The

November 2008

Ballarat Naturalist



Trailing Goodenia Goodenia lanata (Club Logo)

VICTORIAN SCHOOL OF FORESTRY HERBARIUM DR TINA BELL



Dr Tina Bell is a Fire Ecologist in the Department of Forest and Ecosystem Science at the University of Melbourne campus at Creswick. In addition to her work in fire ecology she has taken on a project to 'sort out' the herbarium which fortunately still exists at Creswick. In her address she provided some background to the School of Forestry at Creswick and spoke about what she has discovered as a result of her work with the herbarium.

In 1907 the Forests Act established the State Forests Department in Victoria which led to the purchase of a doctor's residence at Creswick and the formation of the School of Forestry with the first six students in 1910. In 1973 the School of Forestry and the Faculty of Agriculture, Melbourne University merged forming a new Faculty of Agriculture and Forestry. In 2008 the fac-

ulty was named Melbourne School of Land and Environment having had other titles in the meantime but always having a presence at Creswick. More details of the history of forestry education at Creswick are on the website: http://www.landfood.unimelb.edu.au/dean/book2/ch7.html

The Creswick site over the years has built up a herbarium which currently is estimated to have between 10,000 and 15,000 specimens covering 2,500 to 3,000 species. This includes 115 acacias and 260 eucalypts. Specimens include native and weed plants with examples from all states. It is described as an exsiccate collection which means specimens are preserved by being dried. As a comparison, the School of Botany at the University of Melbourne has about 100,000 specimens

The herbarium has material collected by notable botanists including Ferdinand

von Mueller, Jim Willis, H B Williamson, J H Siemens and Winifred B Wright, better known as Winty Calder. There are also many student collections from the 1970s and 1980s. Although many specimens were remounted between 1969 and 1975 with the loss of some information and at times the collection has been ignored, it still exists and consequently preserves some interesting historical work which in other places may have been lost.

The von Mueller material is part of the examples which were distributed to places of education. Her had a network of collectors across Victoria including Daniel Sullivan who was a teacher at Moyston. Three volumes of specimens were published. The first volume had 50 sheets per copy, all original specimens showing flowers and fruit with scientific name, authority, publication of first description family and order. Forty three copies were distributed but they didn't all have the same specimens. In our area copies were sent to the Ballarat Mechanics Institute which still has its copy, Ballarat East Public Library, Sebastopol Mechanics Institute, Ballarat German Association and the Creswick Mechanics Institute which later went to the School of Forestry. Volume 2 was published in 1875 and went to the same places. Volume 3 came out in 1876. Thirty three copies were distributed but not to the same places. Copies were distributed as a result of written requests and as well as Victorian locations they went to USA, India and Germany.

Jim Willis was a student at the Victorian School of Forestry from 1927 to 1930. He wrote a "Synopsis of Indigenous Plants Occurring within 10 miles of Creswick, Victoria, Australia". Some of Jim Willis's original notebooks still exist and an honours student has put much of the data from these into an electronic database. Information about Jim Willis is on the website: http://www.austehc.unimelb.edu.au/guides/will/will.htm

H B Williamson lived from 1860 to 1931 and contributed specimens to the Creswick herbarium between 1899 and 1918. It was Williamson who discovered a Grevillea in the Grampians which was described by von Mueller as Grevillea williamsonii. See http://asgap.org.au/APOL2/jun96-4.html for more information on this unusual plant. A note about Williamson can be found at the site: http://www.anbg.gov.au/biography/williamson-herbert.html

In addition to those already mentioned other collectors with specimens in the herbarium at Creswick include Edwin J Siemens (Principal from 1927 to 1951), Alfred J Lesley, Kevin Tolhurst and many other lecturers and students.

The herbarium is well worth preserving as a source of valuable scientific and historical information. It was very interesting to hear the herbarium still exists and is being valued. Appreciation of Tina's work and presentation was expressed by the members.

Peter Dalman

EXCURSION TO MT. BECKWITH RESERVE LEADER: JOHN GREGURKE

We had a somewhat momentous departure for this excursion as we left from our new meeting place at the Horticultural Centre carpark. On our way to Mt. Beckwith the countryside appeared fresh and green even though the rainfall for September had been the lowest on record for most parts of Victoria. We entered the reserve from the Eastern side via Mountain Creek Road.

