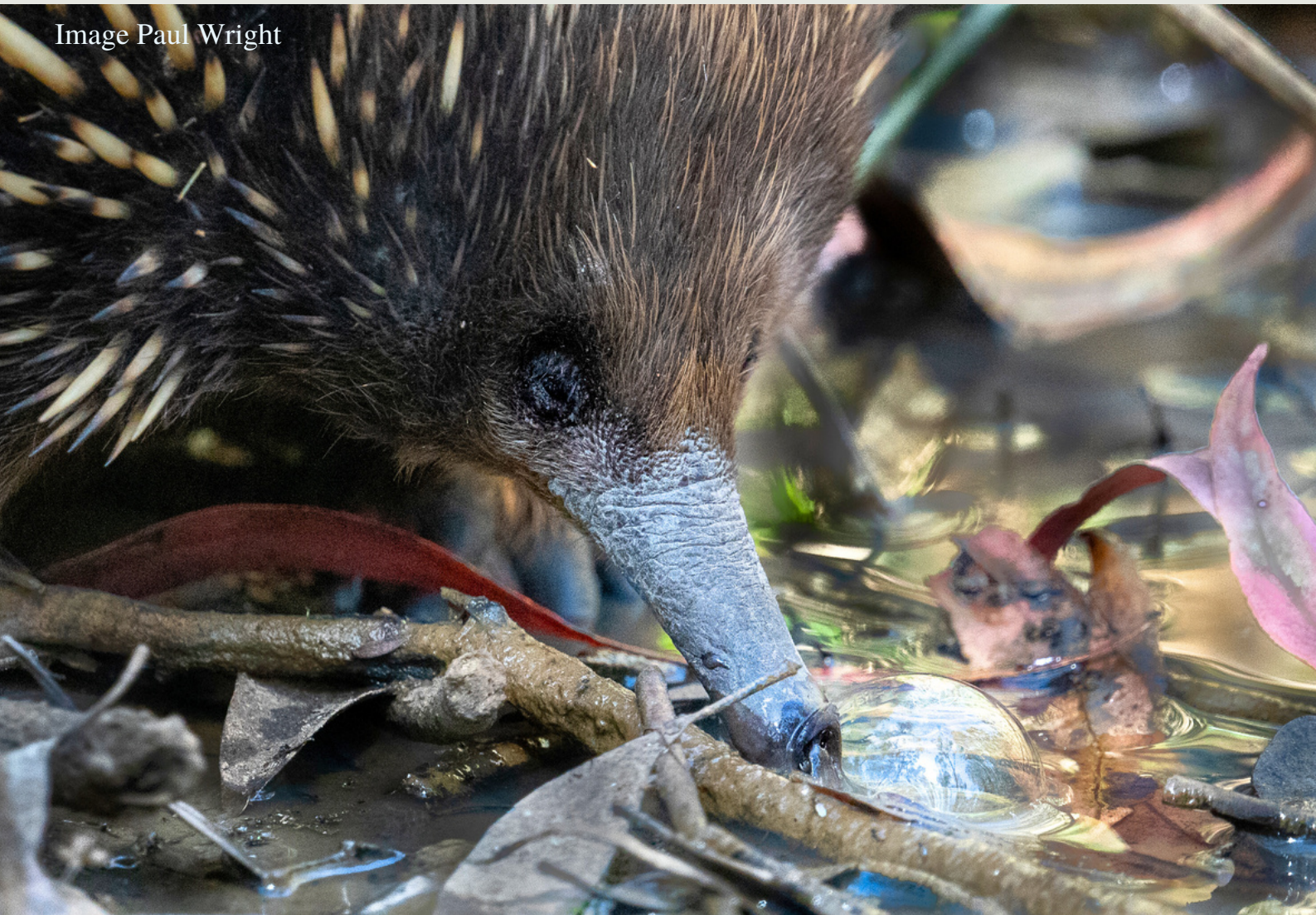


Autumn 2024

# Angair Quarterly

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

Image Paul Wright



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# Angair Quarterly

Autumn 2024



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Angair inc. (R/N A0002974W)

3C McMillan Street, Anglesea, Vic. 3230

Phone: (03) 5263 1085

email: [admin@angair.org.au](mailto:admin@angair.org.au)

 [www.facebook.com/angairaustralia](https://www.facebook.com/angairaustralia)

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## Epic travellers of the sky

Text and photos by Rob Shepherd

Animal migration is the long-distance movement of animals, usually on a seasonal basis, where animals travel from one habitat to another in search of food, improved conditions and/or reproductive needs.

Migration occurs in all major animal groups, including birds, mammals, fish, reptiles, amphibians, insects, and crustaceans.

There are many well-known examples of animal migration. The great migration of Wildebeest, *Connochaetes taurinus*, Zebra, *Equus quagga*, and Gazelle, *Eudorcas thomsonii*, across Tanzania and Kenya in search of fresh grass and water is a round trip of hundreds of kilometres. Closer to home is the remarkable migration of Bogong Moths, *Agrotis infusa*, to and from the Australian Alps each summer and Whale Shark, *Rhincodon typus*, migration to the Ningaloo Reef in March each year. Of course, migration is also a widespread human activity among hunter gatherer communities and sun-seeking retirees!

While many bird species show evidence of seasonal migration, the most dramatic examples of migratory behaviour occur among the 320 species of shorebirds that undertake long-distance migration. These birds are the champions of migration within the animal kingdom. Each year many shorebird species travel from their breeding areas in the tundra regions of the northern hemisphere to spend several months during the southern hemisphere summer, resting and feeding. Many shorebird species that have spent the summer along the Surf Coast are now preparing to return northward along specific routes known as flyways.

While not commonly seen in Australia, Arctic terns, *Sterna paradisaea*, have the longest known migration of any animal in the world. Weighing around 100 grams with a wingspan of 70 cm, these birds leave their Arctic breeding grounds around October to migrate to the Antarctic, returning to their breeding grounds for the next northern summer – a round trip of 40,000 km a year!

