

JOIN US AT BERG MT MARTHA'S

ANNUAL GENERAL

MEETING

SATURDAY 21ST OCTOBER Mt Martha House 9.30-11.30am

Guest speaker

Jonathan Ricciardello

from The Briars



Jonathan will tell
us about the
rewards and
challenges of
managing The
Briars wildlife

sanctuary, the proposed 40-hectare sanctuary expansion and the revegetation works that have occurred over the past several years.

Then learn what BERG volunteers have been up to in the past year in our

- work in the reserves and along the coast
- ◆successful grants
- ♦ community activities
- progress towards an ESO the strongest environmental protection for the reserves.

And enjoy another delicious morning tea!

CAN YOU HELP?

Can you or someone you know make a difference to your local environment by being more involved with BERG MM?

WE NEED to fill two key positions:

◆TREASURER: Julie Zammit is standing down after a sterling 7 years in this position. Our Treasurer manages the many grants that are the lifeblood of our work.

◆VICE PRESIDENT: to help with the future direction of BERG

We are also looking for

a new WaterWatch Coordinator (see page 7) and more Morning Tea Bakers (see page 4).

THANKS!

From President Eric Smalley

A special thank you to all those volunteers who stepped up and filled the breach while various coordinators and committee members have been away over winter.

It would be great to have more volunteers join BERG in the future. Did you know that most people who volunteer have done so because someone asked them in the first place?

Do your friends a favour and ask them to join us, support us, and join in if they can! (It doesn't have to be physical work.)

SAVE THE DATE!

ALL BERG MM MEMBERS

ARE INVITED TO OUR

END-OF-YEAR PARTY!!
SATURDAY 25TH NOVEMBER

Mt Martha House, early evening More details to come



Thank you!Mt Martha Community Bank
Sponsors of *The Creek* 2023

Mount Martha

Community Bank® Branch



MISTLETOE - AN ECOLOGICAL KEYSTONE

By Angela Kirsner

This article is based on a BirdLife Australia webinar presented by Mistletoe expert Professor David Watson. My thanks to Jeanette Miller for alerting me to it. Click here to watch the presentation.

Many people think of mistletoe as a parasitic pest that kills its host tree. Nothing, said Dave Watson, mistletoe researcher for over 20 years, could be further from the truth. Australia has almost 100 of the world's 1500 mistletoe species, and they punch high above their weight in supporting biodiversity.

What is a mistletoe?

A mistletoe is a plant that is parasitic, woody, and attaches above ground to the branches of its host. In Australia the fruit and abundant nectar of mistletoes are browsed by many native birds and animals (and livestock). In a healthy ecosystem, mistletoes don't kill trees but live in a dynamic balance with their host. Most Australian mistletoes are primarily water parasites; they photosynthesise their own sugars and carbohydrates, but rely on their hosts for water.

Keystone species

A keystone species is one that has a disproportionate influence on maintaining diversity in its ecosystem. Mistletoes are such species: while relatively rare in many ecosystems, their presence nevertheless dramatically boosts biodiversity.

To explore this, Watson and his colleagues selected 40 woodlands of about 30 hectares each in northern

Victoria. In half, they removed every mistletoe; the rest they left untouched. After three years, they found that the sites without mistletoe had a third less woodland bird species than the control sites – a remarkable effect, much larger and more rapid than expected.

Specifically, it was groundforaging insectivorous woodland birds – robins, babblers and the like – that vanished completely when the mistletoes were removed. But why?

'Tasties' in mistletoe litter

The researches found that the litter beneath trees with mistletoe had far more of the tasty bugs that ground foraging-birds prefer — caterpillars, cockroaches, spiders — than under comparable trees with no mistletoe. Over a year, there were about 1,000 more 'tasties' per square metre under mistletoes, translating to 2.5 million more snacks per hectare. The perfect mix for bug abundance, they found, is just a few mistletoe leaves in the eucalypt litter. But without any mistletoe, bug numbers plummet and insectivores have nothing to eat.

What brings the 'tasties'?

