



Pied Currawong, CBG. Photo Noel Young

Plume Moths - What are they?

From comments after the talk at our August meeting it appears that many in the audience had never heard of plume moths or have any idea what they are. We were all certainly enlightened after this talk! Our speaker, Donald Hobern is internationally recognised as a bioinformatics expert and was the inaugural director of Atlas of Living Australia. He is an amateur lepidopterist and vice-president of [Moths and Butterflies Australasia](#). His main area of interest and study is a distinctive group of small moths in the family *Pterophoridae*, commonly known as plume moths. This is a relatively understudied group of insects. There is only a handful of people who have studied them with the two leading experts being in Russia.

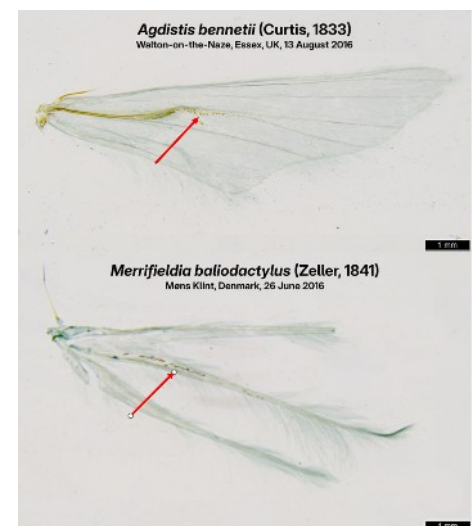
Plume moths occur globally with approximately 1700 species found everywhere except polar regions. In Australia there are about 53 known

species with about 16 species having been recorded in Victoria. These numbers will increase as more is learnt about the group and new species are described.

Plume moths are reasonably common in Victoria. They will come to a light in the evening so you are likely to see them on your window. They roll their wings when settled and usually hold them straight out from their body forming a distinctive 'T' shape. Their wingspan is 15-25mm. They will often settle with their two hind legs held high or along their body. The legs have long spines and sometimes clusters of scales at the joints.

Most, but not all, plume moths have longitudinal splits in their wings (1 in the forewing, 2 in the hindwing). The distinctive feature for the group is a row of venous scales on the underside of the wing. Beware of look-alikes which may also hold their wings almost in a 'T' but do not have the venous wing scales. These so-

called false plume moths are unrelated.



The unique characteristic shared by all plume moths, even those without splits in their wings, is the presence of rows of venous scales (red arrows added) along the veins on the underside of the wings.
Image: Donald Hobern, Wikimedia CC.

The Castlemaine Field Naturalists Club acknowledges the Dja Dja Wurrung community as the Traditional Owners and Custodians of the Country where we meet and study the natural environment. We pay our respects to their Elders, past, present and future.

Plume moth caterpillars are small. Of particular interest was *Buckleria paludum* whose caterpillars feed on sundews (*Drosera spp.*). Although not reported in Victoria, some of the host plants are found here so perhaps one to look out for.

Interestingly, Donald explained that three species of plume moth have been introduced to Australia in an attempt to control invasive plants.

Wheeleria spilodactylus was introduced to help control Horehound, *Marrubium vulgare*. This is now one of the commonest plume moths seen in Victoria with its distribution corresponding to that of its host plant.



Wheeleria spilodactylus, Horehound Plume Moth. Photo: Euan Moore

Further north, *Lantanophaga pusillidactylus* was introduced to help control Lantana. The caterpillars of this species burrow into the stems slowing plant growth.



Wheeleria spilodactylus, Horehound Plume Moth larva.

Photo: Enot Poluskuns / iNaturalist CC-BY-NC.

The third species, *Hellinsia balanotes* was introduced to help control Ragwort, *Jacobaea vulgaris*. This has been successful in NZ but less so in Australia, perhaps due to climatic differences and the target species being less abundant in Victoria.

In northern Australia, *Diacrotricha fasciola*, the Starfruit Plume Moth is, as its name suggests a pest of starfruit orchards. This species is found across South-east Asia. It is uncertain as to whether it is a native or has been accidentally introduced.