The East Asian - Australasian flyway is one of the world's most significant flyways with an estimated eight million migratory shorebirds and hundreds of millions of migratory songbirds, raptors and other migratory birds travelling along all or part of it each year. While some shorebirds make non-stop flights of over 5,000 km – including the Bar-tailed Godwit's, *Limosa lapponica*, 12,000 km non-stop flight over a week from Alaska to Australia and New Zealand – the majority take shorter flights while recuperating at several stopover points along the way.

Stopover points are critical for the survival of migratory species, providing a safe site to rest and feed during their journey. Major stopover sites are located at the edge of geographical barriers such as desert, ocean or a mountain range, and typically consist of large nutrient-rich mudflats with a wide intertidal zone to maximise feeding opportunities. These sites are key to the survival of migratory species which are under challenge from habitat decline and hunting. Changes to weather patterns and shifting seasons are also having an impact, as the time of a bird's arrival at a stopover or breeding ground, is critically aligned with the abundance of food – any reduction in prey species as a result of climate change could be disastrous.

Long-distance shorebirds have evolved over millions of years allowing them to undertake these remarkable journeys. Written into their genes are instructions for when and where to fly, unique physiological traits that meet the extreme energy demands of migration, and astonishing navigational skills.

The timing of migration, influenced by the shortening of daylight hours, results in a seasonal contraction/growth of the gonads associated with the non-breeding/breeding season. The resultant hormonal changes affect birdsong and plumage but also induce the birds into binge feeding that significantly increases their fat reserves and muscle. Because most migratory shorebirds breed in the northern hemisphere, we have little opportunity to observe them in full breeding plumage.

These birds have evolved unique physiological properties to overcome the extreme energy demands of migratory flight. After all their fat reserves are burnt, muscle and internal organs are consumed, leaving only the brain and lung tissue unaffected by flight. The risk of dehydration during extended flight is reduced via the production of 'metabolic' water associated with fat metabolism. Finally, oxygen consumption is an important issue as some migratory birds fly at heights of more than three kilometres. Increased oxygen demands are met via a very efficient respiratory system and, at least in some species, an increase in the number of red blood cells just before migration.

The navigational skills of migratory shorebirds are astounding, particularly as these skills are based on a genetic map and without assistance from adult birds that have completed the journey previously. Birds employ multiple navigational clues including geography (mountains, sea etc.), star rotation (north/south cues), sun rotation (east/west cues), and polarised light (visible to birds but not mammals). Birds also possess a magnetic sense; however, its exact function remains unclear.

Migratory shorebirds provide a unique niche in the web of life. While research continues to provide new insights into their remarkable lives, many species are in decline. It is the responsibility of individuals and organisations like Angair to lobby governments on their behalf. We are very fortunate that many migratory shorebirds visit our shores each summer: three examples, the Far Eastern Curlew, *Numenius madagascariensis*, Latham's Snipe, *Gallinago hardwickii* and the Sanderling, *Calidris alba*, are illustrated here. Enjoy them from a distance, let them rest and feed as they prepare for their next epic journey.

### **Far Eastern Curlew, *Numenius madagascariensis*.**

This elegant bird is our largest migratory wader. It breeds in north-east Asia and can be observed along the Australian coast, including the Surf Coast, over summer.



## **Latham's Snipe, *Gallinago hardwickii*.**

Breeds in northern Japan and is a summer migrant to Australia. Although shy and often difficult to see, the Allen Noble Sanctuary is a good place to observe them.



## **Sanderling, *Calidris alba*.**

This elegant sandpiper breeds in the Arctic Circle and is a summer migrant that can be seen along broad ocean beaches along our coast including the ocean side of Point Roadknight.



Throughout these long-distance flights the birds must sleep. They do so 'on the wing' with one half of their brain sleeping while the other half remains awake. This is a common occurrence among many animals that undertake long-distance migration.

References:

Weidensaul, S. (2021) *A World on the Wing: The Global Odyssey of Migratory Birds*, Picador, London.

<https://education.nationalgeographic.org/resource/natures-most-impressive-animal-migrations/>

<https://www.dcceew.gov.au/environment/biodiversity/migratory-species>

View Tania Ireton's recent Angair Talk on 'Our Amazing Shorebirds' on the [Angair Nature Show](#)

## **Book review: Great Forest makes a great read**

**Mandy Mitchell-Taverner**

A beautiful and captivating book has recently been donated to the Angair library. It is *The Great Forest: The Rare Beauty of the Victorian Central Highlands* by David Lindenmayer with photographs by Chris Taylor, Sarah Rees and Steven Kuitert.

It is profoundly affecting. I can't say it better than this quote in the blurb by Sophie Cunningham: 'It's rare to read a book that fills your heart with joy and your eyes with tears, all at the same time. The Great Forest does just this, thanks to photographs which capture the majesty and diversity of Victoria's Central Highlands, photos that sit alongside the erudite and fierce words of David Lindenmayer, the world's foremost scientific expert on this unique landscape.'

David Lindenmayer is known to us all as the advocate and voice of the Leadbeater's Possum. For over 40 years Professor Lindenmayer has been monitoring, researching and often living in the great forests of central Victoria studying their every aspect.

Each chapter describes a different aspect of the forest area: landscape, geology, rainforest, mountain ash forest, water, fire, wildlife, logging and the future. His words are indeed fierce. His respect for the First Nations people of the area is palpable – he uses their names for plants, places, animals and landscape features and refers to their ongoing sovereignty over the area and the deep knowledge they have of every aspect.

I can't really say more – just take the book home and enjoy it – and widen your knowledge. It is at once a delight and a sad reflection of white men's land management – joy and tears indeed. On the Angair library shelves at 582.160994 LIN

\* David Lindenmayer, *The Great Forest: The Rare Beauty of the Victorian Central Highlands* with photographs by Chris Taylor, Sarah Rees and Steven Kuitert, Allen & Unwin, East Melbourne 2021.

