Angair Quarterly

Bringing you stories from the Anglesea, Aireys Inlet Society for the Protection of Flora and Fauna.



What's inside?

Spring and summer song and our avian visitors - 3 Safety in the snake season - 8

Eradicating the Big Five - 10

When is a cherry not a cherry but a stem? - 15

Victoria's wet forests in the east and west - 17









Contents

- **3** Spring and summer song and our avian visitors
- **5** Understanding your personal rainbow
- 6 The orchids of summer
- 8 Safety in the snake season
- **10** Eradicating the Big Five
- **13** Our weedy responsibilities
- **14** The subtle tones of Anglesea's heath moths
- **15** When is a cherry not a cherry but a stem?
 - **17** Victoria's wet forests in the east and west
 - 20 38 ways to enjoy summer

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Spring and summer song and our avian visitors

Ellinor Campbell

As in the northern hemisphere cuckoos are the harbingers of spring. Australia is home to numerous cuckoo species, most of whom are migrants arriving to over-winter in inland or northern Australia, Papua New Guinea and beyond. Our region has three main cuckoo species, each having a different insistent ringing call, but none sounding at all like the aptly named European Common Cuckoo. The Horsfield's Bronze-Cuckoo and the Shining Bronze-Cuckoo are small birds which, though very similar in appearance, have very different calls.



Horsefield's Bronze-Cuckoo Image: Margaret Lacey



Fan-tailed Cuckoo Image: Margaret Lacey



Pallid Cuckoo Image: Margaret Lacey



Shining Bronze-Cuckoo Image: Margaret Lacey

Over the spring and summer period the calls of the Golden Whistler are joined by the extremely varied musical calls of its relative, the Rufous Whistler. If you manage to sight either whistler they may reward your search by sitting and singing for a good period of time, unlike so many birds such as honeyeaters which seem to be constantly on the move.

Horsfield's has a long descending call, the Shining has a call like whistling for a dog. The Fan-tailed Cuckoo, which is a bigger bird, has a distinctive downward trill. A fourth and larger cuckoo, the Pallid, may also be seen occasionally, and it has an upward run of about seven or eight notes. If you are really fortunate you may hear the wonderful call of the Eastern Koel, a much larger bird again, and a rare migrant to our area, but becoming more common.





Golden Whistler Image: Margaret Lacey

Rufous Whistler Image: Margaret Lacey

Flocks of woodswallows appear, swooping in large flocks along our waterways such the Anglesea River and the Painkalac Creek. The most common are the Dusky Woodswallows with their subtle colouring of blue, smoky brown, and gunmetal grey, with contrasting white streaks on the wings and tail. The Satin Flycatcher is always a welcome summer sighting along the Painkalac—the female with her buff breast and the male with a glossy blue-black chest and back.

In our local marshes a highlight is seeing the elusive Latham's Snipe, which fly here from Japan. They are quite large brown and white birds with long pointed beaks, but they manage to blend beautifully into the wetland landscape. Their colouring, combined with their statue-like behaviour, usually makes them almost impossible to see unless they are disturbed or are foraging for food in the early mornings or late evenings. Another seasonal visitor, which likes to lurk in the reeds beside waterways, is the Australian Reed-Warbler. The rich liquid call of this bird gave rise to its original, and appropriate, name of Clamorous Reed Warbler. Another bird also easier to hear than see is the Olive-backed Oriole. The rolling call, which sounds a bit like its name 'olly-ole', may be heard quite regularly, but being able to spot the large distinctive thrush-like bird is not so easy.

There are a few species of crakes and rails which become more obvious over the summer period. This year there have been numerous sightings of handsome Buff-banded Rails, and at Allen Noble Sanctuary regular glimpses of the less-common, smaller and plainer Spotless Crake lurking in the reeds. Very special offerings to a chosen few, unfortunately not me, have been sightings of the tiny Baillon's Crake which is smaller then a Hooded Plover. There have also been glimpses of the rare chook-like Black-tailed Nativehen. Uncommon Lewin's Rail have been seen regularly in a resident's garden adjoining the sanctuary. Very recently a handsome Great Crested-Grebe was seen on the Painkalac Estuary. I have seen many of these in Europe, but only occasional sightings in Australia and never at Aireys Inlet. What will be next!



Buff-banded Rail Image: Bron Ives



Baillon's Crake Image: Katie Pahlow





Latham's Snipe Image: Margaret Lacey

Australian Reed-warbler Image: Margaret Lacey

In spring we are also suddenly able to hear and see birds which, while being permanent residents, are not so obvious for the rest of the year. One of our really special calls is the penetrating silvery voice of the Rufous Bristlebird, as they scuttle everywhere along the clifftops in courtship mode. The summer period is a good time to try to spy the very elusive small Southern Emu-wren. However, you are unlikely to find them by their call as it is a faint insect-like buzz. It is their active territorial behaviour which makes them easier to spot on sunny summer days. Bluewinged Parrots with their tinkling calls become more obvious as they move away from winter wetlands to look for summer food sources in the woodlands and clifftops.





