

ARTICLES FROM THE LAUNCESTON NATURALIST
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AUGUST 5 - DEAN HEINZE - MOUNTAIN PYGMY POSSUM, VICTORIA

A wonderful talk was given by Dean Heinze of DPIW, substituting for Matthew Pauza who was unable to attend. His subject the ecology and conservation of the amazing Mountain Pygmy Possum (*Burramys parvus*) found only in and restricted to a few alpine areas around Mt Hotham and Mt Buller in Victoria, where they inhabit the boulder fields and in a limited area of Mt. Kosciuszko, NSW. The population on Mt Buller has been only recently discovered.

The Mountain Pygmy Possum weighs 40-80 grams depending on the time of the year and lives up to 12 years - hibernation is thought to play a part in their longevity. They hibernate throughout winter utilising fat already laid down on their bodies and emerge about October. Breeding occurs once a year and four young per litter are produced. Males leave their home territories to visit the females to mate, after which the females force the males out of their home area. The two sexes are segregated and live in different areas of the boulder fields.

They are omnivorous and feed on bogong moths, seeds, berries and other fruits. Females live in a resource rich area, while males inhabit less favourable sites lower down the slopes. The flight of the bogong moth creates an important source of food. The moths go into the caves in the boulder fields, carpeting the floor in their thousands and are consumed by the possums, as well as other animals. Mountain Plum Pine (*Podocarpus lawrencei*) produces red enlarged leaf scales that are full of goodness and this is a favourite food of the possums. To date cached seeds have not been found. Trapping, ear tagging and study is conducted regularly for 3-5 days each spring and radio tracking devices are also employed in November-December and again in February-March to keep track of them.

Fierce fires in 2003 burnt out a major part of the alpine area with 40-60% of the pygmy possum's habitat being burnt. To add to the problem more fires in the area followed in 2006. Dean said that the wild population was down probably to less than 1500 animals following the fires. However, good rainfall and abundance of food leads to population explosions and the annual variation in populations can be high. As well as large fires, animal predation creates major threats to their safety and survival. Predator control is an ongoing necessity, especially of feral cats. The opinion was expressed that if foxes were exterminated, the build up of the cat population would be catastrophic.

Habitat restoration has been undertaken in various areas. For instance, tunnels have been built under the road at the resort to enable access for mating without the animals being subject to annihilation by traffic. At Mt Buller the possums have a much larger home range than at Mt Hotham where there is considerable housing development at the ski resort.

There is a captive breeding colony at Healesville in Victoria using pygmy possums trapped from Mt Buller. Loss of genetic diversity leads to the need to introduce new genes into the population. It is hoped that these marvellous little animals continue to thrive. Marion Simmons

AUGUST 10 - FIELD TRIP TO WARRAWEE FOREST RESERVE

Eight members headed to Latrobe early on an overcast rainy morning to hopefully see some platypus (*Ornithorhynchus anatinus*) at the Warrawee Forest Reserve.

On entering the Reserve we walked to the Mersey River edge to look for platypus and we were not

disappointed seeing two feeding within minutes of exiting the forest lining the river. We continued along the river track in light rain toward the Reserve picnic area and saw many more platypuses. In the pond at the picnic area there appeared to be only one platypus which spent quite long periods floating on the surface.

Following a late morning tea, members headed for the Forest Circuit Walk at the far end of the Reserve. The hour long walk started with a stroll along the river and then proceeding up into the hills above the picnic area, and in the usual Field Nats style took twice as long to complete as was suggested on the information board. The rain continued and a late lunch was eaten under a shelter on the pond boardwalk where the platypus was still feeding.

Around 3 pm we headed back to Latrobe with the sun emerging for the first time during the day. We enjoyed a coffee and chat at a local eatery, then headed for home following a successful outing in less than perfect conditions.