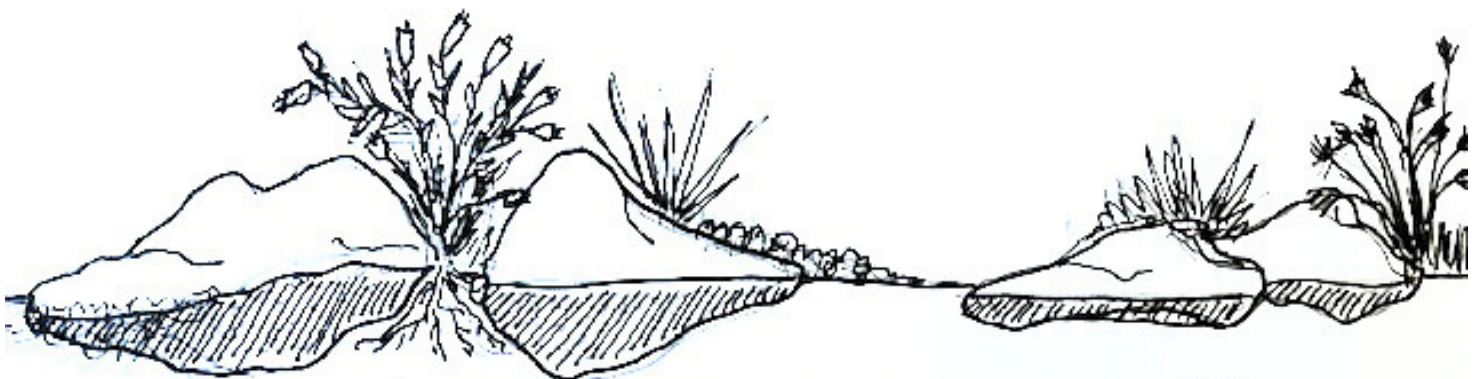
## Dig deep for a natural garden

Neville Millen

Last October's Angair camp-out at Mount Langi Ghiran near Ararat allowed me to observe very inspiring landscapes of rocky outcrops nestled into the environment, enveloped below by gravel and supporting shrubby undergrowth, small plants and grasses. It made me reflect on the design deficiencies of home gardens I have seen recently in new suburban estates around Geelong and Torquay.

When I lived in the Eltham area in Melbourne, as a young married man, and at a stage in life when I was developing my first bush garden, I had the fortunate opportunity to attend a seminar given by a local landscape gardener, Gordon Ford. Ford trained under Ellis Stones, the founder of what was then called an 'Australian landscaping style'. There were follow-up visits to public and private gardens in Eltham constructed by Ford and a special visit to a garden in Ivanhoe and another in Heidelberg, developed by Ellis Stones under the guidance of another pioneer Australian garden designer Edna Walling.

The salient and enduring lesson I learned from these visits was how rockwork was used to create natural settings and how the use of fewer rocks, strategically placed, had more impact in the overall design. Ford emphasised that Stones believed 'When placing rocks, bury more underground than you will see above'. The reason is practical as well as aesthetic. The rocks become heat banks drawing in the sun's rays to transmit heat under the soil surface. Rocks also concentrate moisture and coolness at night. While this is not always possible to achieve, the rule should be to bury a good part of each rock when landscaping with them. With climate change at present bringing hotter days it is even more essential in today's world to use rocks in the garden to protect plant roots, by keeping them moist and cool, or warm, as some plants such as eremophilas wish to be treated.



Bury rocks to create a more natural appearance



I think many current landscapers, and home-owners, building their own gardens, make the common mistake of overusing too many small to medium rocks, often arranging these in neat rows and even having rocks placed directly on the surface or only buried to a shallow depth. The overall impact is of a contrived garden that would not occur in nature and this does not enhance the garden aesthetic nor offer the best conditions for the survival of plants.



Ellis Stones also said that every garden, no matter what size, should have a 'sitting spot' and if needed a raised stone would be the exception in the garden landscape if a rough timber seat was not constructed.



Both Stones and Ford both stated that we can learn a lot from nature in regard to the relationship of rocks, logs, water, mulches and plants to create naturalistic gardens. Unfortunately in housing estates many residents have relied on landscaping advice that is far from the naturalistic bush gardens that were popular in the 1970s. However, due to Angair's influence on the Surf Coast, the take-up of native plantings is more pronounced. We just have to remember to follow the dictum of the Australian landscape pioneers, to get the most naturalistic rockwork in place, ideally, to complement the native plants that have been chosen and installed.



## References:

- Ford, Gordon & Gwen (1999) *The Natural Australian Garden*, Bloomington Books, Hawthorn, Vic.  
Latreille, Anne (1990) *The Natural Garden: Ellis Stones – his life's work*, O'Neill, Ringwood, Vic.  
Walling, Edna, (1984) *On the Trail of Australian Wildflowers*, Mulini Press, Cook ACT.

## Small but essential – the ants of the Surf Coast Part 1

John Lenagan

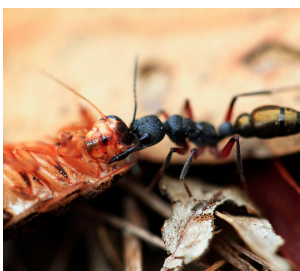
What would our world be like without ants? More than likely many of our ecosystems would collapse, as numerous above and below ground nutrient recycling and critical subsoil aerobic activation processes would cease, resulting in the topsoil structure compacting which would affect both plants and invertebrates. Many invertebrate species and their larvae would bloom in plagues and others that have strong symbiotic relations with their ant partners would be severely impacted. The rich food source for the avian, mammalian and reptilian families would be significantly reduced resulting in aspects of the food chain going out of balance. This could include the possible extinction of our precious echidnas. It is surprising how a creature so small, which often goes unnoticed, plays such a vital part in our surrounding ecosystems.

