ARTICLES FROM THE LAUNCESTON NATURALIST VOLUME XLII No 1 October/November 2008

5 OCTOBER - BOOBYALLA EUCALYPTUS OVATA WALK

13 members left from the Windmill Hill car park on an overcast day heading for the Boobyalla River to meet Mike Douglas of the NE Field Naturalists for a look at the Eucalyptus Ovata reserve. There was a little rain getting there and it was a bit cool while we waited to start, but the walk soon warmed us up. Mike explained that many parts of the north east were under threat from proposed irrigation dams, including the reserve where we were to walk.

Our field trip proper started along a 4WD road beside the river and there was also a water race first used for tin mining and still working because it is used for irrigation. Mike set too fast a pace for LFNC members who soon reigned him in especially along the early part of the walk which was light forest and easy going firm ground which probably appeared uninspiring. That was soon to change.

After crossing the river the next section of the walk was heavy going through a swampy area of Coast paperbark (*Melaleuca ericafolia*). Mike explained that he cut the track during a dry summer and the winter rains had left much of this part very wet. We came out of this heavily treed area to a grassy clearing just in time for lunch. Mike stated that it had been used to run stock and where we stopped for lunch there was an old agricultural stock feeder. This provided some seating and a resting place for food and drinks.

At the difficult return crossing of the river, an alternative was suggested and those who chose this were treated to an unusual site. A lichen covered rock had a forest of Maroonhood orchids (*Pterostylis pedunculata*) growing over it. On the return journey along the river we discovered that we had missed another rock, just off the track, also covered with Maroonhoods and that Tasmania's only rock orchid, *Dockrillia striolata*, was also growing on it.

Areas of this wonderful walk include Blackwood (*Acacia melanoxylon*) with Dogwood (*Pomaderris apetala*), Black gum (*E.ovata*) and Stringybark (*E.obliqua*) growing together, an area of *E.ovata* with Scented paperbark (*Melaleuca squarrosa*) as the understorey and a section of button grass plains.

Many thanks from the LFNC for the time Mike spent with us and for his walk and talk and we also hope the residents of the north east appreciates the effort he has put into highlighting and conserving this area. Noel J Manning

12 OCTOBER - FIELD TRIP - WINIFRED CURTIS RESERVE

11 members and 2 visitors headed to Scamander to visit the Winifred Curtis Reserve. We regrouped at Scamander Beach for morning tea where we saw the following birds:

Little black cormorant (Phalacrocorax sulcirostris) Australian pelican (Pelecanus conspicillatus) Silver gull (Larus novaehollandiae) Tern (Sterna sp.) Grey fantail (Rhipidura fuliginosa) Little pied cormorant (Phalacrocorax melanoleucos) Pacific gull (Larus pacificus) Welcome swallow (Hirundo neoxena) Pied oystercatcher (Haematopus longirostris)

Last November club members who participated in the Federation Get-together visited the Reserve to look at plants slowly returning to life following the devastating fires of December 2006. Today the Reserve was a picture. The blackened sandy soil of last year was now covered by grasses, wildflowers, shrubs and tree regrowth. We were pleased to see the *Allocasuarinas* growing in many areas around the Reserve, as these were thought unlikely to return. We spent a couple of hours before and after lunch happily identifying and photographing the many species on display, before heading back to Launceston. Members recorded the following plants, orchids, birds and lizard during the visit.

TREES, SHRUBS AND WILDFLOWERS

Spreading wattle (Acacia genistifolia) Sunshine wattle (Acacia terminalis) Necklace sheoak (Allocasuarina monilifera) Necklace fern (Asplenium flabellifolium) Milkmaids (Burchardia umbellata) Common correa (Correa reflexa) Heath grass (Danthonia decumbens) Smooth parrotpea (Dillwynia glaberrima) Common heath (Epacris impressa) Common native-cherry (Exocarpos cupressiformis) Gahnia sp. Trailing native-primrose (Goodenia lanata) Spreading guineaflower (Hibbertia procumbens) Silky guineaflower (Hibbertia sericea) Running postman (Kennedia prostrata) Leucopogon sp. Monotoca sp. Daisybush (Olearia sp.) Twiggy waxflower (Philotheca virgata) Handsome flatpea (Platylobium formosum) Sedge sp. Kangaroo Apple (Solanum laciniatum) Hairy pinkbells (Tetratheca pilosa subsp. pilosa) Kangaroo grass (Themeda triandra)