Birds at Warrawee Forest Reserve

Green Rosella (*Platycercus caledonicus*)
Chestnut Teal (*Anas castanea*)
Grebe

Superb Fairy Wren (*Malurus cyaneus*)
Grey Shrike-thrush (*Colluricincla harmonica*)
Grey Fantail (*Rhipidura fuliginosa*)

Flora along river and in picnic area

Dogwood (*Pomaderris spp.*)
Silver wattle (*Acacia dealbata*)
Prickly Box (*Bursaria spinosa*)
Mother Shield-fern (*Polystichum proliferum*)
Soft Tree-fern (*Dicksonia Antarctica*)
Musk Daisybush (*Olearia argophylla*)
Forest Flaxlily (*Dianella tasmanica*)
Earth Star (*Geastrum indicum*)
Guitar Plant (*Lomatia tinctoria*)
Sagg (*Lomandra longifolia*)
Fishbone Fern (*Blechnum nudum*)
Pimelea sp.
Ruddy Groundfern (*Hypolepis rugosula*)

Forest Daisybush (*Olearia lirata*)
Blackwood (*Acacia melanoxylon*)
Bracken (*Pteridium esculentum*)
Satinwood (*Nematolepis sp.*)
Ribbon Gum (*Eucalyptus viminalis*)
Silky Goldentip (*Goodia lotifolia*)
Common Native-cherry (*Exocarpos cupressiformis*)
Maidenhair Fern (*Adiantum sp.*)
Pinkwood (*Beyeria viscosa*)
Dollybush (*Cassinia aculeata*)
Prickly Starwort (*Stilleria pungens*)
Native Currant (*Coprosma quadrifida*)
Necklace Fern (*Asplenium flabellifolium*)

Flora on Forest Circuit Walk

South Esk Heath (*Epacris exserta*)
Hard Waterfern (*Blechnum wattsii*)
Bird Orchid (*Chiloglottis sp.*)
Mountain Pepper (*Tasmannia lanceolata*)
Nettle (*Urtica incisa*)
Mountain Correa (*Correa lawrenceana*)
Slender Treefern (*Cyathea cunninghamii*)
Bearded Heath (*Leucopogon sp.*)
Small Gnat-orchid (*Cystostylis reniformis*)
Helmet Orchid (*Corybus sp.*)
Heartleaf Bushpea (*Pultenaea daphnoides*)
Filmyfern (*Hymenophyllum sp.*)

Maroonhood (*Pterostylis pedunculata*)
Prickly Bottlebrush (*Callistemon viridiflorus*)
White Elderberry (*Sambucus gaudichaudana*)
Mayfly Orchid (*Nemacianthus caudatus*)
Native Olive (*Notelaea ligustrina*)
Mountain Clematis (*Clematis aristata*)
Rough Treefern (*Cyathea australis*)
Wood Rush (*Luzula sp.*)
Nodding Greenhoods (*Pterostylis nutans*)
Batwing Fern (*Histiopteris incisa*)
Black Peppermint (*Eucalyptus amygdalina*)
Tall Sundew (*Drosera peltata ssp. Auriculata*)

SEPTEMBER 2 - LOUISE MENDEL PRIVATE FOREST CONSERVATION

Dr Louise Mendel from Private Land Conservation at DPIW gave us an overview of the different mechanisms that can be employed to conserve areas of bushland or rare plant communities on private

land. She told us that there are more than 400 conservation reserves in place in Tasmania and that most of them are covered by a covenant in perpetuity.

The Forest Conservation Fund is a programme that follows on from the previous one, under which most of Skemps was covenanted. This programme targeted old growth and under-reserved forest communities on private land. Under the latest programme, private land owners are supported through conservation management agreements, voluntary covenants and on-going incentives to manage and protect threatened non-forest vegetation. This includes priority grasslands, heath and scrublands, wetlands and alpine heaths. As a separate component of this programme, karst forest in the Mole Creek area is being targeted, with over 480 hectares being secured through purchase of land and agreements, with more under negotiation.

Another programme is the Revolving Fund that is managed by Tasmanian Land Conservancy, where properties with important conservation values are bought, covenanted, then sold on to individuals or groups to manage. The first of these agreements are at present being signed.

Land for Wildlife is a voluntary programme with 620 properties covering 56,000 ha. registered to protect natural values on the properties.

A map detailing the different areas under reserve was shown and although these areas look like a lot of small dots on the map, they are significant as they reserve areas scattered over a large area of the State, particularly in the Midlands where important remnant native grasslands still exist.