While we have 200+ ant species residing in and around the Surf Coast, for this article, the first of two, I have chosen to focus on our not-so-small but in fact the largest: the bull ants, bulldog ants or jack jumper ants from the genus *Myrmecia*. They are from the subfamily Myrmeciinae of the family (Ant) Formicidae. *Myrmecia* is a large genus of ants, comprising approximately 93 species, all endemic to Australia. The single New Zealand species is now understood to be an Australian immigrant.

In the Surf Coast we have 10 species of Bull Ants described, with another two under review. Our species list includes the largest living ant on the planet often called the Inch Ant which can grow to 40 mm.

Genetic evidence suggests that the *Myrmecia* group is one of the oldest of the Formicidae. They have been found in the fossil records back to 110 million years ago.

Bull ants are classified as specialist hunters being active during the day, although some species are nocturnal, with elongated mandibles and large compound eyes giving them excellent vision. This, along with their speed, agility and strength, makes them unequalled hunters in the ant world. Unlike most of the ant families they are solitary foragers and hunters, travelling significant distances to capture prey for the colony and their carnivorous young. The adults are nectarivores, consuming honeydew and other sweet substances deposited by sap-sucking insects with some species being effective pollinators. *Myrmecia* is one of the very few genera where the workers lay trophic, or infertile, eggs which is a food for viable offspring and the queen. This process, called trophallaxis, helps sustain the colony when it is dormant and remains underground during winter.



Tawny-legged Jack Jumper



Jack Jumper Ant



Inchman Ant



Inchman Ant with Bogong Moth





Inch Ants



Inch Ant (in Anglesea)



Black Scaped Bull Ant



Toothless Bull Ant

Bull Ants have ferociously strong jaws for clasp and dissecting their prey. There are records of their mandibles being used by Aboriginal communities as surgical sutures to close wounds. However, it is their sting that delivers the knockout punch: the venom from these ants is among the most toxic in the insect world rated as a 3-4 on the international pain index. In Tasmania and Victoria three per cent of the human population are allergic to the venom of the Jumping Jack Ant, *M. pilosula*, and can suffer life-threatening anaphylactic reactions if stung. Emergency treatment is only needed if a person is showing signs of a severe allergic reaction. Before calling for help, stung persons should be laid down, and their legs elevated. People prone to severe allergic reactions who enjoy bushwalking can be prescribed an EpiPen and or be treated by their doctor with allergen immunotherapy which can be effective after a 6-to-12 month course of treatment. Bull Ants are the longest lived of all our ants, some living up to a year. Almost all *Myrmecia* species are monomorphic, with little variation among workers of a given species. For most species there are only two functional types of ants in a colony: the males which are generally smaller and have shorter mandibles, and the larger females with larger mandibles. Each female worker can, if needed, become a new queen should the colony's queen die.

The *Myrmecia* nests on the Surf Coast are typically found on flat ground in a lightly vegetated open area directly exposed to sunlight with slight mounding 10-15 cm high. The mound can be up to one metre in diameter and the nest can penetrate underground up to two metres.

Some ants, including the Jack Jumpers, can change the composition of the mound's surface from light-coloured gravel to a darker colour depending on the time of year and the radiant heat or cooling requirements for the nest. Nests generally have a single entrance; some have two. They are always guarded by several worker ants that sit just within its entrance. Often as you approach a nest at a distance of up to four metres, the guard Bull Ants will come out and directly move towards you. If you remain too close they will exhibit territorial alarm behaviour using pheromones from various glands. This alerts the whole colony to attack.

*Myrmecia* ants, although being among the most primitive ants, exhibit some behaviours considered 'advanced'. Adults sometimes groom each other and the brood, transferring the nest odours which are distinct for each colony. There are very few predators that eat these ants because of their aggression and potent sting; however, their larvae are often consumed by blind snakes and echidnas. The other main threat, apart from humans, is a number of parasites including the smallest of the red spider mites that can infect both adults and the brood. This causes much grooming amongst the ants in each colony. Personally, I have been studying and photographing these ants for over 20 years and see them nearly every time I venture out into the heath and local forests. They are one of the most aware invertebrates I have encountered and will go about their business and leave you alone if you leave them alone. I have included some images of the main species found along the Surf Coast and Otway Ranges.

Part Two – the smaller Agricultural Carpenter and Sugar Ants from the genus *Camponotus* – will appear in the next issue of the Angair Quarterly.

## Aurora Visions, Anzac Eve 2023

Neville Millen

From a cliff-top in Aireys on a still night  
Beyond Castle Rock, an ethereal glow  
Distant red with green streaks in sight  
Waves roll easy upon the rocks below

The Aurora that night roused my soul  
The strange light brought visions of war.  
Gallipoli, mud in France - human toll  
Red cannon flashes my grandfather saw

A light-horseman, he enlisted for war  
Fought without a horse he would sneer  
Gallipoli shook him to his core  
Haunted by the past, he downs his beer

From the cliff-top I see misty ghosts  
Streaks of quicksilver on the lifting waves  
A low roar brings calls of departed hosts  
Returning home from their foreign graves



## The online presence of the Anglesea Perimeter Walk

Dot Hutton

This year marks the tenth anniversary of the opening of the 22-kilometre Anglesea Perimeter Walk. The walk's instigator, Dot Hutton, reviews the track's online reviews

A Google search for the Anglesea Perimeter Walk (APW) gives access to 11 different websites. Most sites separate the eastern and western loops which partly reflects the original idea that walkers can walk in stages or along the full length. Website creators have relied heavily on the wording and map from the original brochure available in the Surf Coast Shire's Information Centres or have copied from an NewsAngle article. Some, such as [www.angleseaadventure.com.au](http://www.angleseaadventure.com.au), simply give the length and difficulty of the walk and a reminder to tread lightly on the land.