Mountain Road Gate

Our first stop was just inside the gate where John outlined both the geological history and the more recent known items of the history of settlement. In Devonian times (400 million years ago) magma pushed up into the overlying deepseated Ordovician rock and cooled slowly to form the large-crystalline rock, granite. Many eras of erosion of the overlying Ordovician rocks eventually revealed the granite rock and the mountain, Mt Beckwith and other granite mountains in the district. Then 2 million years ago basalt, from eruption points near Clunes flowed along low-lying areas such as valleys displacing the creeks to their edges of the flows to form what is known as *lateral streams*. Erosion of a lateral stream between the basalt and granite can be seen as you approach Mt Beckwith along Mountain Creek Road. In recent times, pockets of granite sands, formed by erosion of the granite in the reserve, were mined consequently leaving excavations. These, in better days are filled with water to form a number of dams both large and small.

The altitude of Mt. Beckwith is 634 metres when this is not increased by human construction of piles of stones on the summit!

John began the recent history with the note that in the 18th Century about 200-250 people of the tribe, Dja Dja Wrung populated the mountain and the surrounding area of 15 600 square kilometres. They called the mount *Nananook* or *Korerpunbrlite Gudidji*. The first white man's note of the area was from Major Mitchell when he passed through the area, Lexton to Dunach, 10km NW, in 26 September, 1836, describing it as "... being well-covered with trees'. Two days earlier he named the mountain, now known as Mt Misery, Mt Beckwith (named after military colleague Gen/Col. Thomas Sydney Beckwith).

Misinterpretation by early settlers led to the location of Mt 'Beckworth' being set 13 km to the north-east.

In 1918 five *Pinus radiate* were planted on the summit and four were later cut down in 1945 to make way for an aerial survey beacon. The remaining pine had its lower branches trimmed to form the well-known, *lollypop tree* which can be seen up to 50 km away.

Other plantations included those of Pine, Black Wattle and Cork Oak. Before 1962 the Reserve was grazed, quarried and logged but then these activities ceased because of their degrading effects on the fragile granitic soils. At this first stop

we had hoped to see a variety of birds but we were disappointed. But we did hear and see a few including the Pallid Cuckoo, Yellow-tufted H E, Long-billed Corella, Fuscous H E and White-browed Wood Swallow.

For the plants sighted in this spot, including two orchids refer to the list. Because of the drought the trees looked stressed and a Long-leafed Box was covered with galls which when cut open showed the grub in its home. Growing on another Box was a mistletoe whose fruit is the feed for the Painted H E.

Manna Gums Picnic Area

On the way to this picnic area we stopped to examine a Sydney Golden Wattle which had been mentioned on Gardening Australia as once being a source of detergent for the indigenous people living around Sydney.

After morning tea we strolled through the bush and saw more flowers here than at the first spot. In fact we came upon a meadow of Blue Squills or Stars (Chameascilla corymbosa). Its colour, shape and the twilling lines on the bud explained the reasons for the common names. The Cherry Ballart (Exocarpus cupressiformis) was in bud with only one ripe red fruit available for tasting. Refer to the list for other plants seen at this spot. When we returned to the picnic area we lunched at the table provided or in the nearby shade.

The Dam

At this next spot little water could be seen in the large dam, a mining for granite-sand excavation and possibly the source of water for the black wallaby we saw jumping through the bush. Other fauna we saw included a Wood White butterfly and a well-camouflaged lizard with the colouring of the surrounding litter and a very long tail. Hopefully Elizabeth Thurgood will be able to name it for us.

Again we came across meadows of flowers but this time they were filled with Waxlip Orchids (Glossodia major). These were all shades of mauve from very pale to deep purple. Some distance away John found a nearly white one which is not too surprising as albino specimens are seen in this area.

The Cork plantation

On the way to this spot John spotted a Little Eagle and we stopped to examine a Daphne Heath (Brachyloma daphnoides) in flower. We were then close to many Drooping Sheoaks (Allocasuarina verticillata). John pointed out that this tree is dioecious, having the male and female flowers on separate trees so that the woody cones form only on the female trees. The male trees are easily distinguished by the orange anthers which give the tree an orange colouration at flowering time.