Rufous Bristlebird Image: Jordan Ayton

Southern Emu-wren Image: Rob Shepherd



Great Crested Grebe Image: Bron Ives

Understanding your personal rainbow

Wendy Cook

It's late in the day. You are standing in your garden, relishing the smell of damp earth, watching the retreating dark grey storm clouds, as large drops of rain fall in the distance. Behind you, the clouds part and you feel warm sunshine on your back. In front of you, in a perfect arch, reaching high into the sky above you and down to the ground on either side, the beautiful colours of a rainbow gradually appear, with the centre of the arch directly ahead. As you watch, the colours intensify and a second paler rainbow becomes visible outside the first, but with colours in reversed order. You walk around the garden, but the rainbow remains centred in your view. What is the magic that creates this rainbow?

It all begins with light and water. White light is a mixture of all the colours of the rainbow. When light travels into water, it bends or refracts, as you may have noticed if you've tried to pick up an object in a pool. The same happens as sunlight enters a raindrop. At this moment, the colours in the white light separate slightly, as the drop acts as a prism. Some light travels through the raindrop, but much of it reflects off the inside of the back wall of the drop, rather than passing through it. This light bends further as it passes out of the drop, splitting the colours more. Each colour of light bends differently. Purple and blue light bend most, so these colours appear in the lowest part of the rainbow. Red light bends least, so it is the outermost colour in the arch.

Some light bounces around the inside of the raindrop, reflecting twice before it leaves the drop. This light travels out of the raindrop at a different angle, causing a second rainbow above the first. Less light follows this path, so the rainbow is paler. Again, purple light bends most, so this time it is in the highest part of the arch, while red is innermost. Larger drops of water create a brighter rainbow.

Light reflects with a consistent angle inside the raindrop. If the sun is high in the sky, light both enters and leaves the raindrop from a higher angle. It will then pass above any observer on the ground, so a rainbow cannot be seen in the middle of the day when the sun is high. In the earlier part of the morning and later in the afternoon, when the sun is lower in the sky, sunlight will enter a drop of water from a lower angle, and will leave the drop at a lower angle. It can now be seen from the ground and will create a visible arch of colour. When the sun is lowest, the angle at which the separated colours travel towards Earth is steepest. As you look up at a rainbow very late or very early in the day, it will appear higher in the sky. The coloured light leaving most raindrops will travel in a line that is either above or below your line of vision or too far to the left or right. This is why you see the rainbow as an arch. This is the light that passes through the raindrops that are in the correct position for it to reach your eyes. If Earth were made of glass, you would see that the rainbow forms a circle. The ground blocks your view of this, but it can be seen from an aeroplane.

Forms of water other than rain can cause a rainbow to appear. You may see one near a waterfall or a fountain, or you may be able to create one with a garden sprinkler if the sun is coming from behind you. A rainbow may also form a complete circle around a full moon. This phenomenon is known as a moonbow and contains all the colours of the rainbow, but due to the relatively poor night vision of most people, it is usually seen as white. Wherever you stand, the rainbow will be centred on you. If you are with another person, they will also see a rainbow centred on themself, but it will be a different rainbow created by sunlight shining on different drops of water. The magic of rainbows is in the way light and water drops interact to create an arch of colour that is seen only by you.

The orchids of summer

Margaret MacDonald and Alison Watson

With the lack of rain recently our beautiful sun orchids and the other spring orchids came to an abrupt finish. Some people were lucky to see the Blotched Sun Orchid, *Thelymitra benthamiana*, in full flower, the Blue Star Sun Orchid, *T.holmesii*, and new to our area the Flatleaf Sun Orchid, *T. latifolia*. These three species were very exciting to see.

The Large Duck, Caleana major, and Small Duck, *C. minor*, have put on lovely displays with their shiny, duck-like flowers. The Bearded Orchids, *Calochilus* sp., had a very short season with no recorded sightings of Naked Beard, *Calochilus imberbis*, this year. So far there have been just a few Leek Orchids in the burnt area on Harvey Street. There are still some we hope to see, especially if we have some rain, such as the Austral Leek Orchid, *Prasophyllum australe*, or the Elegant Leek Orchid, *P. barnettii*.