Donald then went on to talk about the species known to occur in Victoria. There were annotated photos of each species with distinguishing features described and pointed out. Each of these moths is quite distinctive so can be identified from a clear photo. You can view these on our [web site](#) by selecting 'Plume Moths' from the drop-down list under Fauna.

Finally, Donald discussed the taxonomic issues that have arisen with this group. In some cases, museum specimens have been incorrectly filed resulting in 'lost' knowledge about the species. This may also cause a species to be assigned another name creating confusion in the future. There were four examples of unnamed plume moths that are held in the National Insect Collection. These will require work to determine if they are a known species or will be named as a new species. There are likely to be other un-named species that have not yet been recognised. It is also possible that there are species known from outside Australia but have not yet been recorded here.

Load your photos of possible plume moths on iNaturalist to obtain a positive identification and extend our knowledge of their distribution. Every record adds to our knowledge and you never know, your record may be the first for an unknown species!

Euan Moore

SEANA in Castlemaine is fast approaching:

Fri 9th- Sun 11th October!

Your club is hosting this year's Spring meeting of the South East Australian Naturalists Association (SEANA) which involves a weekend of half-day excursions and two evening meals with guest speakers. By now we hope that many of you will have registered (closing date was 28th August) to enjoy these activities.

The organising committee would appreciate extra help with various tasks at the Campbells Creek Community Centre, our base for the weekend, including:

- Setting up the tables and chairs on Friday, and stacking them away on Sunday afternoon.
- Welcoming our visitors and assisting with the excursion registration activity from 3 pm on the Friday.
- Other tasks throughout the weekend such as checking toilets each morning, filling Phytoclean spray bottles for excursions, maintaining the self-serve tea and coffee area.

Can you help? Please contact:

Phil Hopley (0425768559) or Peter Turner (0439369709), munrodsi@iinet.net.au

ANZAC Hill excursion – 15 August 2026

Prepared by Lou Citroën and Carolyn Crowther

On 15 August, Castlemaine Field Naturalists gathered to explore ANZAC Hill near the centre of Maldon. This excursion was organised and led by Judy and Phil Hopley with expert assistance from Bev Phillips, Secretary of Maldon Urban Landcare Group (aka MULGA).

Mother Nature spoilt us with perfect sunny weather on the day.

ANZAC Hill sits at the foot of Mount Tarrengower (the mount's name derives from *Dharrang Guawa* in Dja Dja Wurrung language). Mount Tarrengower has a fascinating history of its own that long predates human occupation. Geologically, it is not of a volcanic nature, but referred to as *hornfels*; a hard, fine-grained metamorphic rock formed when hot magma bakes and alters surrounding sedimentary or igneous rocks without high pressure. It is about 375 million years old. [1]

For many thousands of years, the Jarra People of the Dja Dja Wurrung language group occupied a large area of central Victoria. The Liarga Balug, a clan of the Jarra tribe, lived in what is today's Maldon district. The plains, hills and valleys sustained those people and provided them with abundant food and materials to trade.

The Maldon District was colonised by European settlers during the late 1830s and 1840s. Pastoralist squatters took vast holdings of land for dry-land farming and, in the process, effectively denied the Indigenous people access to their water and hunting grounds. They were eventually dispossessed, moved to reserves, first at Hamilton's Crossing, then Franklinford and later Coranderrk and within a few decades only a small number were left in the area.

The large-scale pastoral operations were disrupted in the 1850s when

gold was discovered near Maldon with consequent destruction of much of the natural environment.

The journey from tumultuous 1850s gold-mining town, through boom times and decline took an unprecedented turn in the 1960s. Between 1964 and 1969 Maldon's historic 19th and early 20th century buildings and streetscapes were rediscovered, surveyed, and it was declared the first 'Notable Town' by the National Trust in 1966. The 60th anniversary of this achievement was celebrated this year. Once again Maldon was leading the way, this time as an example for the fledgling heritage conservation movement [2]

ANZAC Hill was renamed from Garfield's Hill in 1916 by the re-formed Maldon Progress Association who set out to improve the surroundings of Maldon devastated by mining though not officially opened until November of 1917.

