen and heard: Kookaburra. Crimson Rosella, Whitethroated Treecreeper, Rufous Whistler, Grey Fantail, White -naped Honeyeater and Superb Fairy-wren.

Common Reed was growing in the waterholes along the creek. Higher up the drainage line supported Common Maidenhair, Bidgee Widgee

and Fireweed. Nodding Saltbush with ripe fruit sprawled on the banks of the road cutting. Neville found the dainty Dwarf Skullcap *Scutellaria humilis*, a member of the mint family.

As we drove up from the creek patches of Matted Bush-pea were flowering. We stopped to have a closer look at a Short-beaked Echidna that quickly dug into sandy soil at the base of a stump.

On the way out of the forest we drove through a patch of deep sand densely covered with Bracken where several White-eared Honeyeaters were seen.

The day concluded with a cuppa in Meredith. We thanked Greg for showing us areas which we had not visited for a long time. We travelled through a heavy shower on the return trip to Ballarat.

#### LADYBIRDS

An ABC TV program recently had a segment on ladybirds. It mentioned a website: <u>http://www.ento.csiro.au/biology/ladybirds/ladybirds.htm</u>. It covers general information about the biology, ecology, life cycle, food preferences and ladybirds role in biological control.

There are detailed sections on morphology (body structure) and classification. An image gallery covers 158 Australian species.

Using a photograph I had taken of a ladybird on a wattle I was able to identify it as *Harmonia conformis* (no common name), which feeds on aphids. It was on a Prickly Moses at Macarthur Park wetland.

The website is well presented with up to date Australian information.



#### HADDON EXCURSION WEDNESDAY 19 NOVEMBER 2008

Six people set out for a mid-month excursion on a cloudy morning. A few showers were still lingering after the previous night's welcome rain.

We had short walks through unburnt sections of the Haddon Common. The parts that were control burnt last autumn are less interesting. Flowering highlights included several patches of Flying Duck Orchid *Caleana major*, Button Everlasting *Helichrysum scorpioides*, Smooth Parrot-pea *Dillwynia glaberrima* and the bright yellow flowers of the inappropriately named Grey Everlasting *Ozothamnus obcordatus*. The main flowering season is finished with many of the early flowering plants, such as Narrow-leaf Bitter-pea *Daviesia leptophylla*, Black-anther Flax-lily *Dianella revoluta* and orchids now carrying developing seeds.

After lunch at a picnic ground alongside the Woady Yalloak River we travelled to the Junipers Road Bushland Reserve south of Haddon. This is a small area of bushland with a drainage line running through it and several water races indicate past mining activity. The Golden Bush-pea *Pultenaea gunnii* had nearly finished flowering but the smaller, soft leaved Dwarf Bush-pea *Pultenaea humilis* was still colourful. Also flowering were Tiger orchid *Diuris sulphurea*, Common rice flower *Pimelea humilis*, Slender rice flower *Pimelea linifolia* (taller and droopin in habit), Common cassinia *Cassinia aculeata* growing on the edge of a water race, and a few Small grass-trees *Xanthorrhoea minor* were flowering without being stimulated by fire.

We returned to Ballarat via the Peregrine Falcon nest site at Devil's Kitchen. An adult and one juvenile Peregrine Falcon were seen. Nineteen days previously the nest on the cliff ledge contained 3 fluffy chicks. Now the nest was empty. The rapid development of the juvenile amazed me. It is now fully feathered flew competently and was feeding rock surrounded by white and pink feathers. The juvenile was banded with green bands on both legs. No sign of the other adult or chicks was seen.

John Gregurke

### VALE MAUREEN CHRISTIE

In November the club lost a long time member with the passing of Miss Maureen Christie. Maureen has been involved with our club over an extended period since its reformation in the 1950s. In more recent years from 1999 to 2007 she was a member of the committee and in this role she assisted organising the program for members and was a regular attendee at club, South East Australian Naturalists' Association and Australian Naturalist Network camps. With Maureen's help in recent years, including this current year, Christie's Ice has sponsored the production of our annual syllabus.

Maureen maintained a keen interest in the natural environment, recently allowing her home to be used as the location for a station monitoring bats in urban environments. She attended meetings regularly until quite recently and was a cheerful enthusiastic member.