The Hyacinth Orchids are in bud and the asparagus-like buds are noticeable. Of the two species the Rosy Hyacinth, Dipodium roseum, is more common and usually appears first. The Spotted Hyacinth, D. pardalinum, has a red spotted labellum with white hairs, so look carefully at these lovely orchids. The labellum of the Rosy is pink striped with pink hairs. There are still lots to look for though in the next month or two. The Large Tongue Orchid, Cryptostylis subulata, has a beautiful red and yellow flower with large leaves. It likes damp areas, and you need to look carefully to find it amongst the surrounding vegetation. The easiest place to see it is in an open, slightly dampish area in Moggs Creek where it is growing happily. Another interesting orchid that flowers soon is the Horned Orchid, Orthoceras strictum. This is also difficult to see initially as it blends into its grassy surroundings. The Horned Orchid is mainly a green and brown orchid, and the spreading lateral sepals give it a horned appearance.



Blotched Sun Orchid





Blue Star Sun Orchid



Rosy Hyacinth Orchid



Austral Leek Orchid

Spotted Hyacinth Orchid

Cinnamon Bells, *Gastrodia sesamoides*, are always a pleasure to see with their cinnamon-coloured bell-like flowers. Tall Cinnamon Bells, *G. procera*, a taller orchid, grows more in the tall forests of the Otways while the shorter ones grow more in our parts of the forest.

Tiny Elbow Orchids, *Thynninorchis huntianus*, seem to grow along the sides of tracks where there is more space and less competition. The tiny, unusual flower has a hinged labellum designed to attract the male wasp. When the wasp lands on the labellum it's swung against the column and pollen is transferred.

There is one late flowering greenhood which was discovered again last year after many years. This is the Dark-tipped Greenhood, *Pterostylis atrans*, which has a dark-tipped, pointed hood and the greenhood rosette is quite small. Look for it in forested areas.

A late flowering caladenia is the Black-tongue Caladenia, *C. congesta*, which is occasionally seen in the Eastern View area. It can also be reliably seen at Forrest. It can grow to 30 cm, has bright pink flowers with black shiny calli covering the narrow labellum.



Large Tongue Orchid





Cinnamon Bells

Horned Orchid



Black-tongue Caladenia



Dark-tipped Greenhood

So, there are some interesting orchids to look out for over the next few months. Please let us know of any of your interesting orchid experiences at either <u>margmacmoggs@icloud.com</u> or <u>alisonw577@gmail.com</u>.

All of our orchids are documented and photographed in Orchids of the Anglesea District. The new edition is available from the Angair Natural History Centre on Monday and Thursday mornings, online through the Angair website <u>www.angair.org.au</u> and from Anglesea News & Lotto and Great Escape Books in Aireys Inlet.

Safety in the snake season

Ann Fielding

An Angair member stops on an Aireys Inlet road to photograph and remove an elegant Blotched Bluetongue Lizard, *Tiliqua nigrolutea*. Another nearly steps on a camouflaged Shingleback, *T. rugosa*, during the Angair camping weekend near Ararat. Another snaps a Jacky Lizard, *Amphibolorus muricatus*, laying an egg. It's obviously reptile time.

From September to April most reptiles emerge from brumation, the form of seasonal dormancy which sees them secreted in a burrow or hollow trunk to await the breeding season which runs from late spring to autumn. Brumation can last between one to eight months depending on the ambient air temperature, the type of reptile, its size, age and health. Reptiles can go for months without food but must emerge sometimes to drink.

The snakes most commonly found around the Surf Coast are the Eastern Brown Snake, *Pseudodonaja textilis*, the Eastern Tiger Snake, *Notechis scutatus*, the Common Copperhead, *Austrelaps superbus*, and the smaller White-lipped Snake, *Drysdalia coronoides*. Only the Brown Snake lays eggs, the rest give birth to live young.



Image: John Lenagan



Blue-tongue Lizard Image: David Wilson



Shingleback Lizard Image: Sally White



Eastern Brown snake Image: Greg Wallis

While most of us delight in seeing lizards, we are more circumspect about snakes; but they feel similarly about humans. Most of the time, they'll slide away and not confront us if we leave them alone. Still, it's sensible to take precautions.



White-lipped Snake Image: John Lenagan

When walking in the bush, take your mobile phone, a specially designed snake bandage that shows the correct way to put it on and a friend. Wear sturdy shoes. Some regular walkers wear gaiters as snakes usually aim for the lower leg. If you do get bitten, don't wipe away the venom as it can identify the snake so the right antivenene is used when you get to hospital. Get your friend to apply the compression bandage, immobilise the limb, send for help and get to hospital as soon as possible.

Encounters with snakes are more likely to occur around the house than in the bush. At home we humans are more relaxed and less alert to the possibility of bites. You don't really want snakes around and they can be discouraged.