Interestingly, the name Garfield's Hill was given in honour of James Garfield, the 20th President of the United States, following his assassination in 1881.

On ANZAC Hill, 21 acres of land, divided into three sections of planted trees, were planted in memory of Maldon pioneers, residents and soldiers. 'ANZAC Circle', in memory of Maldon soldiers killed in action during The Great War, was set with 32 Mahogany Gums (*Eucalyptus botryoides*) planted in a circle, and later doubled by a second circle of trees.

The choice of the non-endemic eucalypt was unfortunate, as all but one perished in the harsh rocky and dry terrain. The more hardy and local species, Yellow Gum (*Eucalyptus leucoxylon* subs. *pruinosa*) are now planted by MULGA as memorial trees with each white cross.

Since 2017, MULGA members have surveyed over 300 pre-1852 eucalypt trees in and around Maldon, including parts of the Maldon Historic Reserve. The objectives of this project are to obtain detailed records for original indigenous trees that were growing before 1852 (i.e. pre-European settlement) in Maldon and to achieve long-term protection for these trees under the Mt. Alexander Shire Council Planning Scheme, or an appropriate alternative scheme.

The species recorded are Grey Box (44%), Yellow Box (29%), Red Box (9%), Long-leaved Box (11%), Yellow Gum (7%) and 1 Red Stringybark. [3]

The dominant native eucalypts on the lower slopes and historic reserve areas of ANZAC Hill in Maldon include Grey Box (*Eucalyptus microcarpa*) and Long-leaved Box (*Eucalyptus gonicalyx*), all of which were visible on the day. The summit area also features commemorative plantings. The following table lists flora identified on the day. Of particular interest was a flowering Hopbush noticed and photographed by Euan Moore (see image). Bev also drew our attention to the last of the remaining original Mahogany Gum memorial trees in the outer circle.

Bird activity was brisk and no fewer than 22 species were observed (see tabulated sightings below). Notable amongst them was a beautiful Mistletoebird captured by Kerrie (see image).

This most interesting and enjoyable outing concluded with a customary gathering in the sun of the excursioners over a cuppa and shared nibbles to reflect on a fascinating place. We extend our grateful thanks to Judy, Phil and Bev for organising the outing.

References:

- 1 Golding B. and Willman C.- *Six Peaks Speak*
- 2 Maldon Museum & Archives Association
- 3 Bev Phillips, Secretary, MULGA

Flora and birds observed on ANZAC Hill excursion

Common name	Botanical name
Long-leaved Box	<i>Eucalyptus gonicalyx</i>
Grey Box	<i>Eucalyptus microcarpa</i>
Mahogany Gum	<i>Eucalyptus botryoides</i>
Yellow Gum	<i>Eucalyptus leucoxylon</i> subs. <i>pruinosa</i>
Hop Bush	<i>Dodonaea viscosa</i>
Dwarf Greenhood	<i>Pterostylis nana</i>

Common name	
Australian Magpie	Raven spp.
Brown-headed Honeyeater	Red Wattlebird
Corella spp.	Spotted Pardalote
Eastern Spinebill	Striated Thornbill
Fan-tailed Cuckoo	Superb Fairy-wren
Galah	Weebill
Grey Fantail	White-eared Honeyeater
Little Raven	White-naped Honeyeater
Mistletoebird	Yellow Thornbill
Musk Lorikeet	Yellow-faced Honeyeater
New Holland Honeyeater	Yellow-tufted Honeyeater



Above left to right:
ANZAC Hill memorial. Photo Jenny Rolland,
Bev introduces ANZAC Hill. Photo Lou Citroën,
Mahogany Gum. Photo Lou Citroën.

Left:
At the tunnel. Photo Kerrie Jennings.

Below left to right:
Dwarf Greenhood *Pterostylis nana*. Photo Lou Citroën,
Hop Bush *Dodonaea viscosa* in flower. Photo Euan Moore,
Mistletoebird. Photo Kerrie Jennings.



