



The Creek

Volume 23 No 1, February 2019

Caring for the Balcombe Estuary Reserves

FUNDRAISERS FOR BERG MM

They were selling their excellent home-made chocolate chip cookies, their stall outside the Mt Martha IGA on 30th December. The bakers and stall-holders were the grandchildren of BERGers Philip and Prue Gray; from left to right (below): James Gray, Paddy Sheehy, Oliver Sheehy, Ted Read, Tom Gray, Chloe Gray, Chloe Read, Sam Sheehy. Missing from the photo is Annabelle Read. They donated the proceeds to three charities: the Jane McGrath Foundation, Mt Martha CFA, and BERG MM.

They raised \$12 for BERG MM. We are most grateful for their support!



Photo Angela Kirsner

HAND OVER YOUR BOTTLE TOPS!

Not-for-profit charity *Envision* has paired with Rotary in the Helping Hands project, turning RECYCLED PLASTIC BOTTLE TOPS into PROSTHETIC HANDS & ARMS.



Bottle tops are turned into 3D printer filament, to print prosthetic hands that can pick up a cup or hold a fork. Rotary sends the hands to third-world or war-torn countries.

YOU CAN HELP!

Take your plastic bottle tops – milk, soft drink, cream, supplements etc – to our local collection point – Bendigo Bank, Mt Martha.

CAN YOU HELP?

Schools Program - Share the Load

We are looking for someone to take responsibility for one or more of our school programs, especially during Winter & Spring, when Jenny Selby, our schools program coordinator, is unavailable.

When a school contacts BERG MM, you would need to:

- **Direct them** to our website and school policy.
- With the teacher in charge, **establish details:** curriculum focus, student numbers, length of program requested, number of teachers & adult assistants attending, etc.
- **Organise volunteers** from the BERG MM list.
- **Plan the program** with the relevant BERG MM person (eg Field Officer, Waterwatch coordinator).

Enquiries to Jenny Selby on 0432 719 288

SWEET BURSARIA

By Angela Kirsner

It's been an exuberant season for Sweet Bursaria, with so many clusters of the sweet-scented cream flowers through the reserves, and many Mt Martha streets and gardens.

Already the purse-shaped seed capsules are starting to replace the flowers. Soon they will hang in brown clusters, the flat seed inside each one rattling in the wind.

Bursaria spinosa is a member of the Pittosporaceae family. The species is widespread, found from coastal to subalpine areas in eastern and south-east Australia. Its size too is variable, almost prostrate in subalpine areas, to five metres or more in gentler climes – a small tree.

In the garden

Sweet Bursaria is a rewarding garden plant. It is happy in most conditions, needs little maintenance (though it's happy to be pruned if necessary), and is long-lived (80+ years). It makes an excellent hedge and its spiny branches make it a useful barrier. Its fibrous root system helps with erosion control, it grows well on rocky sites, and it re-sprouts readily after disturbance or fire.

The leaves contain the compound aesculin, which provided an effective sun-screening agent for World War 2 military forces. It was collected by boiling the leaves and collecting the resulting surface oil.

Bursaria, bugs and butterflies

The insects have loved this prolific Bursaria season! It is truly an insect magnet; look at a head of Bursaria flowers and you are very likely to find a pair of feelers waving from among the petals. Pollinators include ants, butterflies, native bees, beetles and wasps, as well as honeyeaters, which love its nectar.

Bursaria's part in the life-cycle of the threatened Eltham Copper Butterfly is fascinating (though the butterfly is not found on the Peninsula). Adult Eltham Copper Butterflies lay their eggs on the roots of Sweet Bursaria, and when the larvae hatch, ants from the genus *Notoncus* guard the tiny caterpillars



Clockwise from top left: Sweet Bursaria (*Bursaria spinosa*) in full flower, with butterfly feeding, starting to form seed pods (photos Liz Barracough), and the seed pods close up (photo Angela Kirsner)

and lead them by night from the ant colony to browse on the Sweet Bursaria leaves. By day, the larvae live in the ants' nest underground at the base of the shrub. The reward for the ants is to feed on the sugar secretions the caterpillars exude. The butterfly can only exist where *Notoncus* ant colonies are present

A veritable insect restaurant, Sweet Bursaria provides food for a number of other butterflies. Depending on the timing of flowering, the nectar feeds a small wasp that lays its eggs in the bodies of Eucalypt-eating Christmas Beetles, thus helping to control the beetles' often virulent and defoliating outbreaks. It's also a food for wasps that parasitise leaf-eating scarab insects and pasture grubs, and it hosts insects that feed on saw-fly larvae that infest eucalypts.