Some sites are more imaginative in surprising and pleasing ways. The Angair site, updated in 2020, has a brief description and a map. It shows the APW sign and illustrative photos. Bushwalking Victoria has good descriptions of both loops but no map. The Wikiloc site briefly describes the western loop, with efficient track statistics and an elevation sketch. Friends of the Eastern Otways has the most attractive site with a map and a photo of the APW sign. Attached to this site are audio snippets of bird calls, and beautiful photos of the flora and fauna.

# Angair Quarterly - Autumn 2024

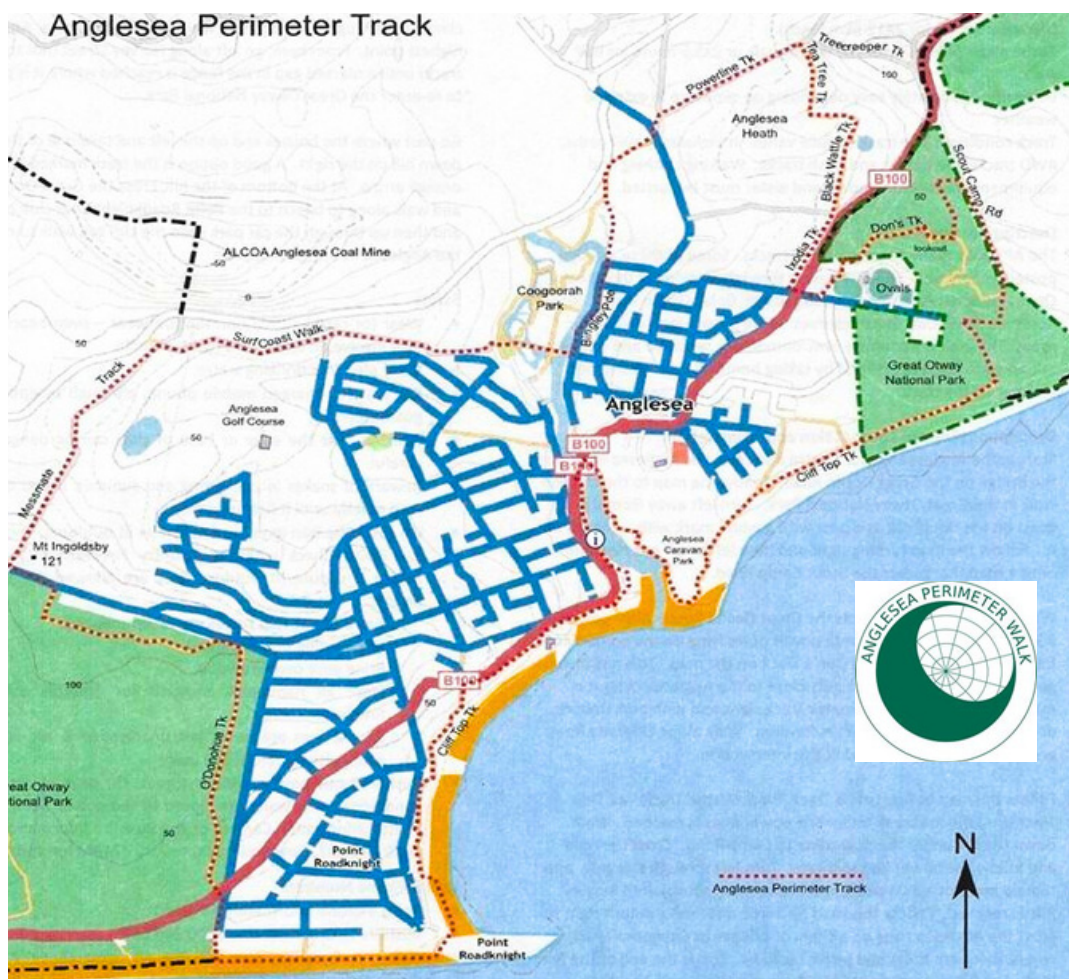
An old site (2016), [www.goinferalonedayatatime.com.au](http://www.goinferalonedayatatime.com.au), uses a diary form. The author rants a bit about mining, but that aside, this article has a detailed description and very useful photos. Several sites are disappointing. The Parks Victoria site opens with a list of closed tracks that have nothing to do with the APW. This could be misleading for people who do not know the area or track names. The Surf Coast Shire site only lists APW as a possible walk in the area. It gives no further information. An opportunity exists for us to rectify the information on these two important sites.

Only one site, AllTrails, has reviews as well as a comprehensive set of photos, listed as Photos of Anglesea Perimeter Walk.

The APW rates an average of only 3.9 on a scale 1-5. While many walkers give us 4 or 5, some give as little as 1.

The biggest complaint is to do with missing signs. Les Lyons has been maintaining the signs over the past six months and they are currently in good order; however, recently someone has removed some of the directional arrows. The latest review from a few weeks back on the AllTrails site has a 1 because the walker saw a snake and turned back. I guess the fright made them most disgruntled. Another was very unhappy that the walk was close to houses in places and thought they would enjoy walking around Albert Park much more. We plan to monitor the reviews and see if we can improve the walking experience. If you have walked the track recently, we would find it useful if you could add your review to the AllTrails site or get in touch with us.

We are just a small group monitoring the APW but if you would like to join our team overseeing the track, please give your contact details to Natalie at the Angair office on 03 5201 2896 or [www.admin@angair.org.au](mailto:www.admin@angair.org.au) and one of us will get in touch.



## The other monotreme swimmer

Sally White

We all know that platypus are sleek and powerful swimmers, probing their beaks along the river bottom, echolocating their food. But many people are unaware that the only other monotreme, the echidna, is also a water lover. Sometimes they are even seen swimming at the beach. Echidnas' reason for going for a dip on hot summer days is in their blood. Their body temperature is around 30°C, lower than most mammals. We humans average 36°-37°. So echidnas really need a way of cooling off.