Keep vegetation around the house short and clear up rubbish and debris, particularly timber piles where snakes can shelter. The clean-up doubles as fire preparation. Some authorities suggest getting rid of nearby water features as all snakes have to drink. This poses a dilemma if you want to leave water on the ground for birds and other animals. Perhaps eliminating all water sources is too drastic but be aware of the possibility of an unwelcome drinker and stay alert. Seal up any potential entrances to the house. If a snake does get inside, leave it alone. Do not kill the snake as all species are protected. Evacuate people and pets. Don't try to get rid of a snake yourself on your property, whether it's inside or out. Call the local snake catcher, Bellarine and Surf Coast Snake Catching, on 0499 266 189.



Eradicating the Big Five

Isabelle Kielbaska Ranger, Parks Victoria

Transformer weeds—nicknamed the 'Big Five'—have the capacity to change the character, condition, form or nature of an ecosystem. They smother indigenous vegetation, turning a landscape that was once rich in floral diversity into a monoculture. This in turn disrupts local ecosystem processes and functions, profoundly affecting biodiversity more broadly. About 10% of invasive plants have this transformative character.

Over the past 18 months, Parks Victoria has been targeting the region's 'Big Five' within the Great Otway National Park:

- Sallow Wattle (*Acacia longifolia* subsp. *longifolia*)
- Sweet Pittosporum (*Pittosporum undulatum*)
- Coast Tea-tree (*Leptospermum laevigatum*)
- Boneseed (Chrysanthemoides monilifera subsp. monilifera)
- Bluebell Creeper (Billardiera heterophylla)

Over the next two years, with funding from the Victorian Government's Protecting Biodiversity program, the aim is to further reduce infestations of these five transformer weeds within areas of the national park that have high biodiversity value. Some of these areas share interfaces with residential areas along the coast, from Anglesea to Moggs Creek in particular.

Infestations are first identified and assessed by Parks Victoria, and then weed control works are collaboratively carried out by local contractors, including Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC) Natural Resource Management—Caring for Country Team, community groups such as Angair and Friends of Eastern Otways, Parks Victoria and the Department of Energy, Environment and Climate Action (DEECA). You too can play a role in tackling the Big Five. Most of these weeds end up in the Great Otway National Park when birds feed on the seeds of plants within the townships, and then move into the national park, spreading these seeds and creating new populations of weeds. In what follows, we provide notes on each of the Big Five species to help you recognise them, as well as recommendations for the Big Five Replacements if you find any of these plants growing in your backyard. All five recommended replacement species are indigenous to Anglesea-Aireys Inlet and grown by Angair in its nursery and available for purchase at its plant sales.

Sallow Wattle, *Acacia longifolia* subsp. *longifolia*

If you live in Anglesea or Aireys Inlet, its common to see Sallow Wattle growing as a shrub or tree (1.5-10m) in backyards or on nature strips and roadsides. Although it's an Australian native, Sallow Wattle is only indigenous to parts of New South Wales. It's best recognised by its bright yellow flowers which form elongated cylindrical clusters, as well as its thin leaves, which usually have two or three prominent parallel veins. The fruit of Sallow Wattle is usually coiled cylindrical pods, 5-15 cm long, and leathery. Sallow Wattle commonly hybridises with Coast Wattle, Acacia longifolia subsp. sophorae, and these hybrids are also regarded as an environmental weed in coastal south-west Victoria. If you take a walk through the Anglesea Heath, you'll notice that Sallow Wattle has moved out of the townships and into parts of the Great Otway National Park. Key areas for control over the next two years include areas along Pipeline Track, Whites Track/Gilbert Street and O'Donohue Block.

Recommended replacement: Golden Wattle, *Acacia pycnantha*.

Sallow Wattle, Acacia longifolia subsp. longifolia



Seedling

Mature Plant

Flower & Fruit

Encroachment example

Sweet Pittosporum. Pittosporum undulatum

Commonly found in gardens, Sweet Pittosporum is originally from East Gippsland. It grows to 15 m tall and its leaves are shiny and elliptical with wavy margins. Small, creamy white, perfumed flowers appear in clusters in spring. The flowers are followed by large berries that turn orange when ripe.

Sweet Pittosporum is a serious threat due to its ability to form a dense canopy that excludes light to the understorey. Its leaves contain toxins that can inhibit the growth of other plants. It is particularly invasive in warm temperate forests and woodlands.

Recommended replacement: Common Boobialla, Myoporum insulare



Seedling



Mature Plant



Flower & Fruit



Encroachment example

Coast Teatree, Leptospermum laevigatum

Another species common in backyards along the coast, Coast Teatree does not occur naturally further west than Torquay and is one of the most serious environmental weeds we're targeting. We've found stands of it growing in the Anglesea Heath, far away from the coast. It is fire sensitive, but regenerates prolifically after burning from canopy stored seed.