Phytophthora Monitoring

One of our best wildflower areas has been affected by Phytophthora which has the potential to kill or severely weaken many of our native plants including members of the Myrtaceae (Eucalypts, Melaleucas, etc), Fabaceae (pea flowers) and Proteaceae (Grevilleas, Hakeas, etc). DEECA & PV are embarking on a program to spray the affected area with a chemical (phosphite) that has been effective in reducing the impact of Phytophthora in WA, the Otway Ranges and near Nagambie.

The club has been asked to assist with monitoring the effectiveness of the spraying in our area. This will involve small groups visiting survey plots and recording the number and health of key species. The main requirements are a reasonable level of fitness, the ability to walk off-track for short distances and the desire to help protect our

forests. Training will be provided on how to identify the handful of key species, assess their health, navigate to the sites and to use relevant apps on your mobile phone.

The first round of surveys and training will probably be from 14th – 17th September with the exact dates dependent on weather conditions. There will be other rounds of monitoring later in the year or into next year with some sessions likely to be on weekends.

If you would like to be involved in the project (even if you are not available on the above dates) please email Euan at calamanthus5@bigpond.com with details of your availability and your phone number.

Euan Moore, President CFNC

Very old Eucalypts in Maldon

As part of the 60-year anniversary of Maldon becoming Australia's first Notable Town, Maldon Urban Landcare is celebrating Maldon's natural heritage. Join them on **Sunday 6th September, starting at 10am** to find out about some of the Eucalypts that have been growing since before European settlement. We will walk to approximately 40 pre-1852 Eucalypt trees at the Bill Woodfull Reserve, Maldon Primary School, Maldon Hospital, St Brigid's Catholic Church, and private properties. The estimated age

of the trees visited is between 185 and 540 years. Information will also be provided about how to identify the four species of Box trees that grow in the Maldon area.

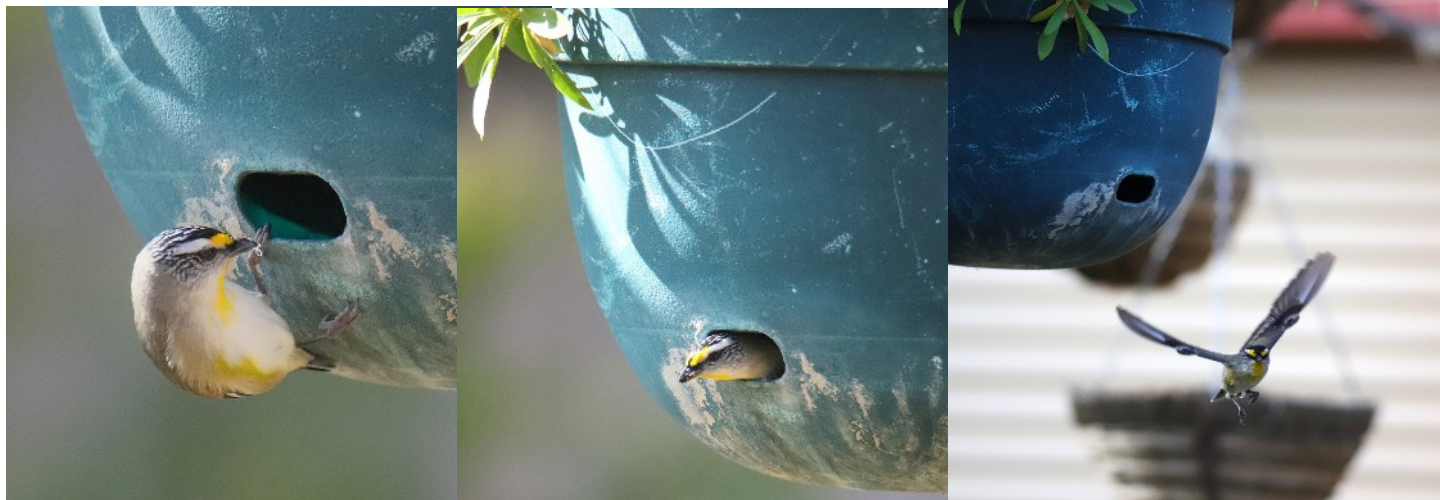
Walk details: Meet at the Rotunda in the Shire Gardens, High St Maldon (next to the Visitor Information Centre). Approx. 2-3km, along footpaths, roadsides, gravel tracks, one short, steepish hill, for 1.5-2 hours. The walk will be cancelled if it's raining steadily.