The thorny foliage is a protective refuge for small birds, and a source of spider webs for nesting finches.

HYACINTH ORCHIDS

By Angela Kirsner

There has been a wonderful patch of Hyacinth Orchids (*Dipodeum roseum*) this summer in the recently restored bushland along Maude St – clusters of pink flowers on purplish-red stems that can be up to 75cm tall.

This widespread species grows in shady positions in woodland, and flowers between November and March. The individual star-shaped flowers are about 5cm across with darker pink or purple spots on the petals and sepals. The leaves are barely noticeable, tiny and insignificant.

It is saprophytic; that is, it obtains food from decaying organic matter in the soil, and this makes it impossible to cultivate or transplant. Saprophytes do not produce chlorophyll. The fruit is a capsule containing fine dust-like seed.

Flora of Melbourne records that the fleshy roots of *D. roseum* were eaten by the Aborigines.



We once had many also on the south bank, though we have seen only small numbers there in recent years. In late January, I counted about 13 in the area below the Ferrero ovals, though I may well have missed some under the many fallen tea-trees. But in the February-March 2004 issue of *The Creek*, Field Officer Liz Barraclough said:

‘Have you seen the terrific number of Hyacinth Orchids in this area this year? I stopped counting at 125! Previously I have never seen more than 32.’

Above: Hyacinth Orchids along Maude St; below left, the fruit capsules; right, flowers close up. Photos Angela Kirsner



THANKS TO OUR BUSINESS PARTNERS

- Akarba party hire
- Bell's Meats
- Bendigo Bank Mt Martha
- Bonaccorde
- Bunnings Mornington
- Complete Colour
- Complete Step – Podiatry & Footwear Specialists
- Danckert Real Estate
- Mornington Peninsula Gardening
- Mt Martha Chiropractic & Sports Injury Clinic
- Mt Martha Veterinary Clinic
- Mt Martha Village Clinic
- Rotary Club of Mt Martha
- South Sea Shacks
- Terry Bateman Pharmacy
- Volpino
- Warlimont & Nutt Pty Ltd

DODDER LAUREL

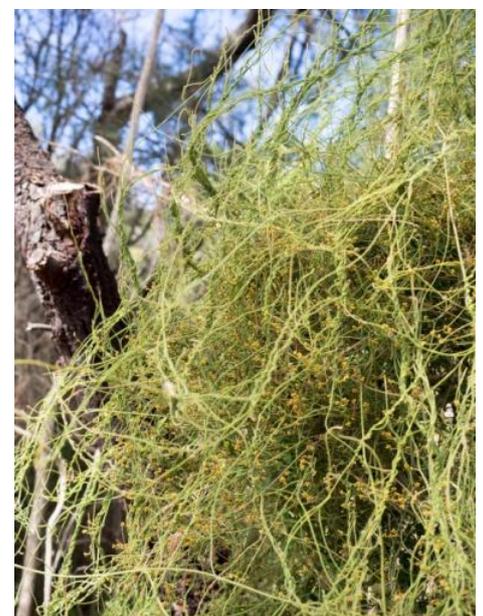
You have probably noticed thick veils of Dodder Laurel (*Cassytha pubescens*) twining itself over bushes and small trees in parts of the reserves. The small flowers are out at the moment and small fruit will follow in autumn. The indigenous vine is hemiparasitic – it photosynthesises (through chlorophyll in the stems – the leaves are tiny), but still draws water and nutrients from its host plant through haustoria – ‘suckers’.

It is very un-fussy about its host, and it does not seem to have a major impact on native vegetation. It has been suggested, however, that *C. pubescens* could be a biological control for some major invasive woody weeds. Research at the University of Adelaide found that it can kill gorse, blackberry and Scotch broom – all ‘Weeds of National Significance’ – while not damaging native shrubs.