ORCHIDS

Caladenia sp. Tiny fingers (Caladenia pusilla) Gnat orchid (Cyrtostylis reniformis) Waxlip orchid (Glossodia major) Tiny sun-orchid (Thelymitra carnea)

BIRDS

Yellow wattlebird (Anthochaera paradoxa) Grey shrike-thrush (Colluricincla harmonica) White-faced heron (Egretta novaehollandiae) White-bellied sea-eagle (Haliaeetus leucogaster) Green Rosella (Platycercus caledonicus)

LIZARD

Blotched blue-tongue lizard (Tiliqua nigrolutea)

Redstem wattle (Acacia mvrtifolia) Prickly moses (Acacia verticillata subsp; verticillata) Golden pea (Aotus ericoides) Silver banksia (Banksia marginata) Blue lovecreeper (Comesperma volubile) Blue dampiera (Dampiera stricta) Grey parrotpea (Dillwynia cinerascens) Dwarf sundew (Drosera pygmaea) Rosy heathmyrtle (Eurvomyrtus ramosissima subsp. ramosissima) Common wedgepea (Gompholobium huegelii) Prostrate guineaflower (Hibbertia prostrata) Erect guineaflower (Hibbertia riparia) Twiggy guineaflower (*Hibbertia virgata*) Teatree (Leptospermum scoparium var.) Scented paperbark (Melaleuca squarrosa) Sagg (Lomandra longifolia) Short purpleflag (Patersonia fragilis) Riceflower (Pimelea linifolia sp.) Glasswort (Sarcocornia sp.) Senecio sp. Triggerplant (Stylidium sp.) Tufted lily (Thelionema caespitosum) Southern grasstree (Xanthorrhoea australis)

Dusky fingers (*Caladenia fuscata*) Flying duck-orchid (*Caleana major*) Autumn orchid (*Eriochilus cucullatus*) Sun-Orchid (*Thelymitra sp.*)

Dusky woodswallow (Artamus cyanopterus) Grey butcher bird (Cracticus torquatus) Brown falcon (Falco berigora) Australian pelican (Pelecanus conspicillatus)

17 - 19 OCTOBER - FEDERATION WEEKEND AT WEYMOUTH

10 members attended the weekend get-together at the Salvation Army camp in Weymouth, meeting with representatives from King Island, Central North, Burnie, North East and Tasmanian Field Naturalists Clubs. Sue Woinarski of the Tasmanian Herpetological Society had organised the event.

After settling into our bunkhouses and organising evening meals, geologist and local shack owner Henry Shannon gave a talk on the geology of the Weymouth and Tam-o-Shanter areas. Our field trip in the morning was to the beaches of both towns and Henry's photographs illustrated the different rock formations that we would see. Following his talk, Henry identified a selection of rocks that Sue had collected from Weymouth Beach.

On Saturday morning we walked to Weymouth Beach with Henry, joined by additional members from both the North East and Launceston FN Clubs who had arrived for the day's activities. We spent a couple of hours on Weymouth beach, Henry pointing out the many changes in the rocks.

Following lunch three members of the Herpetological Society (Ian, Jane and Darron) held a live reptile display featuring Tasmanian and mainland snakes (safe in an enclosure); demonstrated first aid and talked about survival following a snake bite. With the warmer weather upon us, this was a timely reminder that we must be prepared in the event that we are unlucky enough to be bitten whilst in the bush. There was also a display of some illegally imported reptiles (a Storrs monitor,

bearded dragon and a carpet python) which are kept for educational purposes and a blue-tongued lizard, she-oak skink and eastern long-neck turtle. Many had their photo taken with a rather large carpet python curled around their shoulders.