For a number of years, I have been privileged to have a spikey swimmer regularly visit the small waterhole in my bush garden throughout the summer. It even dug a nice damp cave in the side of the waterhole to provide for an after-dip snooze. One season the water began to evaporate and the cave became dry and dusty above the water level. The echidna solved that problem by digging another cave, some 40 cms lower than the first. This year, however, the waterhole had dried up by September despite a supposedly wet winter. What would happen to my water-loving visitor?

I didn't see it but knew it was there because it started a program of digging up all the bare ground behind the house.

Then three weeks after Christmas, I heard a splashy noise coming from the poly water trough we had sunk into the bottom of the waterhole to give all the animals some summer water. The echidna was taking a dip. No room for a swim with beak pointed up like a snorkel but a decent cool bath was almost as good.

Since then the echidna has been coming at around noon most days for a cleansing ablution. It has been interesting see how it uses those peculiar backward-facing feet that look as if they have been put on the wrong way. It clasps the edge of the trough with its front feet and vigorously scratches one side from chest to tail to get water well into the fur below the spines. Then it does the other side. Three times each side takes nearly four minutes. There's just time for a snuffle in the water and then it heaves itself out of the trough and trundles off into the bush. Somewhere it has probably dug yet another cool sleeping hole!



Image - Paul Wright

## Our attractive midges come out in autumn

Margaret MacDonald and Alison Watson

As the common name, Midge Orchids, suggests, these orchids have very small flowers. The spike of dark-coloured insect-like flowers grows up inside a cylindrical leaf and then emerges through a slit at the top.

Three species of the genera, *Corunastylis*, are found in the Anglesea district and all flower in late summer and autumn. You need to look carefully to find them as they often hide amongst grasses and heathland plants.

You would be lucky to find *Corunastylis despectans*, Sharp Midge Orchid, as it is listed as extremely rare in the district. It can be recognised by the 20 cm flower stem that may bear up to 15 flowers, closely together. The purplish-brown flowers are downward facing with sharply pointed hairless petals and sepals. The dark labellum is also hairless.

The stem of *Corunastylis ciliata*, Fringed Midge Orchid, is about 10-15 cm with up to 10 flowers. This small orchid gets its name from the long reddish, sparsely hairy labellum on each greenish-yellow flower as the species' name, *ciliata*, is Latin for 'eyelash'. It is listed as rare.

Consistent with its common name, *Corunastylis morrisii*, Bearded Midge Orchid, has many long hairs on its labellum and on the base of the dorsal sepal of the reddish-purple flowers. The lateral sepals point slightly upward and are hairless. The tallest of our Midge Orchids, at about 25 cm, it is listed as uncommon.



Sharp Midge Orchid



Bearded Midge Orchid



Fringed Midge Orchid

## Our wonderful wattle seed pods

Ellinor Campbell

We all love our wattles with their distinctive fragrant yellow flowers, such a welcome highlight when walking in our woodlands and forests. I am also intrigued by the varied and interesting post flowering displays provided by their seed pods. Each wattle has a different pod, which changes colour and shape as it develops and produces seeds, often curling outwards to release them.

I have four favourites: the Blackwood, *Acacia melanoxylon*, the Hedge Wattle, *Acacia paradoxa*, the Golden Wattle, *Acacia pycnantha*, and lastly the Sweet Wattle, *Acacia suaveolens*.



The Golden Wattle, *A. pycnantha* (top), Blackwood, *A. melanoxylon* (left), the and the Hedge Wattle, *A. paradoxa* (right).

The Blackwood's short clusters of pale flowers are quite inconspicuous compared to most wattles, but the hairless (glabrous) seed pods are a delight. They are initially long, green and leathery, but as they mature, they become brown and twist and turn into massed coils. These open and expose seeds surrounded by a fleshy, apricot appendage called an aril. In autumn, the shaded pathway at Allen Noble Sanctuary, which has an avenue of Blackwoods, becomes strewn with these intricate and flamboyant pods and seeds.

Hedge Wattle, a most inhospitable prickly plant, described by Leon Costerman as 'armed with fine thorns', provides perfect protection for small birds. It becomes much more appealing to humans when bearing its abundant bright yellow flowers, followed by its really unusual seed pods. These leathery, curved pods are covered in dense erect white hairs, initially green and looking very like large hairy caterpillars. They also turn brown and woody as they release their seeds.

Our national floral emblem, the Golden Wattle, has some of our most eye-catching and striking flower clusters, which contrast so well with the rich green of the leaves (phyllodes). Their long narrow seed pods are flat at first, and go through a range of colours from green and a lovely reddish colour when young. Finally they turn brown and knobbly, and open with each side of the long pod curling strongly outwards to expose the seeds.



Sweet Wattle *A. suaveolens*. Image: John Tann.

The long-lasting, clustered creamy-yellow flowers of Sweet Wattle brighten up our winter walks. Once finished they develop appealing short, flattened and almost rectangular seed pods with transverse seeds. They are initially bluish in colour, described by Enid Mayfield as having a 'powdery bloom.' They really stand out along the branches between the widely spaced phyllodes.

Most other wattles have similar versions of narrow knobby pods of varying size and length, turning brown when they mature and release their seeds.

Some of our most common species are as follows: Varnish Wattle, *Acacia verniciflua*, has long pods which are sticky over the seeds.

#### References:

Enid Mayfield (2013) *Flora of the Otway Plain & Ranges 2*, CSIRO Publishing, Melbourne

Leon Costermans (1981) *Native Trees and Shrubs of Eastern Australia*, CSIRO Publishing, Melbourne

Margaret Macdonald (2009): *Flowers of Anglesea and Aireys Inlet*, Inverted Logic, Melbourne

Prickly Moses, *Acacia verticillata*, has markedly hairy pods of a similar width, but much shorter.

The Silver Wattle, *Acacia dealbata*, and Black Wattle, *Acacia mearnsii*, have similar feathery true bipinnate leaves, not phyllodes like most other of our wattles and develop similar long flattish seed pods.