Observations

Lou Citroën

From about 29 July we've been observing the frenetic comings and goings of a pair of Striated Pardalotes visiting (presumably coming back to) the overflow outlet of one of our wicking hanging baskets. Last year I reported that we had Striated Pardalotes there trying to 'set up shop', but eventually abandoning it for reasons not understood. To accommodate them, I had at that time, drilled a hole in the bottom of the hanging pot so that, with rain, it would not fill up and drown them.

The seemingly abandoned 'basement apartment' is now, again a hive of activity, perhaps a bit early (although Pizzey indicates they breed between June and Feb), I hope they succeed this year in producing young before the heat of Summer.



Kerrie Jennings

A couple of photos taken after the rain (48mm - Sat night 8th Aug thru to Mon morn 10th Aug).



10/08 Rabbit up a tree - Eastville



10/08 Spiny Rice-flower *Pimelea spinescens* in flower – Moolort



Singing Honeyeater taken in the vicinity of Blue Hills near Baringhup, 7th August, 2026

Geraldine Harris

Large Striped Skink *Ctenotus robustus*
under the water pump. 10/8/26



Coming events in September

Monthly meeting: Friday 11th September, 7.30pm
Uniting Church Hall, Lyttleton St, Castlemaine

Speaker: Hannah Faraone, Federation University
"Birds and litter - using imagery to investigate bird-litter interactions"
Combined meeting with 2026 [Feathery Festival](#), Connecting Country, and Birdlife Castlemaine

Anthropogenic litter poses a significant global threat to birds for example by ingestion and entanglement. Hannah will tell us about her project to better understand bird-litter interactions through a citizen-science based image collection study. She found some unexpected interactions, revealing a broader range of interactions than previously anticipated. The observed patterns between interactions, bird species, and litter characteristics provide management organisations with the first step to developing targeted strategies to mitigate the risks of anthropogenic litter to birdlife.

Observations: Members and visitors are invited to share their interesting observations at the meeting. Please email any photos to illustrate your report as uncropped JPEG file(s) to Jill Williams (jilliwill33@gmail.com) by noon on the day of the meeting.

Excursion: Saturday 12th September, 1.30pm
"Proposed Loddon River Nature Trail, Guildford"
Leader: Bill Sampson

Guildford Upper-Loddon Landcare (GULL) has invited our club to undertake an excursion along their proposed Nature Trail on the Loddon River and the Big Tree, an ancient Bial (Red Gum) in Guildford. The purpose of the excursion is to harness our expertise in a survey of the flora and fauna to assist in promoting the walk and developing it in sympathy with its potential.

Bill will give us some background on the fauna that have been seen along this stretch of the Loddon including platypus and Galaxias. He has a good bird list already with several birds of prey that enjoy the thermals from the steep side of the nearby lookout. He will also point out the challenges e.g. weeds and future development of the local 'village'. The eventual plan is to extend the trail up the river and through Crown Land to the Guildford Lookout - thus providing the opportunity to establish a broader type of habitat and an important wildlife corridor. We look forward to exploring this wonderful environmental asset and adding to the knowledge of its natural values. GULL will kindly provide afternoon tea (including GF options) at the end of our walk, just bring your chair!

Meet: for car-pooling and **1.30pm** departure at the northern end of the car park, north of the Railway Goods Shed, Kennedy St. Castlemaine.

Or meet at 1.45pm near the Loddon River, at the far western end of Havelock Street, Guildford (i.e. at the opposite end of the road that leads up to the Guildford Lookout) ([Google Maps](#)).

Bring: water, snacks, **clean** sturdy shoes, chairs.

Wednesday Wildflower Wander: Sinclairs Lane, 23rd September, 4pm.

Join us for a late afternoon wander to enjoy a wonderful wildflower show in our local Box-Ironbark woodland. We should find a few orchid species and the locally rare *Grevillea micrantha* amongst other wildflowers.