On the Saturday evening we all enjoyed a meal at the Tam-o-Shanter Golf Club, which was followed by another talk back at the camp by Henry Shannon. He showed more photographs, this time of rock formations at Tam-o-Shanter Beach, which we were unable to visit earlier in the day, as the tide had risen. This was followed by the powerpoint presentation "Caving in Tasmania" which Henry had made to enthuse new members to the caving fraternity; the superb photographs were from parts of the caves in the Mole Creek area that were not open to the general public. Sue thanked Henry on behalf of everyone for his leadership and interesting presentations.

On Sunday morning we were all up bright and early to pack up. We then visited a bush property in Bellingham that had been burnt twice during the fires in January this year. There we were met by local Field Nats members and together looked for evidence of regenerating plants. We were amazed at the variety of plants found in a very short period of time.

An enjoyable weekend: many thanks to Sue for organising the event. For many, leaving Weymouth ended on a sad note, with an ambulance being called for our dear friend Ruth Upson; who we were later told had suffered a stroke. Thank you to the people who assisted Ruth until the ambulance arrived.

The following birds and plants were identified during the weekend.

Birds seen in Weymouth area during weekend

Fan-tailed cuckoo (Cacomantis flabelliformis) Shining bronze-cuckoo (Chrysococcyx lucidus) Black-faced cuckoo-shrike (Coracina novaehollandiae) Grey butcher bird (Cracticus torquatus) Sooty oystercatcher (Haematopus fuliginosus) White-bellied sea-eagle (Haliaeetus leucogaster) Silver gull (Larus novaehollandiae) Australasian gannet (Morus serrator) Australian pelican (Pelecanus conspicillatus) Eastern rosella (Platycercus eximius) Grey currawong (Strepera versicolor)

Plants in Weymouth camp area

Coast wattle (Acacia longifolia subsp. sophorae) Allocasuarina sp. Milkmaids (Burchardia umbellata) Pale sundew (Drosera peltata subsp. peltata) Coast paperbark (Melaleuca ericifolia)

Birds and plants at Bellingham property

Wedge-tailed eagle (Aquila audax) Pallid cuckoo (Cuculus pallidus) Yellow-tailed black-cockatoo (Calyptorhynchus funereus)

Redstem wattle (Acacia myrtifolia) Milkmaids (Burchardia umbellata) Tall sundew (Drosera peltata subsp. auriculata) Trailing native-primrose (Goodenia lanata) Running postman (Kennedia prostrata) Short purpleflag (Patersonia fragilis) Dwarf riceflower (Pimelea humilis) Kangaroo apple (Solanum laciniatum) Southern grasstree (Xanthorrhoea australis)

Small mosquito-orchid (Acianthus pusillus) Tailed spider-orchid (Caladenia caudata) Patersons spider-orchid (Caladenia patersonii) Corybas sp. Eastern wallflower orchid (Diuris orientis)

Autumn orchid (Eriochilus cucullatus) Hares ears (Leptoceras menziesii) Pterostylis sp. Horsfield's bronze-cuckoo (Chrysococcyx basalis) Grey shrike-thrush (Colluricincla harmonica) Pallid cuckoo (Cuculus pallidus) Laughing kookaburra (Dacelo novaeguineae) Pied oystercatcher (Haematopus longirostris) Welcome swallow (Hirundo neoxena) Pacific gull (Larus pacificus) Striated pardalote (Pardalotus striatus) Green rosella (Platycercus caledonicus) Grey fantail (Rhipidura fuliginosa) Common starling (Sturnus vulgaris)

Prickly moses (Acacia verticillata) Bossiaea sp. Blue stars (Chamaescilla corymbosa var. corymbosa) Coast beardheath (Leucopogon parviflorus) Early nancy (Wurmbea dioica subsp. dioica)

Fan-tailed cuckoo (Cacomantis flabelliformis) Green rosella (Platycercus caledonicus)

Sweet wattle (Acacia suaveolens) Billybuttons (Craspedia sp.) Black peppermint (Eucalyptus amygdalina) Spreading guineaflower (Hibbertia procumbens) Sagg (Lomandra longifolia) Long purpleflag (Patersonia occidentalis) Restio sp. Bluebell (Wahlenbergia sp.) Shiny grasstree (Xanthorrhoea bracteata)