Members will also remember her in her professional role as a physiotherapist which continued until the last few years. This must be a working life which few will have and is a tribute to her physical capabilities and dedication.

The club extends its condolences to Maureen's extended family. She will be missed at our club.

#### ERN PERKINS, OAM, WINS AWARD

Australian Natural History Medallion 2008 has been awarded to Ern Perkins from Castlemaine. Field Naturalists' Club of Ballarat nominated Ern for the award in 2006. The nomination stands for 3 years and was supported by the Castlemaine Field Naturalists' Club who updated the submission early in 2008.

The following is an extract from the nomination "...our club has been aware of the outstanding contribution that Ern has made to the understanding, promotion and conservation of the natural environment over an extended period. Ern has made a real difference to the academic knowledge of the environment and to the understanding that both field naturalists and the general public have of their local areas...We believe Ern's consistent investigation, exploration recording, documenting and advocacy of our natural environment have been of such benefit that he would be a worthy recipient of the Australian Natural History Medallion...".

Ern has been a member of Field Naturalists' Clubs and other natural history groups since 1965. He has prepared several publications on the flora and fauna of Castlemaine and the Mt Alexander Shire. Research activities included setting up quadrats to monitor the effects of controlled burning. Ern developed a Photopoints Project with the Castlemaine FNC to show the changes in the landscape over time. These are a few of the many projects which Ern undertook to improve our knowledge of natural history.

The Field Naturalists' Club of Ballarat congratulates Ern on the Award of the Australian Natural History Medallion 2008.

# FIELD NATURALISTS CLUB OF BALLARAT INCORPORATED<br/>No. A0014919PNo. A0014919PABN 13 150 403 135.Minutes of the 29th Annual Stella Bedggood Memorial Lecture<br/>Held at the Ballarat Horticulture Centre on the 7th November<br/>2008.

The President, Peter Dalman, welcomed 50 people including members of the Bedggood family, visitors and club members.

Apologies were received from Stephen Jones, Mayor of Ballarat, Kathryn King MHR, Geoff Howard MLA, Irene Hooper, Bob Curtain, Edna Fry, Margaret Rotheram, Margaret Smerdon, Avis Barlow, Lyndsay and Lorraine Fink.

The Guest Lecturer was Neville Walsh, Victorian Government Botanist, co-author of the four-volume *Flora of Victoria*. His topic was "*Threatened plants in Victoria – where we are and how we have progressed in looking after them*." He explained how legislation has to protect flora and fauna had changed over the years. Loss of habitat, climate change and increasing population and resource use are still threatening flora. He outlined the positive steps (such as relocating plants, seed banks and public education) that are being taken to preserve threatened species.

Peter Dalman thanked Mr Walsh and presented him with a gift, which included a photograph of *Correa reflexa* donated by Bill Murphy.

Supper was served at the conclusion of the evening.

# **CALENDAR 2008/09**

#### December

| Fri 5                  | Dr Fran Hanrahan—Aspects of the natural history of Malawi.  |  |  |
|------------------------|---|--|--|
| Sat 6                  | BOCA Bird Challenge excursion to Creswick district. Time to be decided at FNCB meeting on 5 December.   |  |  |
| Sun 7                  | Bungal State Forest—Elspeth Swan & Paul Norquay,  |  |  |
| Thur 11                | Mid-month excursion to Western Treatment Plant,<br>Werribee. Leaving Ballarat Horticulture Centre at 8.30am.<br>Names and cars to be worked out at FNCB meeting on 5<br>December. |  |  |
| Sat 20<br>everything a | Christmas Barbecue at Carol Hall's, at 5pm. BYO<br>and a salad or dessert to share.   |  |  |

#### 2009

Tues 27 JanuaryFri 6 FebruaryGuest Speaker: Sebastian Pfautsch will talk about the Hydrology and Ecology of the Pilbara. Tony Wilson has agreed to postpone his talk until 3 July.

| Committe   | е                            |  |  |  |
|--|------------------------------|--|--|--|
| President Mr Peter Dalr                          | nan                          |  |  |  |
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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 Horticultural Centre, cnr. Gregory & Gillies Sts (VicRoads 254 F8) at 9.30am unless otherwise specified.

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