(contd. P.6)

Our final observation was made when we parked near the cork trees and examined the very thick old cork bark. Bill Murphy then expressed our thanks to John for his leadership for the day and the sharing of his knowledge with us. Of course there were others who also shared their knowledge and experience, including Bill himself.

We made our way out of the reserve via a few farm gates and eventually passed

Mt. Beckworth Scenic Reserve Plant List - Some of the plants noted, Oct 5, 2008			
East gate area		Manna Gums Picnic area	,
Pinus radiata	Monterey Pine	Acacia longifolia	Sydney golden Wattle
Bursaria spinosa	Sweet Bursaria	Diuris lanceolata	Golden Moths
Acacia paradoxa	Hedge Wattle	Leptospermum continentale	Prickly Teatree
Glossodia major	Waxlip Orchid	Acacia laracillata	•
Drosera glanduligera	Scarlet Sundew	Xanthorrhoea minor subsp. lutea	Small Grass-tree
Acacia mearnsii	Black Wattle	Dianella laevis	Pale Flax Lily
Eucalyptus gonio- calyx	Long-leaf Box	Wurmbea dioica subsp. dioica	Early Nancy
Hydrocotyle laxiflora	Stinking Pennywort	Chamaescilla corymbosa	Blue Stars
Caladenia phaeocla- via	Brown-clubbed Spider	Wurmbea dioica subsp. dioica	Early Nancy
Chamaescilla co- rymbosa	Blue Stars	Hypoxis glabella var/ glabella	Star Grass
Thysanotus paterso- Eucalyptus melliodo-		Eucalyptus Acacia mearnsii	Roughbarked Manna Gum Black Wattle
<i>r</i> a	Yellow Box	0.00	
		Stylidium inundatum	Hundreds and Thousands
The Dam Area		Chamaescilla corymbosa	Blue Stars
Thelymitra antennif- lera	Rabbit Ears	Diuris lanceolata	Golden Moths
Wahlenbergia stricta subsp. stricta	Tall Bluebell	Themeda triandra	Kangaroo Grass
Drosera peltata subsp. auriculata	Tall Sundew	Acaena echinata	Sheep's Burr
Pterostylis nutans	Nodding Greenhood	Drosera peltata subsp. pel- tata	Pale Sundew
Kennedia prostrata	Running Postman		
Disseis as a selfer a	Language Constraint	Eucalyptus ovata	Swamp Gum
Diuris pardina	Leopard Orchid	Stylidium inundatum	Hundreds and Thousands
Tetratheca ciliata	Pink Bells	Hypericum	St John's Wort
Calochilus robert- sonii	Purple Beard Orchid	Triptilodiscus pygmaeus	Common Sunray
Gonocarpus tetragynus	Common Raspwort	Chamaescilla corymbosa	Blue Stars
Pimelea humilis	Common Rice-flower	Caladenia carnea	Pink Fingers
Brachyloma daph- noides	Daphne Heath	Cheilanthes austrotenuifolia	Green Rock Fern
Allocasuarina vertic- illata	Drooping Sheoak	Oxalis perennans	Yellow Wood-sorrel
		Brachyloma daphnoides	Daphne Heath
		Cymbonotus preissiana	Austral Bear's Ears
		Exocarpos cupressiformis	Cherry Ballart
		Bursaria spinosa	Sweet Bursaria
		Eucalyptus melliodora	Yellow Box
		Banksia marginata	Silver Banksia
		Leucopogon virgatus var. virgatus	Common Beard Heath
		Diuris pardina	Leopard Orchid

through Coghills Creek area where we viewed wetlands with little water in them or birds about them.

Fran Hanrahan

FIELD NATURALISTS CLUB OF BALLARAT INCORPORATED No. A0014919P ABN 13 150 403 135 Minutes of the General Meeting 3rd October 2008.

Opening and Apologies.

The President, Peter Dalman, opened the meeting and welcomed 23 members and visitors.

Apologies were received from Nina Netherway, Zelda Martin, Lyndsay and Lorraine Fink, Val Hocking, Dulcie Brooke, Maureen Christie, Denis and Elisabeth Thurgood

The apologies were accepted on the motion of Carol Hall, seconded Peter Billing.