While Eucalypts retain their leaves for two or three years, mistletoes turn theirs over every six months or so and, unlike other plants, they don't suck their leaves dry of nutrients before shedding them. Year round, mistletoes deposit high volumes of nutrient-rich litter that detritivores – insects, bacteria, fungal

Mistletoes around Mt Martha: Left: in a Manna Gum in the old Quarry in the reserves Below: in a large Black Wattle on Nepean Hny south of Hopetoun Ave. Photos Angela Kirsner





Sue Brahender took this wonderful photo of a Koala sleeping in a Mistletoe at The Briars in 2010

communities - gobble up.

Litter with mistletoe leaves decomposes more slowly and provides a steadier supply of the nutrients needed for plant growth, as well as reducing evaporative water loss from the forest floor. The composition of understorey plants researchers found, reflected these changes, with a greater proportion of annual plants found beneath trees with mistletoe.

Ecological interactions

Mistletoes start life as a seed deposited by a fruit-eating bird. They provide nesting sites for many birds. Many animals eat their nutrient-rich foliage. Brush-tailed Possums in particular relish it.

Nectar-feeding birds pollinate the bright showy flowers and, as with ground-foraging birds, where mistletoes are present, there are more species of nectar-feeding birds more of the time. If water is scarce, Eucalypts and other plants won't produce much nectar, but mistletoes,

'plumbed into' their host, can flower whenever they want, and typically they flower when other plants don't.

Less is known about insect-mistletoe interactions, but ongoing research is finding many other species that occur only on mistletoes, including three psillids.

Mistletoes however are sensitive to drought and at the end of a significant drought one study found that most had died, though this was probably more to do with high temperatures than lack of water. This is of real concern in relation to our nectar feeding birds and the pollination services they provide on all plants, but especially Eucalypts.

Finding the 'Goldilocks' density

Mistletoes are not evenly distributed, but patchy, and it's possible to have too many. A tree overloaded with mistletoes will be struggling, and an ecosystem with too many mistletoes is lacking its natural constraints. In southern and eastern Australia, mistletoe numbers largely are controlled by fire (mistletoe has no defences against fire and no storage organs) and those voracious mistletoe munchers. Brushtail Possums.

Removal of hollow trees, and the preponderance of isolated trees in agricultural land both act against possums. So where there are too many mistletoes, nest boxes, reconnecting these trees with nearby bushland, and targeted revegetation, plus the occasional fire, are much more effective strategies than selective removal of mistletoes.

Mistletoes in the city?

Dave Watson described areas with no mistletoes as 'wastelands'. The City of Melbourne's abundant Plane Trees, for example, are useless for Australian wildlife and insects. A project is underway, however, to seed Plane Trees with Creeping Mistletoe, and after just a few years, beautiful native mistletoes are establishing, and the project is inspiring other mistletoe regeneration works.

Mistletoes have another fascinating potential in cities. On a very hot day, their leaves remain cool. Acting like mini Coolgardie safes, they are full of water and their stomata always remain open. Birds seek them out in heat, and there is interest in the City of Melbourne in the possible role of mistletoes in combatting the urban heat island effect. By putting out a lot more vapour, a tree with Mistletoe in it, can cool the area around it by up to 15 degrees on a very hot, dry day.

A RARE FUNGUS?

Jeanette Miller reports

Given that most agaric fungi have turned to 'moosh' and decomposed by this time of year, I was surprised to discover these papery, dried-out specimens whilst weeding among dried leaf litter at Devilbend Natural Features Reserve recently.



Fungi expert Alison Pouliot identified them as Sandy Stiltball, *Battarea phalloides*, and directed me to an interesting story on them in her recent book, *Underground Lovers*. Her story illustrates the slippery notion of rarity in the world of fungi.

This is an unusual fungus, tough, woody, up to half a metre tall (the ones I found measured 20cms). Atop the stipe is a domed, papery sac which ruptures at maturity to release

rusty brown spores. The dried remains of these sacs felt like eggshell on the specimens I found.

Adapted to growing in harsh conditions, Sandy Stiltball occurs in many countries around the world, yet is recorded infrequently and is being considered by

the Global Fungal Red List Initiative. But the fact that it appears in habitats disturbed by human activity (a pot of geraniums in Italy, a carpark planting at Devilbend!) throws into question its status as 'rare'.