Caladenia sp. Dusky fingers (Caladenia fuscata) Chiloglottis sp. Rosy hyacinth-orchid (Dipodium roseum) Tiger orchid (Diuris sulphurea) Waxlip orchid (Glossodia major) Tall leek-orchid (Prasophyllum elatum) Fire orchid (Pyrorchis nigricans) Twisted sun-orchid (*Thelymitra flexuosa*) Large-spotted sun-orchid (*Thelymitra juncifolia*) Slender sun-orchid (*Thelymitra pauciflora*) Spotted sun-orchid (*Thelymitra ixioides*) Plain sun-orchid (*Thelymitra nuda*) Pink sun-orchid (*Thelymitra rubra*)

4 NOVEMBER - MOTHS

At the meeting on 4 November 2008 a simple title, "Moths", introduced a wide-ranging talk by Dr Peter McQuillan. This was linked throughout with excellent colour illustrations.

Moths belong to the insect Order Lepidoptera which is characterised by wings covered with scales. These flattened, striated structures represent modified hairs. The nearest relations of Lepidoptera, the caddis flies (Order Trichoptera), have wings which are covered by hairs.

Two superfamilies of Lepidoptera, the Hesperioidea (skippers) and Papilionoidea, are commonly known as butterflies while the <u>many</u> others are moths. A popular thought is that butterflies are brightly coloured and diurnal while moths are visually dull and nocturnal. In fact there are many day-flying moths and some of these are colourful. Not all moths fly by night.

Dr McQuillan explained how moths have evolved in association with the gradual evolution of their food plants and animal predators. In the most primitive moths (Micropterygidae and related families) the day-flying adults have mandibles, i.e. jaws which bite and chew. Their ancestors existed before there were flowering plants so they feed on fern spores and (now) on pollen. Next there evolved moths adapted to feed on coniferous plants.

The arrival of flowering plants began a significant modification of mouth parts. Now an advanced moth (or a butterfly) has a proboscis which functions as a long tube for sucking up fluid, especially nectar from flowers. This proboscis is coiled when at rest.

A nocturnal habit gave moths protection from most birds but, as the evolution of mammals progressed, it made them vulnerable to bats. Now some moth species have tympanal organs, a pair of drum-like membranes which can detect the sonar signals emitted by bats. When danger is sensed the moth can alter its behaviour, e.g. fly erratically or drop to the ground. Thus the characters of moths have continued to evolve to adapt to changes in their environment.

Dr McQuillan has a special interest in Family Geometridae. This is the second largest family of moths world-wide. There are about 2000 species in Australia and 312 species known at present in Tasmania. The Geometridae are characterised by looper caterpillars.

A typical caterpillar (i.e. a lepidopteran larva) has three pairs of jointed legs on its thorax and up to five pairs of unjointed prolegs (extra walking appendages) on its abdomen. In a looper caterpillar the first three pairs of prolegs are absent. This leaves a big gap between the thoracic legs and the posterior prolegs so that the insect loops along like a leech. However, exceptions occur and some geometrid caterpillars have a full number of prolegs.

Relationships between moths and humans vary. The bogong moth, *Agrotis infusa*, was an important food for aborigines. In springtime adults still migrate in vast numbers, south-eastwards to the High Country of NSW and Victoria where they shelter from summer heat in caves and crevices. Larvae of species of Cossidae, from *Acacia* roots, and Hepialidae, from roots of eucalypts, are some of the insect "grubs" which are eaten.

Larvae of a moth from Argentina, *Cactoblastis cactorum*, which were released in Australia in 1926, controlled the prickly pear cactus which had become a serious pest in NSW and Queensland.

Conversely some moth species cause problems. The larvae of genus *Oncopera* burrow in soil and emerge at night to feed on nearby plants. Some of its species are pasture pests, called "corbie grubs". Caterpillars of several genera can defoliate eucalypt trees. These are just two examples of nuisance insects.

Overall, moths represent a great variety of shapes, colours and lifestyles. Some are experts in camouflage while some display bright colours to warn that they are toxic to eat.