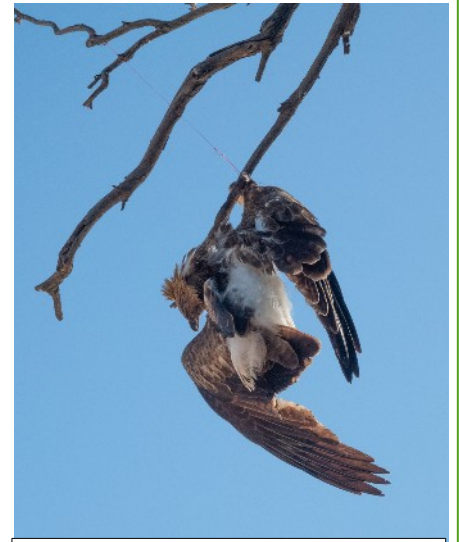
Leaders: Judy and Phil Hopley

Meet: in the car park north of the Railway Goods Shed in Kennedy St ready to car-pool and leave at 4 pm, returning by about 5.30 pm.

Or Meet at 4.15 pm at about 50 m south of the corner of Sinclairs Lane and Carpenters Lane, Walmer.

Bring: Clean, sturdy footwear, water, snack.

Please note: excursions may be altered or cancelled due to weather or other exceptional factors. Check our website the day before the excursion in case there is a change (www.castlemainefieldnaturalists.org.au).



Little Eagle tangled in fishing line
Photo Euan Moore



Loddon river Guildford. Photo W Sampson

Grevillea micrantha -
Photo Jenny Rolland





18/08 Pacific Black Ducks dabbling in the flooded lucerne paddock – Baringhup. Photo Kerrie Jennings

Program

Monthly meetings are returning to in-person at the Uniting Church Hall, Lyttleton St. after our three winter Zoom meetings.

Excursions are held on the Saturday following the monthly meeting and leave from the northern end of the car park north of the Railway Goods Shed, Kennedy St. at 1.30pm unless stated otherwise.

See **“Coming Events”** page for details on September activities.

Fri 11th September, 7.30pm

Meeting (Uniting Church Hall): “Birds and litter - using imagery to investigate bird-litter interactions”

Speaker: Hannah Faraone (Federation Uni)

Combined meeting with Birdlife Castlemaine District and Connecting Country Feathery Festival.

Sat 12th September, 1.30pm

Excursion: “Proposed Loddon River Nature Trail, Guildford”

Leader: Bill Sampson

Wed 23rd September, 4pm

Wednesday Wildflower Wander, Sinclairs Lane

Leaders: Judy and Phil Hopley

Fri 9th-11th October: SEANA Castlemaine!

Please note there is no general monthly meeting in October.

Fri 13th November, 7.30pm

Meeting (Uniting Church Hall): “Bioacoustics and other technologies for surveying our local wildlife”

Speaker: Lawrie Conole

Visitors are welcome at club activities

Castlemaine Field Naturalists Club Inc.

#A0003010B

castlemaine fieldnaturalists.org.au

castlemaine fnc@hotmail.com

PO Box 324, Castlemaine, 3450

Membership

Includes the monthly newsletter, Castlemaine Naturalist. (Membership forms on CFNC website)

Single \$35, Family \$50

Pensioner or student: Single \$25, Family \$30

Newsletter: Castlemaine Naturalist

Email items: newsletter.cfnc@gmail.com

October edition deadline: **25th September**

Committee

President:

Euan Moore (0407 519 091)

Vice-President: Peter Turner

Secretary: Cathrine Harboe-Ree

Treasurer: Geoff Harris

Committee:

Lou Citroën

Carolyn Crowther

Kerrie Jennings

Jenny Rolland

Jill Williams

Noel Young

Newsletter Editors: Noel Young, Jenny Rolland, Jill Williams

Program Coordinator:
Jenny Rolland

Newsletter Distributor:
Geraldine Harris

The Nodding Greenhood *Pterostylis nutans* is the emblem of the club. Design by Rita Mills.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club.