It grows as a shrub or small tree and is recognisable by its dull grey-green leaves and large white flowers that appear in the spring. The capsules which develop after flowering are flat topped. Its bark flakes in thin strips. **Recommended replacement:** Moonah, *Melaleuca lanceolata*



Seedling



Mature Plant







Flower & Fruit

Encroachment example

Boneseed, Chrysanthemoides monilifera subsp. monilifera

Originally from South Africa, Boneseed is a large shrub or small tree (to 3 m) which forms dense thickets. You may have seen examples of these infestations along the Great Ocean Road and along the Sheoak Falls Walking Track. It has large light green oval shaped leaves with toothed or serrated edges. Its flowers are bright yellow and daisy-like, appearing in clusters at branch tips in late winter and spring. The rounded fruit is covered with a green fleshy skin which later becomes black at maturity.

Boneseed is a prolific seeder and the seed bank remains in the ground for many years. Although the plant is fire sensitive, the seed bank enables it to regenerate vigorously after an area is burnt. Unfortunately, this occurred recently after fuel reduction burns in Area 9 between the DEECA office in Camp Road and the Great Ocean Road. However, due to all of the hard work Angair volunteers have put forth towards tackling Boneseed over many years the seedbed has fewer seeds. The seedlings that have popped up are visible and provide an opportunity to exhaust the seedbank. We'll be using this opportunity to build on Angair's work over the next two years to further reduce the Boneseed that remains in Area 9, and hence its Boneseed seedbed.

Recommended replacement: Hop Goodenia, Goodenia ovata



Seedling



Mature Plant



Flower & Fruit

Encroachment example

Bluebell Creeper, Billardiera heterophylla

This twining woody stemmed climber or dense shrub can grow to 4 m tall in some cases. Its leaves are dark-green, smooth, hairless and oblong in shape. Bluebell Creeper has nodding, deep blue (or sometimes purple or white) bell-shaped flowers from spring to summer. After flowering, the plant produces pendant, translucent grey-green sausage-shaped berries (seeds) that darken as they ripen.

Bluebell Creeper is very good at smothering and strangling indigenous vegetation. It can thrive in a wide range of environments including dune shrubland, heathland, woodland and forest. The key areas of the national park we're tackling Bluebell Creeper include along Fairhaven Ridge to Moggs Creek, and in blocks off Gundrys Road. **Recommended replacement:** Love Creeper, *Comesperma volubile*









Seedling

Mature Vine

Flower & Fruit

Encroachment example

Our weedy responsibilities Sally White

Agapanthus, Watsonia, Freesia, Polygala, Red Honeymyrtle, Flax-leaf Broom, Arum Lily, Gazania, Boneseed, Bluebell Creeper, Montbretia ... the list goes on and on. Many of the gardens and nature strips of Anglesea and Aireys Inlet contain these environmental weeds, several of which are WONS (weeds of national significance) or RCW (regionally controlled weeds).

Just who is responsible for controlling these invaders? The shire, the property owner, state government authorities? It depends where the weeds are growing. In Victoria, VicRoads is responsible for the control of 'declared' weeds such as WONS and RCW on major roads in the Melbourne metropolitan area and Regional Roads Victoria is supposed to look after the road reserves of the state's highways and arterial roads. Local councils are responsible for weed maintenance on minor roads. Unfortunately, all these authorities are legally required to control only 'declared' weeds. Removal of other weeds, like the ubiquitous Agapanthus or Polygala, have a low budget priority.

Within town boundaries throughout the state, most councils – although they own and control nature strips as part of the road reserves – don't have weed maintenance obligations.

The Surf Coast Shire's Residential Nature Strips policy, which came into effect in July this year, is quite clear who should get rid of weeds. 'Property owners or occupiers are required to maintain nature strip grass and any plants excluding street trees which are solely Council's responsibility ... Maintenance includes mowing and weeding.'

So if you are plagued by environmental weeds that have escaped from next door and are flourishing on your nature strip, it is up to you to get rid of them to save the surrounding bush and heathlands from being overrun. Go to <u>www.angairnatureshow.org.au</u> where you'll find information, under Caring for the Environment, which gives advice on the best control method for each weed species.





Agapanthus

Watsonia



Freesia



Honey-Myrtle



Flax-leaf Broom



Arum Lily



Gazania



Bluebell Creeper

The subtle tones of Anglesea's heath moths

John Lenagan

As the weather starts to warm up, the heath moths from the subfamily Epidesmiinae start to emerge in their thousands from their overwintering pupation. They are quite small with a 10-15 mm wingspan that displays the distinct delta shape of the Geometridae moth family. Like many of the smaller Geometrids they are typically found in their muted grey and brown colour forms, providing them with fabulous camouflage in their bush surrounds.