Monitoring of the various schemes and their management plans is left to a very small staff. Apart from Dr. Mendel, there is one stewardship officer located in Hobart and another in Launceston Prospect Office. Their role is to offer support and advice to landholders for on-going management ensuring that natural values and biodiversity are safeguarded while, in some cases, still leaving the owners free to continue to use their land productively as previously. Marion Simmons

SEPTEMBER 6 - FIELD TRIP TO 'BENHAM' FINGAL VALLEY

Eighteen LFNC members and a friend visited "Benham", near Avoca in the Fingal Valley. Our host, Robert O'Connor, took over management of the property from his father in 2003. Robert represents the seventh generation of the O'Connor family at "Benham" since his 4 greats-grandfather, Roderic O'Connor, bought the first part of its land in 1828. With some later purchases added, the current property comprises about 19,500 hectares (c.48,000 acres)

For most of its history "Benham" has concentrated on grazing, with both sheep and cattle. During the 20th century it was renowned for its superfine wool which set a world record price per pound in 1951. Now irrigation and cropping occur as well as the traditional work with animals. Wheat, triticale and canola are included in a rotation of the crops grown.

What began as a preliminary talk by Robert developed into a longer discussion, held in sunshine outside his office. Here we were shown a carton of "Pure Canola Oil" with the rest of its labelling in Japanese. "Benham" and a few other growers of non-genetically-modified canola have formed a company which sends its canola seeds to Japan where they are pressed to produce this oil.

During the 21st century emphasis on environmental matters has increased. At present there are no formal covenants on "Benham" but the O'Connor family has chosen private reserves to protect significant plants. A check for threatened species has identified stands of plants which are rare elsewhere, eg. South Esk Pine, *Callitris oblonga* ; Midlands Wattle, *Acacia axillaris* ; and Swamp Peppermint, *Eucalyptus rodwayi*.

About 60% of “Benham” is still hilly, native bush country. However, on its lower, farmed areas aged remnant eucalypts are dying now. Robert has developed linear plantations of young, local trees, eg along the boundary with the Esk Highway.

Our group looked at the plantings beside the main access road into “Benham”. The species placed here are Cabbage Gum, *Eucalyptus pauciflora* ; White Gum, *E. Viminalis* ; Silver Wattle, *Acacia dealbata* and South Esk Pine. The seeds used were collected on the property, with the help and advice from Biz and Lindsay Nicolson, the parents of Robert’s wife Hanna. As well as replacing lost trees these plantations will provide corridors for native animals.

The morning visit to “Benham” gave our group a good appreciation of an historic property which is adopting new ideas and opportunities while still continuing its grazing traditions. Thank you to Robert O’Connor for sharing his information with us.

Lunch was eaten beside the St Pauls River, near its junction with the South Esk. Some carloads planned to call at one or two reserves, on the way home. My car stopped at the Conara Flora Park.
Alison Green

SEPTEMBER 20 – PROPAGATION DAY WITH UNDERSTOREY NETWORK

A day to remember! The weather was absolutely the worst it could have been with a biting, blustery and at times howling wind, heavy rain and hail at different times during the day, with occasional bursts of sunshine. We were disappointed that some members did not make it as it was a terrific session with much being learnt from our tutors.

In spite of the weather we were all cosy inside with the fires burning brightly. The entire propagation session was held indoors.

Ruth Mollison and Kris Schaffer were our tutors. Ruth introduced the session instructing us on a simple mix for seed growing, then giving us information on different seeds and how to collect them. Dried cones of *Banksia marginata*, silver banksia, were handed to members who had to locate and extract the seeds from between the hard petitions in the seedcase. These are often mistaken for seeds. We successfully used tweezers for that job.

Kris took over after a break with a short powerpoint presentation and then demonstrated how to deal with different cuttings and the appropriate cutting mix to use. This consisted of fine matured pine bark and river sand. She had on hand masses of cutting material and she showed us how to prepare cuttings and the plant hormone to use. She demonstrated how to take leaf cuttings too. Members were all involved in hands-on activities of planting seeds, preparing and planting cuttings and potting-on small native plants provided, that they were given to take home and grow on.

After a most successful and enjoyable day, our tutors were thanked with acclamation.

Marion Simmons