Minutes of previous meeting were summarised in the Ballarat Naturalist and tabled.

Accepted on the motion of Bill Murphy, seconded: Greg Binns.

Business Arising from previous minutes:

nil.

Correspondence.

IN:

- Geelong FNC: Geelong Naturalist, September 2008.
- FNCV: Field Nats News, October 2008; Victorian Naturalist, October 2008.
- Bendigo FNC: Whirrakee, October 2008.
- Castlemaine Field Naturalists Club: Castlemaine Naturalist, September & October 2008.
- Environment Victoria: Green Action News, Spring 2008.
- RHSV: Gardeners Gazette. Spring 2008.
- Trust for Nature: Conservation Bulletin, September 2008.
- Bush Heritage Australia: Bush Heritage News, Spring 2008.
- Bendigo Bank: Statement.
- Irene Hooper: Apology for Stella Bedggood Memorial Lecture.

Edwin Bedggood, Kevin Andrews: Acceptance for Stella Bedggood Memorial Lecture.

Field Reports

- John Mildren: *Acacia aculeatissima* with bright yellow flowers at Linton. Prostrate plants spreading to a width of 2 metres.
- Chris Baulch: *Acacia pycnantha* seen flowering in early August along rail line in Werribee Gorge State Park. The plants did not flower in 2007, was this due to drought?
- Bill Murphy recalled that 40 years ago Jim Willis spoke at the club and said that in Central Australia plants shed leaves and boughs to survive drought.
- Carol Hall: The new terminal at Singapore Airport has a walk through butterfly garden with tropical plants, fresh fruit to feed butterflies and a pupae incubator.
- Fran Hanrahan: Ripon Street Croquet Club has a rabbit problem under and around the club house.
- Greg Binns: Mount Beckworth Birds seen included Scarlet Robin, Rufous Whistler and White-throated Treecreeper. Waxlip, Golden Moth and Rabbitears Orchid flowering. Slatey Creek Spring flowering of *Hardenbergia*, Early Nancy, Narrow-leaf Bitter-pea, and Sundew beginning.
- Peter Billing: Several clutches of cygnets at Lake Wendouree.
- John Gregurke: Lake Wendouree 20 Sharp-tailed Sandpiper, 15 Red-kneed Dotterel, 2 Black-fronted Dotterel, and a flock of Black-winged Stilt on mud flat near Windmill Drive. One Swan banded at Albert Park Lake has arrived at Lake Wendouree. At Basalt an upright form of *Acacia aculeatissima* has plants about knee high.

Excursion Arrangements:

Sunday 5 October 2008 to Mt Beckworth. Leaving at 9.30 am from Ballarat Horticulture Centre. Leader John Gregurke.

Mid-month excursion: 9.30am Tuesday 7 October to Haddon for Wattle photography.

Syllabus Item: Tina Bell "Use and History of School of Forestry Herbarium". Tina told us that the herbarium contains specimens collected by many well know botanists including Baron von Mueller and Jim Willis. She is researching the historical information behind the collectors and collection. Peter Dalman thanked Tina and presented her with a gift.

Supper

CALENDAR 2008

November

Fri 7
 Stella Bedggood Memorial Lecture
Neville Walsh, Victorian Government Botanist.
Threatened Plants in Victoria—where we are and how we have
progressed in looking after them.
 Sat 8
 Excursion—Bamganie—the Cameron property—Greg Binns
Members can meet at the Horticultural Society at 9.30am or at
Buninyong, on the north side near the UFS Dispensary.
 Wed 19
 Mid month excursion—Haddon Common and Hillcrest Nature
Reserve—full day
 Tues 25
 Committee meeting at Les Hanrahan's, Ballan

December

Fri 5 Dr Fran Hanrahan—Aspects of the natural history of Malawi.

Sun 7 Bungal State Forest—Elspeth Swan & Paul Norquay, Club

Members

NOTE—Excursion Departure place is now the Ballarat Horticultural Centre, cnr. Gregory and Gillies Sts. (Our Friday meeting place)

Committee

Ms Nina Netherway (editor).....

Correspondence: PO Box 328W, Ballarat West, 3350

Email:

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.

A monthly publication of the Field Naturalists' Club of Ballarat Inc. Incorporation # A0014919P ABN 13 150 403 135