There are numerous species to be found along the Surf Coast and in the heath. I have observed 12 different species to date, all emerging in October and November. The adults can cover a mothing sheet in their hundreds, flitting about trying to find a mate. They are often seen flying from low shrub to shrub and in amongst the grasses along the walking paths. Because they are diurnal, they are quite active during the day. The main food source for their larvae is the various tussock grasses and other small sprawling plants where their subtle and varied geometrically designed forewing patterns blend in. Their small caterpillars, when achieving full maturity towards the end of summer, go to the ground where they pupate and remain in the leaf litter till the next spring.

Like most of the diurnal moths they have numerous benefits for the heathland ecosystem. These vary from pollinating and controlling the tussock grasses to providing a beneficial food source for daytime feeding birds and other animals.

Here are some local images of our heath moths showing their range of colour and patterns.



Geometridae - Epidesmiinae - *Epidesmia tryaxaria*



Geometridae - Epidesmiinae -Dichromodes confluaria - Ceremonial Heath Moth



Geometridae - Epidesmiinae - Phrataria replicataria



Geometridae - Epidesmiinae - *Dichromodes euscia* - Heath Moth



Geometridae - Epidesmiinae - *Phrataria transcissata*



Geometridae - Epidesmiinae -*Dichromodes stilbiata* - White-barred Heath Moth

When is a cherry not a cherry but a stem?

Neville Millen

The Cherry Ballart, *Exocarpos cupressiformis*, belongs to the sandalwood family. Its other common names are Native Cherry and Cypress Cherry. The most interesting fact about the species, and how it gets its common names, is that it creates a fleshy yellow to orange-red edible 'cherry' from the swollen pedicel or stalk that holds its nut.



Cherry Ballart, Exocarpos cupressiformis. Image: Leon Costermans

The genus name, *Exocarpos*, is from the Latin, meaning 'outside fruit' and the species name, *cupressiformis*, is Latin for 'like a cypress in form'. The species was first collected in Tasmania and described by the French botanist Jacques-Julien Houtou de Labillardiere in 1800. His original name for the genus, *Xylophyllos*, was changed by the British Linnaean Society in 1847 to *Exocarpos*. Ballart is a distinctive Aboriginal name from south-west Victoria, probably around Lake Condah.

I have always admired these trees because they are distinguished by contrasting colour and form with their light bronzy-green, cypress-like thickets among the eucalypts and wattles in the bush. With increased housing development around Aireys Inlet I have noticed with concern and regret the gradual clearing of many of the beautiful local Cherry Ballart specimens. As the species name indicates it is a cypress-like shrub to tree, varying from 3-8 metres tall. Its branches are pendulous, made up of scale-like leaves that weep to the ground. It is hemiparasitic while young, in that the plant attaches its roots to host eucalypts in shallow soils. As the plant matures it can then photosynthesise its own food from its leaves. I have hiker friends who have seen old 'Cherry' trees on the Baw Baw plateau in Victoria wedged in rocky terrain with no host trees close by, showing how adaptive the species is to survive in different and difficult terrains. This ability defies its claimed early dependence on other trees.



Image Mararet MacDonald



Image Ellinor Campbell.

Cherry Ballart occurs across eastern Australia from Queensland to Victoria on the leeward side of the Great Dividing Range. It also occurs in South Australia from the Mt Lofty ranges, south across the Fleurieu Peninsula and in eastern Tasmania on coastal plains. The flowers are white and insignificant on small spikes and form into a protruding green nut, like a small slender acorn, with a hard skin containing a single seed.

The cherries were a food source for the Aboriginal people and are definitely still a welcome food source for local birds such as bower birds and currawongs, that I have seen foraging among the branches for the cherries in late spring to summer. I have also seen rabbits and wallabies nibbling the low weeping leaves although its leaves are allegedly toxic to stock.

Lecturer in Natural History at La Trobe University Gregg Müller has researched the Cherry Ballart and his camera-trapping found the trees preferentially attracted a wide variety of animals: echidnas, possums, foxes, swamp wallabies, white-winged coughs, bronzewing pigeons, moths and butterflies.

He speculated that this biodiversity might be because he found that the trees moderate their immediate environment. They create moderate micro-climates in their foliage, reduce soil temperatures, increase water retention in the soil and concentrate nutrients in the soil beneath their canopies. All of these features alter the understorey vegetation.

The Aboriginal people used the sap for snakebite but I could find no clear explanation as to how the sap worked. The fine-grained strong wood made spear throwers.