A RARE VISITOR

Angela Kirsner reports

Sunning herself in a large hollow log near the Old Quarry in our reserves, the handsome skink pictured below was a good 20cm long, four or five times longer than the little skinks that frequent our gardens.

Fauna ecologist Mal Legg tells me it's a female Southern Water Skink, a big mature one, probably about 10 years old (they can live up to 20). Males are distinguished by yellow on the side and more prolific colours.

She is probably breeding now. Like many skink species, she bears live young, which are independent at birth. Litters range from 1 to 6, born in mid to late summer.

Southern Swamp Skinks are rare in our reserves. Her appearance here, Mal points out, highlights the importance of terrestrial hollow logs. These skinks rely on fallen timber with small hollows usually made by Longicorne Beetle larvae to live and hibernate in.

They are found in southern and eastern Victoria and south-eastern New South Wales, and hang out in and around watercourses, seeking small items of prey such as insects, tadpoles, frogs and other small lizards.



ECHIDNAS - SOME COOL FACTS

ABC Science e-newsletters over recent months have reported on some fascinating Echidna research at Curtin University, WA.

Echidnas 'talking' with each other

In what is thought to be a scientific first, Curtin University researchers have obtained recordings of Shortbeaked Echidnas making a range of sounds including cooing, grunting, and wheezing.

Researcher Dr Christine Cooper said in her 20 years of studying echidnas. she had heard them vocalise only five times.

The next step is to figure out what they are saying. It seems they may be flirting! 'We have only heard the vocalisations from adult animals during the breeding season, suggesting echidnas only find their voice when reproductively active' said Dr Cooper.

The discovery is also important in understanding how Australian wild-life evolved. Echidnas are mono-

tremes, like platypuses, which also vocalise. The ability to communicate through sound, like other mammals, suggests this trait must have developed in a common ancestor 100 to 200 million years ago.

Read the whole article and hear the recordings <u>here</u>.

Keeping cool

The same team at Curtin has found that echidnas blow snot bubbles and do belly flops to stay cool in the heat. Thermal vision of wild echidnas showed that they blow mucus bubbles out their noses, which burst and wet the snout tip, cooling a pool of blood at the top of their elongated beaks.

Echidnas also use their bellies and legs (both free of spines) to flop on or press against cool surfaces, letting heat escape.

The findings explain how echidnas can be active under hotter conditions than previously thought. They can't sweat (they don't have sweat glands) nor do they pant or lick themselves.

The next step is thermal modelling to see how important these thermal windows are for heat dissipation, and where echidnas' thermal limits might lie.

Read the whole article bere.

Echidnas in our reserves

We periodically see echidnas in our reserves, most recently at a Friday working bee in October (as reported in Field News). The one below was on the fire track below Citation hill in 2018.



Photo Angela Kirsner

CALLING ALL BAKERS!

We need more people to join our baking roster, making occasional working bee morning teas for our hard-working bushland volunteers

- CAKES, SCONES, BISCUITS -WHATEVER YOU ENJOY PREPARING!

Call Alison Hazeldine on 0422 724 948



MP VISITS

Tom McIntosh, MLC for Eastern Victoria, made contact with BERG Mt Martha after noting our success in securing a Landcare 2023 grant.

He has a strong interest in conservation matters, particularly in his electorate, of which we are part.

Eric Smalley, BERG President, took Tom on a 'walk and talk' tour in the Reserves on 25th September and outlined BERG activities in the reserves and the local community.

Tom said he will be joining BERG as a member and

hopes to attend a working bee in the future.

Right: Tom McIntosh, MLC for East Victoria, with Eric Smalley, President BERG at the Old Campground



FIELD NEWS

Field Officer Liz Barraclough reports Friday mornings

he weeding continues! Winter L Cherry, Rambling Dock, Forget Me Nots, Arum Lilies, Rambling Dock, woody weeds and more across various sites - along Maude St, Uralla Bridge, the Bunyip and between kinder and tennis courts, among the Swamp Paperbarks at the end of La Trobe St. A concerted attack on the Periwinkle (and other weeds) at end of Henley Ave in the Old Campground. And a similar attack on the large patch of Angled Onion among the Melaleucas by the Hopetoun Creek outlet below the ovals. And a bit of last minute indigenous planting.