Peter McQuillan's presentation has shown that moths are just as fascinating to study as the more popular minority of Lepidoptera, the butterflies. Alison Green

8 NOVEMBER - FIELD TRIP - TOWNSHIP LAGOON RESERVE, TUNBRIDGE

In Tunbridge, fourteen club members met the days leader, Dr Peter McQuillan, who travelled from Hobart. The group then drove to Township Lagoon, south-east of the town. The lagoon itself had water over about a quarter of its bed and it had been completely dry fairly recently. The land around it provides a reserve for Midland plants.

Dr McQuillan and helpers checked local invertebrate animals. Most of these were found under stones, scattered upon grassland bordering the lagoon. Then attention focussed on plants growing further uphill.

Invertebrates seen, and identified on site, included the following:-

INSECTS

 Moths - Scopula rubraria and Neritodes verrucata [Family Geometridae] Glyphipterix sp. [Glyphipterigidae] Helicoverpa punctigera [Noctuidae] and a species of Tortricidae
Beetles - Ladybird, Coccinella undecimpunctata Darkling beetles, Saragus costatus and Isopteron sp. Ground weevil, Cubicorhynchus sp.

Ants - Green-head ant, *Rhytidoponera metallica* Jack jumper, *Myrmecia pilosula*

Earwig, Labidura riparia

Cockroach, Platyzosteria sp.

Centipede - A species of Order Geophilomorpha

Spiders - Redback spider, *Latrodectus hasselti* Wolf spiders, *Lycosa sp.* and *Artoria sp.* European garden spider, *Dysdera crocata*

CRUSTACEANS

Slaters, Porcellio scaber and Eluma caelatum.

Beach millipedes and small, flat snails, both suspected of belonging to introduced species, were taken to Hobart to be identified.

Slaters (terrestrial isopod crustaceans) are my special interest. Three introduced European species are in Tasmania. I saw just one specimen of the very common *Porcellio scaber*, while there were plenty of the least common of the three, *Eluma caelatum*.

Township Lagoon used to be inhabited by the salt lake slater *Haloniscus searlei*. This species is secondarily aquatic. Descended from terrestrial isopods it lives in the saline water of inland sale lakes in Midland Tasmania and southern Victoria, SA and WA. I collected *H.searlei* from a well-filled Township Lagoon in 1989 but found none there is 1995, when little water remained. There was no evidence of *H. searlei* during the latest visit.

The morning of the excursion was fine but grey and windy. The group was very grateful when Geraldine Cameron unlocked a house which her family owns in Tunbridge. There we had shelter for lunch, followed by Dr McQuillan's review of the invertebrates which were found in the reserve.

Many thanks to Peter McQuillan for giving of his time and expertise to lead this successful field trip. In mid-afternoon we drove home in sunshine. Alison Green

Plants identified at the Reserve

Silver wattle (*Acacia dealbata*) Australian bugle (*Ajuga australis*) Golden bulbine-lily (*Bulbine bulbosa*) Common everlasting (*Chrysocephalum apiculatum*) Bindweed (*Convolvulus erubescens*) Spiky bitterpea (*Daviesia ulicifolia*) Buzzy (Acaena novae-zelandiae) Leafless bossia (Bossiaea riparia) Blue stars (Chamaescilla corymbosa)

Billybuttons (Craspedia sp.) Flaxlily (Dianella longifolia var. longifolia) Cranesbill (Geranium sp).Erect guineaflower (Hibbertia riparia)Scaly buttons (Leptorhynchos squamatus)Sedge (Lepidosperma concavum)Grassland paperdaisy (Leucochrysum albicans subsp. albicans var. tricolor)Tunbridge leek-orchid (Prasophyllum tunbridgense)Dwarf riceflower (Pimelea humilis)Tunbridge leek-orchid (Prasophyllum tunbridgense)Pussytails (Ptilotus spathulatus)Matted bushpea (Pultenaea pedunculata)Shiny swampmat (Selliera radicans)Sun-orchid (Thelymitra sp.)Kangaroo grass (Themeda triandra)Narrowleaf new-holland daisy (Vittadinia muelleri)Roundleaf wilsonia (Wilsonia rotundifolia)Sun-orchid (Prasophyllum tunbridgense)

Marion Simmons