European settlers used the wood for tool handles, ate the berries raw and cooked (high in Vitamin A and C, calcium and antioxidants) and used the branches for Christmas trees. It is not a plant you will find in a commercial nursery as it seems almost impossible to propagate in quantity due to limited seed, for the hard nut must pass through the gut of a bird or mammal to be made soft and viable.

If you have this species on your property look after it as you are fortunate to have an unusual, special plant to admire. For those less fortunate to be owners, specimens can be found in our local bush with several good stands of the Cherry Ballart in forest areas along the Great Ocean Road between Anglesea and Aireys Inlet. There is a stand to admire directly across from the Angair office in Anglesea.



Cherry Ballart, Image: Neil Tucker

Victoria's wet forests in the east and west

Ellinor Campbell

Ellinor Campbell compares Victoria's wet forests on a visit to Yarram during the South East Australia Naturalists (SEANA) camp in October.

Attendees at the SEANA spring camp could join excursions to a range of locations such as ocean beaches, heathlands, and a range of flora and fauna reserves. The highlight for me was the Tarra-Bulga National Park, created in 1904 and the fifth such park in Victoria. It was originally quite small, but has now been greatly expanded to 2022 hectares. The first woman ranger in Victoria, Kara Healey, an outstanding amateur naturalist, worked there for 12 years from 1952 and collected over 500 specimens of flora and fauna. Her special interest was fungi of which she collected 160 types, two of them previously unidentified. In large part due to her work, Tarra-Bulga has one of the most comprehensive species record of any national park in Victoria.

Tarra-Bulga is a remnant of the forests which once covered the eastern Strzelecki Range. Most forests in this area were cleared for farms, many of which didn't succeed due to their isolated location and poor soil. It is typical of rainforests that the tall trees and lush vegetation grow on soils of low fertility which are not suitable for western-style farming. Their apparent fertility is due to complex causes. The shallow root systems obtain moisture and rich nutrients from the heavy forest litter of rotting plant and animal materials which are on the upper soil layer. Rainforest plants have complex systems for accessing water and oxygen.

I was really interested to compare this forest with our own much-loved Otways. The first obvious difference was the presence of lyrebirds and whipbirds which are absent in the Otways. The reason for this appears to be that the Otways have isolated 'wet spots' with dry bush surrounding them, unlike the wetter forests in the east of the state. I did enjoy hearing the continuous liquid song from several Superb Lyrebirds, and the wonderful whip of the Eastern Whipbird, but did not manage to see either species. The Tarra-Bulga forest is also home to the Common Wombat, which were originally abundant in much of Victoria, including the Volcanic and Otways Plains. Occasional sightings in the Otways may have been due to translocation by humans. A bounty was placed on their heads from 1925 to 1966 and they were hunted to extinction in the west of the state. The Otways are clearly a much bigger park being over 103,000 hectares, and having numerous high waterfalls. The Tarra-Bulga has only two waterfalls which are quite low and much less spectacular. However, the region has the highest single-span waterfall in Victoria, the Agnes Falls near Toora, just under 70 kilometres from the park. We visited it on the way home and, as there had been recent heavy rain, it was a very spectacular sight. A feature of the Bulga section of the park is the Corrigan suspension bridge, which in the 1980s was rebuilt in this location in 10 days by army reservists.



Both Tarra-Bulga and the Otway parks consist of tall open wet sclerophyll forests of big trees, and sheltered gullies of cool temperate rainforest. A highlight of both parks on the higher slopes is the enormous Mountain Ash tree, Eucalyptus regnans, the second tallest tree species in the world. We were shown the remains of one very old tree which had blown down, and which had a 15-metre base circumference. Many areas of Tarra-Bulga like much of the Otways have only regrowth trees. However the untouched old growth areas may contain Mountain Ash which are hundreds of years old. Our walk leaders expressed some concern that on the long unburnt slopes the ash trees may die and be replaced by other species, as they need fire to regenerate. On the high slopes we saw other big trees growing which are well-known to us here, such as the Messmate, Eucalyptus obliqua, and Blackwood, Acacia melanoxylon.

The cool moist shelter gullies, like in the Otways, are home to the magnificent ancient Myrtle Beech trees, Nothofagus cunninghamii, some of which may be over 1000 years old. These picturesque trees have small leaves and large bases with buttressed roots which can open out into large open 'caves,' some of which were used to house early settlers. The base of the trees also coppice, so they may be surrounded by multitudes of thin young trees. On the branches of one tree we were fortunate to see many clumps of Beech Orange fungi, which are unique to these trees. They vary in size, growing up to 25 mm across, with a pattern of concave depressions, quite unlike any other fungi and looking more like small oranges. The bark, rocks and embankments feature five different species of small and delicate epiphyte Filmy Fern Hymenophyllum. There was also a dicotyledon epiphyte which I had not seen before and was unable to find out its name.