And on Friday 29th September (yes, we were still working on the public holiday!), there was an echidna shuffling by the track from the ovals to the board walk. It delighted not only the Friday workers, but a passing family as well. (See Echidna article page 4)

Sundays

The Sunday crew has weeded round the large indigenous trees planted in the Old Soccer Pitch, and tackled the ongoing Forget-me-nots,

Tobacco Plants and woody weeds on the northern side of the creek upstream of Geoff Kaye Bridge.

A brave turnout of 10 in October,

Another Grant Success

We have been awarded \$19,742 in a 2023 Melbourne Water Victorian Landcare Grant (previously called PPWCMA grants), to restore Grassy Woodland on the slopes below Citation Ovals.

Editor's note: Well done Liz, our chief grant-writer!!

among the Swamp Paperbarks below Hilton Court, pulled out three collapsed tents that were full of bottles and cans, plus twelve – yes, twelve! – inflatable mattresses and a heap of smelly general rubbish. In total, a trailer full of tip rubbish and ten large white bags of recyclables. This hardy crew also started to attack the rampant Arum Lilies and other aggressive weeds on the site – Forget-me-nots, Agapanthus, Pittosporums and lots more. The area will be an ongoing challenge.



Sunday workers, October, with a truck load of rubbish. L-R Kathleen, Henk & Paul van Leeuwen, Joe Karam, Ian Croker Photo Eric Smalley

Work under grants & Shire funding

Naturelinks, our wonderful bushland contractor, has sprayed Bridal Creeper and removed Blackberry and woody weeds under our Melbourne Water grant, working at the bottom of Augusta Street behind and downstream of the pumping station.

And with Shire funding, they have tackled ground-flora weeds in the old Campground, along Mirang Avenue, and further upstream in our precious orchid area. And on the northern side of the estuary, the ongoing battle against woody weeds (Polygala, Italian Buckthorn, Broom) plus English Ivy, Bridal Creeper and three large Sallow Wattles.

MPS Network Day

The Shire's Natural Systems Team hosted another Network day for Friends Group members September 19th, this time at Seawinds. The day included interactive **Bioblitz** session with ecological restoration planner Brian Bainbridge, in which we explored the area for signs presence and invertebrates and birds, and discussed the interactions of these creatures and their habitats.

Redhill Rotary Club

Jock McMillan again brought his group of willing Red Hill Rotarians to plant about 50 plants in the Rabbit Paddock on 28th August.



Friday Group near Henley Ave Above: weed warriors Terry Moar, Geoff Pritchard & Jock McMillan emerging from deep in bushland Left: ...and morning teas in style! L-R: Liz Barraclough, Verona Rawson, Terry Moar, Jock McMillan, Jeanette Miller Photos Angela Kirsner

THANKS TO OUR BUSINESS PARTNERS

FEATURING

MT MARTHA CHIROPRACTIC AND SPORTS INJURY CLINIC

After 30 years' dedicated service to the community, our clinic is entering an exciting new chapter with a change in ownership.

New owner **Dr Rachel Duncan** brings a wealth of experience and a fresh perspective.

A pillar of health and wellness, the clinic has served countless patients over the years. Dr Rachel is committed to maintaining this legacy of excellence in chiropractic care for both existing and new patients. The skilled staff our patients know and trust remain an integral part of our team.



Chiropractors Dr Rachel Duncan (right) and Dr Roxanne Daniels are both long time supporters of BERG MM.

Our services include:

- soft tissue therapy,
- low force and manual chiropractic techniques,
- kinesiology
- rehabilitation care.

Find us at the corner of Bay Rd and Langrigg Ave, call us on 5974 3477, or check out the website at www.mtmarthachiropractic.com.