(blogs.adelaide.edu.au/environment/2016/10/10/media-release-snotty-gobble-could-be-good-weed-controller/)

Below: Dodder Laurel vine, close up, and covering a bush along the north bank fire track.

Photos Angela Kirsner



ESTUARYWATCH

Bruce Ferres reports

EstuaryWatch observations from 25th November and 23rd December show interesting patterns.

With the estuary mouth open intermittently through November, tides and wind were constantly mixing the saline bay water and fresh creek water. With the more regular inflow of saline water, concentrations of salt in the 'salt wedge' – the bottom layer of the estuary – were quite high. For example, at the rotunda jetty, salinity in the lower level was four times that in the upper layer despite the former being only 40 cm below the surface.

The regular in- and out-flow of water also helps to boost the amount of dissolved oxygen (DO), a positive contribution to the creek's health. All sites recorded some of the highest DO levels seen this year.

George Murley's drone images of the mouth (in beautiful evening light – see image) show how the angle of wave approach to the shoreline, in response to south-westerly winds, builds sand on the south side of the estuary opening. This is why so often the opening meanders to the north.

December 2018

After the intermittent opening and closure of the creek mouth through November, it remained open for all of December, without the persistent onshore or longshore winds that are needed to build a berm barrier.

This meant that fresh water was



constantly flushing out the estuary, so the denser salty layer in the lower levels was much reduced.

The water level was also very low throughout the month, with only 10cm of water at both the rotunda jetty and the platform below the ovals – two of our standard test sites. The low water level meant that we took fewer samples than usual.

At Augusta Bridge – our third test site – water depth was only 1.25m, the lowest recorded in 2018. The salinity profile reflected the month's strong fresh water flows. From the surface to 1m down, salinity was only 1 part per thousand (ppt), but the thin salty layer at the very bottom returned a reading of 14.4ppt. This salt 'wedge'

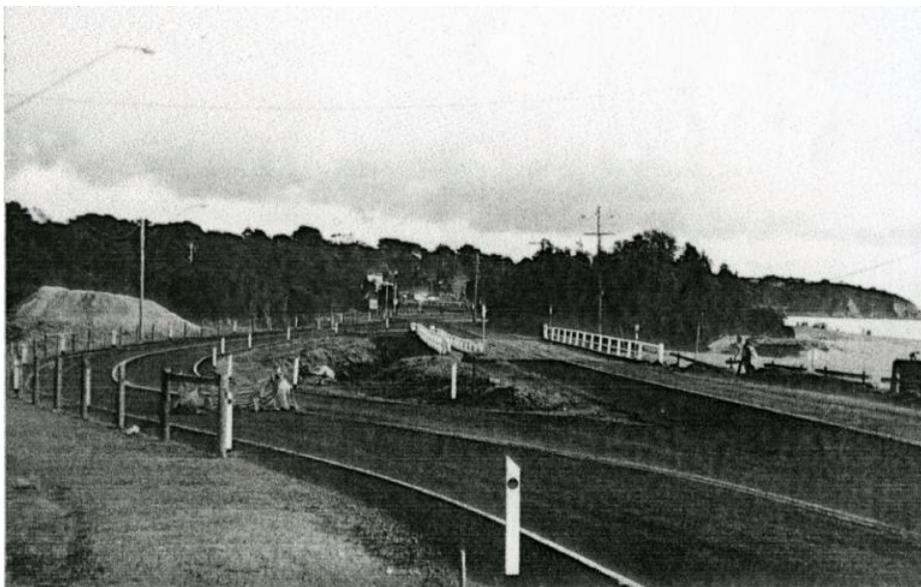
is very thin at this time of year.

Not surprisingly, dissolved oxygen levels were all healthy, continuing November's trend.

We were disappointed to note that graffiti covering the BERG MM seat at the fishing platform below the ovals. There was a surge of this pointless defacing of public facilities last month, through the reserves and beyond.

Thanks to Estuary Watchers Jan Jones, Franc Amendola, Deb Abbs, Colin Wilkinson & Barrie Wilson; to Helen Carroll for uploading our data to the Melbourne Water Estuary-Watch portal; and to George Murley for his wonderful drone images.