Prickly Moses, *Acacia verticillata* Image: Ellinor Campbell

## Bulbine: Mistakes are Made of This

Tracey Worsey

As volunteer growers who are members of Angair's propagation group, we do our utmost to ensure the plants we offer for sale, and for Angair projects, are correctly identified, labelled, and indigenous to our area. We do make mistakes at times, and not all our collected/donated stock plants or seeds turn out to be what we first believed.

We have also been known to look askance at seedlings with unfamiliar juvenile leaves in a nursery tray. These sometimes look nothing like the mature plant (think Acacias, with which we are all familiar, but almost impossible to tell apart at the seed-leaf stage). We have, at times, doubted ourselves to the point of swapping labels or heaven forbid, almost throwing them away; *Lasiopetalum baueri*, Slender Velvet-bush seedlings come immediately to mind. Indeed, we are regularly questioned at plant sales when seed raised-plants sit alongside their cutting-grown counterparts, looking almost unrelated.

The most important step before propagating any indigenous species (after checking seed collecting permits and permissions, and being familiar with VicFlora's Code of Practice for Ethical Seed Collection), is to establish an accurate species identification before collection.

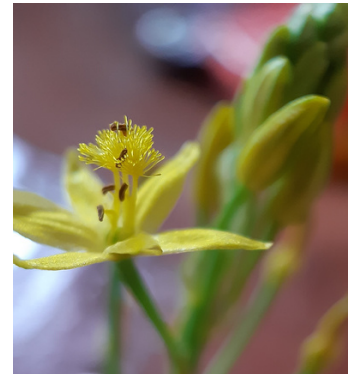
As any members who themselves are 'growers' will know, seed collection and propagation are time-consuming and often challenging pursuits which don't always result in a crop of useable plants.

Last year an article came to our attention, written by an administrator of a web group called Australian Indigenous Plant Identification. Tricia Ann Stewart highlighted the increasing prevalence of the 'wrong' Bulbine Lily, *Bulbine semibarbata*, in nursery stock across Victoria, which was threatening to displace the supply of the correct species for south east Australia (including our area), *Bulbine bulbosa*.

Unfortunately, close inspection of our Bulbine stock has confirmed the same mistake in our Plant Propagation Unit. As this plant also tends to be one which readily self-seeds in gardens, it is extremely important that we alert you to our mistake.

*Bulbine semibarbata* does occur in Victoria, primarily in the north and west of the state, but is not recorded in our district. We have now removed all seed, stock plants and tubestock from the propagation area, and would respectfully suggest you could do the same while we search to find the real bulbous Bulbine.

Lily flowers have six petal-like segments consisting of three petals in the centre, and three outer sepals fused at the base. Photos of our 'wrong' Bulbine, *Bulbine semibarbata*, clearly show the three barbed and three non-barbed male filaments. It also has orange, rather than yellow stamens.

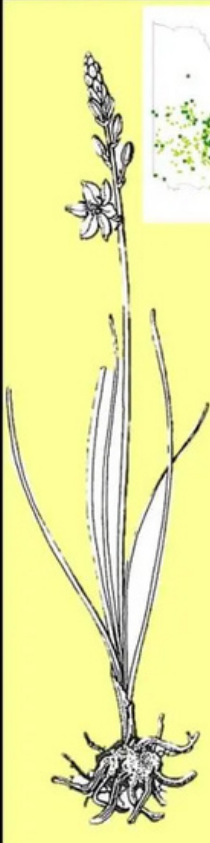


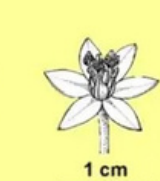


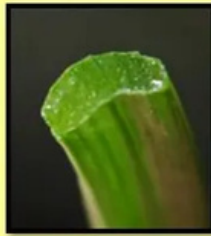





*Bulbine semibarbata*, with sepals removed and three 'barbed' filaments clearly visible



*Bulbine semibarbata* roots, and *Bulbine bulbosa* (unmissable once you've seen it, but we generally don't pull plants out by their roots!)

The following summary was posted publicly to inform the nursery trade and other indigenous plant propagators, and summarises the differences between the two species.

				
		<ul style="list-style-type: none"> <li>-Perennial herb, 27–75 cm high, with thick roots, and often with bulb</li> <li>-Leaves 3–7, channelled, or subterete, hollow, to 30 cm long, 1–5 mm wide</li> <li>-Tepals (petals) 9–22 mm, 1–3.5 mm wide.</li> <li>-Stamens equal, 8–9 mm long; filaments with gold-brown club-shaped hairs to 1.5 mm long, at base of anthers</li> <li>bulbosa=with bulb</li> </ul>	<ul style="list-style-type: none"> <li>-Typically, annual to 50 cm high, with fibrous roots.</li> <li>-Leaves 5–20, spreading or erect, flattish to subterete, 5–20 cm long, 1–5 mm wide (rarely broader). Often with reddish tinge</li> <li>-Tepals (petals) 4–7 mm long, 1–2.5 mm wide</li> <li>-Stamens unequal, outer ones 2–3 mm long, inner ones 3–4.5 mm long; long filaments with hairs, short filaments hairless</li> <li>semi=partially</li> <li>barbata=bearded/hairy</li> </ul>	
	<i>Bulbine bulbosa</i> , Bulbine Lily		<i>Bulbine semibarbata</i> , Leek Lily	



## Four firsts for Surf Coast hoodies

### Bron Ives

Many firsts this season: the first fledgling before Christmas in years, the first fledglings at Lorne for decades, the game-changing introduction of a People and Dog Exclusion Zone at a breeding area and BirdLife's National Biennial Beach-nesting Birds Conference coming to Anglesea for the first time

Seven Hooded Plover breeding pairs live on the Surf Coast's 40 km coastline. This season there have been three fledglings, about 25 nests and three active nests at Urquhart's, 12th Avenue Pt Roadknight and Torquay. There were also three chicks at Pt Roadknight until mid-February when two disappeared, fate unknown.