- Bells Gourmet Meats
- Bendigo Bank Mount Martha
- Boomerang Bags Mount Martha
- Bunnings Mornington
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- Mount Martha Village Clinic
- Mount Martha Yacht Club
- Mr Curtis Wine Bar
- Proscape Landscaping
- Regeneration Projects
- Ritchies IGA
- Roberts Beckwith Partners
- Rotary Club of Mount Martha
- Sea Side Shacks
- Volpino
- Warlimont & Nutt Pty Ltd

FORESHORE FUNDING

Gerard Cook, Mornington Peninsula Shire Team Leader, Water & Coasts, reports

Mornington Peninsula Shire Council has been successful in obtaining three grants from the Coastal and Marine Management Plans Grants 2023. One of these, to the value of \$25,000, is for Mt Martha Foreshore.

The grants were available to Councils and Committees of Management, and we were happy to develop a proposal to assist the work of the BERG Mt Martha's Coastal Team.

The grant is to deliver some actions from the Mt Martha Coastal Marine Management Plan (CCMP). The key actions for Mt Martha Beach South are to improve vegetation by planting, weeding and fencing to prevent ad hoc trails and cover any disturbed middens in these

trails. We are seeking engagement sessions with the Bunurong Land Council to help our volunteers and community better understand the significance of the work that occurs in this space.

While the Minister has not yet endorsed the CMMP, it is our guiding document to manage the Mt Martha foreshore, so we were eligible for the funding.

Suzanne Ryan, BERG MM's Coastal Coordinator, comments:

BERG volunteers are excited to be included and able to support the Shire and bushland contractor Naturelinks with this grant, which supports us to progress and expand our regeneration of Mt Martha's coastal bushland. This grant is for

work in the area south of the Estuary mouth to Balcombe Headland.

Coastal Marine Management Plans

The Shire has developed a number of CMMPs to provide strategic direction and management objectives for our coast. All are developed in line with State Legislation – Marine and Coastal Act 2018 or the preceding Coastal Management Act 1995.

These CMMPs and other relevant coastal plans for each foreshore managed by the Mornington Peninsula Shire can be found on the MPS Coastal Planning webpage.

ESTUARYWATCH

Bruce Ferres reports

In recent months, typical winter weather patterns have seen the estuary mouth opening and closing in a natural cycle. A major storm in late August opened the estuary to the west, and seawater surged into the basin and upstream (see photo, right, taken 5th September). This disrupted the northerly wandering spit and berm, but the mouth wandered north again in the following weeks.

Water testing showed both creek and estuary to be in good health. The late August seawater influx took saline levels above normal as far upstream as the Ferraro Oval test

site, and the inflow has brought about a major improve-ment in turbidity levels, which were alarmingly high through late autumn and winter.

Fishing in Balcombe Creek

In recent months there has been a substantial increase in the number of people fishing in Balcombe Creek. It is usual to see an uptick in

fishing as the weather warms up, but not to the extent seen this year.

While it's great to see people enjoying the estuary, there are some issues that need to be addressed. A article in September in the *Mornington News*, 'Casting concerns over "damage" to estuary', highlighted some of the negative impacts including trampled vegetation (read the full article here). Fishers have



been making their own tracks to the water's edge, and the resulting loss of vegetation and erosion of the bank is causing collateral damage in at least half a dozen locations.

Another concern is the number and size of fish being caught. The most commonly caught estuarine of the size and bag limits.

Sewage spill

On 2nd September South East Water responded to a sewage spill from a property in Gregory Street which overflowed into a Melbourne Water stormwater drain that discharges into Balcombe Creek. Crews were quickly on site

to complete the clean-up, including flushing the spill area. Creek and estuary waters were monitored and tested for several days, and advisory signs were in place until water quality returned to normal. SE Water contacted BERG representatives immediately and informed the local

community via
Facebook and Twitter
with tags referencing
BERG MM. The EPA,
Melbourne Water,
Victorian Fishing
Authority and MPSC
were also notified.

The spill was quite small, nowhere near as impactful as the one earlier this year. We are grateful to SE Water for their quick response and for keeping BERG in the loop.