Myrtle Beech trees, *Nothofagus cunninghamii*, Beech Orange fungi and Filmy Fern Hymenophyllum.

The cool moist conditions support an understory of 41 species of fern, plus many mosses and liverworts. There are four species of tree fern, two of which are the same as in the Otways: the Soft Tree Fern, *Dicksonia antarctica*, and the Rough Tree Fern, *Cyathea australis*. The other two species are considered rare, and we saw many examples of one, the Skirted Tree Fern, *Cyathea marcescens*, with its distinctive skirt of dead fronds hanging straight down close to, and still attached to, the narrow trunk. In this ecosystem system bushfires are expected only to burn and jump across the high slopes, leaving the damp gullies unburnt thus enabling extra long lives for the wet forest vegetation like the Myrtle Beech.

Most of the other trees I identified were the same as in the Otways. Two common species which grow to about seven or eight metres were Austral Mulberry, *Hedycarya augustifolia*, and Blanket Leaf, *Bedfordia arborescens*.

The Mulberry has rich green ovate leaves with serrated edges. Blanket Leaf is well-named, as the long green leaves are white and matted-woolly underneath. Its clusters of small yellow flowers are a feature at this time of year. Another common but taller tree (to 15 metres) is Hazel Pomaderris, *P. aspera*. A variable species, the eastern version has similar but bigger ovate leaves although they have distinct veins like the smaller Hazel Pomaderris with which we are familiar in our dryer areas. The tree's variegated long narrow trunk has white patches that stand out in the wet forests.



Austral Mulberry, Hedycarya augustifolia



Blanket Leaf, Bedfordia arborescens.

Mountain Pepper, *Tasmannia lanceolata*, a smaller bush, has distinctive red stems and branchlets. The smallish lanceolate shiny green leaves have a spicy taste and were used by early settlers and Aboriginals as a flavour enhancer. Aboriginals also used the small red berries for toothache and sore gums.

The stand-out smaller plants in flower which we saw on our walk were the Balm Mint Bush, *Prostanthera melissifolia*, and Forest Starwort, *Stellaria flaccida*. The Mint Bushes with rounded serrated shiny leaves had masses of dark-mauve flowers. In the understorey the white starry flowers of the normally prostrate, starwort were growing up and hanging off the lower bushes. There was so much more of course. We are so fortunate to have our own luxuriant and atmospheric forest almost on our doorstep.



Balm Mint Bush, Prostanthera melissifolia

I can highly recommend attending the next SEANA weekend, which will be in autumn next year at Cowes.



Unknown epiphytic fern

References

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38 ways to enjoy summer

Ann Fielding

The Friends of Eastern Otways have launched a long-awaited revised version of A Guide to Walks in Angahook-Lorne State Park, published 19 years ago. The new A Guide to Walks in the Great Otway National Park, edited by Margaret MacDonald, is a trim soft cover booklet packed with essential information for people who want to explore the eastern section of the Otways. Thirty-eight walks range from the 10-minute stroll to the Distillery Creek Ephemeral Wetlands to the four-hour walk on the Harrison Track along the Anglesea River valley. The estimated times for the walks are generous, assuming an unhurried pace and distances are approximate. Stopping to enjoy the richness of plants, scenery and birdlife inevitable in the Otways will add to the given times. Nearly one-third of the walks are categorised as easy – a leisurely walk on level or undulating ground. Another third of them are easy to moderate and the rest classified as either moderate or difficult. Some walks contain notes such as conditions after rain, the advisability of walking poles or the need to car pool. An easy-to-read separate foldout map is a useful addition as is the general information on safety, fauna and where to park at the start of each walk. The guide is available from the Angair office (Monday and Thursday mornings), online at www.angair.org.au, Great Escape Books, Aireys Inlet or the Anglesea newsagency. It costs \$22, a small price to pay for a comprehensive introduction to the walks of the Eastern Otways.











Angair (Anglesea, Aireys Inlet Society for the Protection of Flora and Fauna) is dedicated to preserving our indigenous flora and fauna, and to maintaining the natural beauty of Anglesea and Aireys Inlet and their local environments. <u>www.angair.org.au</u>

We acknowledge the Wadawurrung of the Kulin Nation and the Gadubanud of the Maar People as the Traditional Owners and protectors of this place.

We also acknowledge their ancestors who cared for the land, water and marine areas and all its biodiversity for thousands of years. We pay our respects to their Elders past and present who continue to care for this place.

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Our next issue will be published in March 2024 and will be the autumn edition. We welcome any contributions of local, seasonal or general environmental interest. Send your contributions to angair.communication@gmail.com by mid-February and clearly label them 'for Angair Quarterly'.