About half of the Surf Coast hoodies are flagged; the volunteers know them well and interest is piqued when there's a visitor. Late last year a monitor spotted a hoodie flagged 'BU White' at Pt Roadknight. BirdLife provided this incredible story:

In late 2022, a flightless 30-day-old hoodie chick was taken by a dog at Cape Bridgewater. The chick was rescued, taken to a vet in Portland and amazingly it was not injured. The next morning the chick was banded and with the help of local volunteers it was released back to its parents. BU White eventually left its natal territory and had not been seen for over a year, until it arrived at Pt Roadknight three months ago — approximately 350 km away.

The headline-grabbing news for the season, however, has to be the Lorne hoodies and the discovery of a nest in December, the first in BirdLife's recorded history. The breeding pair, RA White and an unbanded bird had relocated to Lorne from Moggs Creek after suffering too many lost nests and disturbances. When two chicks hatched, GORCAPA installed a People and Dog Exclusion Zone, another first for the Surf Coast.



Lorne Hoodies

Photos: Bron Ives and Michael Prideaux

The Friends of the Hooded Plover Surf Coast actively promote BirdLife's guidelines not to photograph chicks. Photos used for promotional/educational purposes are taken by a BirdLife trained volunteer.

This was a brave protection strategy by GORCAPA, and its success relied on public cooperation. First to step up to the challenge were 27 wonderful people from the Lorne community who volunteered to become BirdLife wardens. The volunteers were inducted by Janice Carpenter, Regional Coordinator for Friends of the Hooded Plover Surf Coast, and then they completed BirdLife online training. Joined by GORCAPA staff and about 10 existing Surf Coast volunteers, they were rostered on the beach every day for five weeks from 7.00 am - 9.00 pm.

This new zoning allowed the chicks to feed undisturbed and the parents could focus on deterring other threats. Beachgoers enjoyed observing the family through scopes at either end of the beach and learning about the birds from volunteers. The vast majority of people embraced this minor change and happily walked along Cypress Avenue instead of the 75 m stretch of beach. Best of all, we now have two more fledglings to add to the population of these threatened birds.

This zoning strategy was replicated at the Pt Roadknight Conservation Zone when the resident hoodies hatched three chicks a few weeks ago. Dogs haven't been allowed in this area for many years and with the addition of a temporary 'people' exclusion zone, the chicks and parents are making good use of the area.

These Surf Coast communities have shown us that it is possible to change how we do things so that others benefit. We have plenty of great outdoor options; the hoodies and their chicks don't.

Some not-so-good news is that, after repeated nesting attempts, the female bird at Aireys Inlet hasn't been seen since early December 2023. She's been present here continuously for the last seven years. Her male partner remains on territory between Aireys Inlet and the old Mad Max stairs.

BirdLife's Beach-nesting Birds Team are holding their 9th National Beach-nesting Birds Conference in Anglesea from 31 May-2 June at Anglesea Memorial Hall. It will be three full days of fascinating talks, workshops and field visits with experts and others from around Australia. Registration details will be available soon.

The chances of successfully raising chicks have dramatically improved from as low as 2% to as high as 50% at monitored Hooded Plover breeding sites. If you would like to help and join the 600+ BirdLife Beach-nesting Bird volunteers, contact Janice Carpenter on 0418 375 561.

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The Friends of the Hooded Plover Surf Coast recognise and are grateful for the immense contribution of Indigenous people to the knowledge and conservation of Australia's birds. We'd also like to thank the people of the Surf Coast and the following agencies that help to protect our Hoodies - GORCAPA, Victoria Police, Surf Coast Shire Rangers, Forest and Wildlife Officers DEECA, the Lorne, Fairhaven, Anglesea and Torquay Surf Life Saving Clubs, ParksVictoria, the BirdLife Beach-nesting Bird Team and all of the volunteers.



Point Roadknight Fledgling  
Photo: Bron Ives

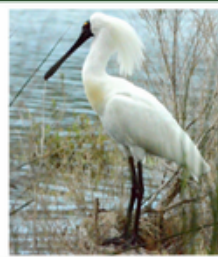
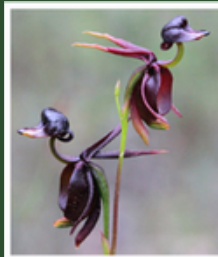
## Some things never change

A trawl through old copies of Angair's various publications is entertaining and revealing. The issues are perennial. Sally White found the following plea from Mary D. White, one of the society's legendary figures.

ANGAIR NEWSLETTER  
MARCH 1984  
REGISTERED BY AUSTRALIA POST  
PUBLICATION NO VBH 1868

Some people dump garden rubbish in the bush and cause the spread of plants which become weeds. There are several bad infestations of Myrtle-leaf Polygala (*Polygala myrtifolia*) on the dunes near Point Roadknight. Smilax Asparagus (*Asparagus asparagoides*) which is used by florists becomes a serious weed in dunes and woodlands. It is very difficult to eradicate. Dolichos lignosis, once used widely in gardens, has taken over on one part of Angahook Forest Park and in several other roadsides and dunes areas. It is a climbing plant with a pinkish pea flower. In one dune area people have planted pelargoniums which are now taking over. It would be a great pity if these garden plants took over from the native ones. Please remember that the Anglesea Tip is open at all times ... There is no excuse for dumping garden rubbish in the bush. If you have seen the effect of boneseed in the You-Yangs you will be anxious to help to free our own district of this noxious weed which can take over and choke out almost all other plants.

M. D. White  
4 MacMillan St, ANGLESEA



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.

[www.angair.org.au](http://www.angair.org.au)

**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.**

### **This issue:**

**Editors: Sally White and Katrina Mock  
Production: David Williams and Mirai Kirsanovs**

### **Next issue:**

Our next issue will be published in June 2024 and will be the winter edition. We welcome any contributions of local, seasonal or general environmental interest. Send your contributions to [angair.communication@gmail.com](mailto:angair.communication@gmail.com) by mid-May and clearly label them 'for Angair Quarterly'.