JOIN THE ESTUARYWATCH TEAM!

We carry out observations & measurements each month, at three test sites: campground jetty, fishing platform near Ferrero Oval, & August St footbridge.

A couple of hours a month, no expertise required.

Join us one day & see how it's done. You'll be made very welcome. Give Bruce Ferres a call on 0435 389 804.

OR COORDINATE THE ESTUARYWATCH TEAM!

After 6 years in the role, Bruce Ferres wants to hand over to another enthusiastic volunteer - he'll provide the necessary small amount of training & induction.

Might this be you? Call Bruce to discuss, on 0435 389 804

fish is Bream. The size limit is 28cm and catch limit is 10. During EstuaryWatch activities it was noticed that one fisherman had caught four extremely small Mullet. There is no size limit for Mullet but there is a catch limit of 40. Mullet have penetrated further upstream this spring due to seawater surge upstream at low tide. It is by no means certain that all those who are fishing in Balcombe Creek are aware

Estuary Opening Warning Sign

The two signs either side of the bridge warning that it is an offence to open the estuary artificially have long been deemed inadequate. Each is no larger than a standard parking sign and threatens offenders with unspecified fines. They have recently been even less effective, spending a lot of time lying down on the job!

New State-wide Coordinator

Melbourne Water has appointed Dr Teresa Mackintosh to take over as state-wide EstuaryWatch Coordinator. Teresa works in the Customer, Community & External Affairs Branch. She is interested in visiting Balcombe Estuary and learning more about the work of BERG MM. We will organise this in the near future.





Far left: Fishing on eroded banks. Left: Track trampled to the creek bank with vegetation damage Photos Bruce Ferres

WEEDS DUMPED

This substantial pile of Agapanthus plants from someone's garden was dumped in the reserves along the sewerage easement that runs from Victoria Crescent to the Esplanade Bridge, with a few houses backing onto it.

Agapanthus is listed in Victoria's Advisory list of Environmental Weeds in Victoria as an environmental weed with a significant impact on natural systems, highly invasive with extensive potential for further spread. It thrives in forest edges and open forest, from damp to very dry conditions, and may form dense monocultures.

Dumping of garden waste is an ongoing problem and source of weed infestations. Anyone caught is



subject to a substantial fine. You can report dumped weeds (and other problems) to the Shire through the *Snap Send Solve* app. Download it to your phone if you don't already have it – it's the quickest and easiest way to get problems addressed round the Shire.

BERG Mt Martha welcomes new members Karen Lloyd, John Roth, Keith Paine

Come along to our Bushland Activities	Join us at WaterWatch & EstuaryWatch	Other Local Groups
 ❖2nd Sunday of the month: between 9.30am & noon. Details emailed a few days ahead, or call Liz Barraclough 0408 388 430. ❖ Coast Group: fortnightly on Wednesdays, between 9.30am & noon. Call Suzanne Ryan 0418 387 604. Details emailed a few days ahead. ❖ Friday Group: weekly between 9.30am & noon. Call Liz Barraclough 0408 388 430. Details emailed a few days ahead. 	First Sunday of each month: *WaterWatch testing: meet 9.15am at Uralla Rd bridge. Enquiries to Franc Amendola 0433 626 007 or Sue Milton 0407 350 175. *EstuaryWatch testing: meet 9.00am at the Rotunda. Enquiries to Bruce Ferres 0435 389 804.	 ❖BirdLife Mornington Peninsula bird-watching 2nd Wednesday and 3rd Sunday. Enquiries to Max Burrows mornington@birdlife.org.au or 0429 947 893, or visit www.birdlife.org.au/locations/birdlife-mornington-peninsula. ❖Sunshine Reserve working bee 9.30am, last Sunday of month. Call Pia Spreen 0437 299 847.

BERG MT MARTHA PATRON: TERRY DENTON

COMMITTEE: President Eric Smalley • Vice President (position vacant) • Secretary Kath Smalley •
Treasurer & Business Partners Coordinator Julie Zammit • Field Officer Liz Barraclough • WaterWatch Sue Milton •
Newsletter Angela Kirsner • Marion Orchison

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