Left: EstuaryWatch was not on the agenda when the old bridge was replaced in 1984! A temporary causeway was constructed and the creek flowed through it in large drains.
(Original source of photo unknown)



FIELD NEWS

Field Officer Liz Barraclough reports

Working on the ground

December and January have been time out for most of our working bees – simply too hot! Sunday and Tuesday working bees start again in February, and the Friday morning group will resume when the weather seems reasonable.

The Coastal Group was not, however, to be deterred! In January they worked from the South Beach carpark to the shops, hand-weeding last season's planting and where needed, replacing small guards with larger ones. They also weeded the pesky polygala seedlings that had sprung up, along with other sneaky weeds and bulbs; they watered thirsty plants, and they collected litter. January's heat defeated even this sturdy crew by 11.30, when they decided it was time to stop.

Naturelinks however, is continuing its work on BERG MM'S various grants and projects across the reserves.

Fauna Survey update

Mal Legg is now about half way through his year-long survey of fauna in the reserves, to update our previous survey in 2008.

The survey started in August and Mal has completed the seasonal frog survey, will finish fish very soon, and has started on the birds.

He is pleased to report good numbers of Bream and Galaxias in creek, and his monthly bird counts show many woodland birds present. He has also found most species of amphibians and reptiles that were present in the previous survey.

The wetland birds in the estuary have greatly reduced in species and numbers – maybe a result of sedimentation – and there are a lot more silver gulls. Swampheens and Moorheens are still around.

He has five cameras in place with which he hopes to find Rakali, the Water Rat, if it is present.

His draft report should be delivered in late June.

KOOKABURRA FAMILY



The December issue of *The Creek* included this photo of a kookaburra entering its nest in a hollow in a dead tree outside the Barracloughs' house in Watson Rd.



On 16th November, too late for that newsletter, two babies emerged to brave the world. One was off before we could get a photo, but the second found its way next door, where it waited for its parents on a pathway. Next day, it was gone.

Liz reports a family of four Kookaburras about her place recently, so we are hopeful that both chicks survived. And there are certainly many Kookaburras around Mt Martha in the early mornings this summer.

Photos: Liz Barraclough (left) and Angela Kirsner (right)

VALE MATT STAHMER

By Liz Barraclough

Matt Stahmer, Operations Coordinator with the Shire's Natural Systems team, died tragically on 19th November 2018 while surfing.

Matt was one of our most loved Conservation Officers who, for the past three or four years, has been overseeing the work of BERG MM.

We shall miss him in so many ways. Larger than life, he always had a laugh and a joke, never taking himself, his job or us too seriously. But he knew what was important and was always there to offer advice, guide us and help set the right priorities.

He was great at his job, fun and terrific to work with. With his easy-going personality, he managed us and all our quirks with unending patience and tolerance – no mean feat!

Our thoughts continue to be with his friends, the Shire Conservation Team and particularly his family.



Liz took this photo of Matt in 2015 at Friends Network Day

BERG Mt Martha welcomes new members

Adam Rasmussen & Melinda Spargo, Jason Quin



ECHIDNA!

This one was at the edge of the fire track between the Augusta St and Uralla Rd bridges, on the north bank of the creek. When first seen, it had its beak under a fallen nesting box, trying to pretend it was not there.

Two passing BERGers said they'd seen one some months ago just north of the bridge, and also on the south bank, between Uralla and August bridges. Was it the same one or another? We simply don't know. Echidnas have a home range of at least dozens of hectares, but they are not territorial. And they can swim.

To learn lots more about echidnas, see the delightful article on the ABC Science website, at <http://www.abc.net.au/science/articles/2000/06/01/2688596.htm>

Angela Kirsner

BERG MM Working Bees	Other BERG MM Activities	Other Groups
<ul style="list-style-type: none"> ❖ Sunday working bee: monthly, 2nd Sunday, between 9am & 12noon. Details emailed a few days ahead, or call Liz Barraclough 0408 388 430. ❖ Tuesday working bee: monthly, 2nd Tuesday between 9am & 12 noon, meet at end of Latrobe Dve. Call Jenny Selby 0432 719 288. ❖ Coast Group: monthly, 3rd Wednesday, between 8am & 11am, meet in car park by the Yacht Club. Call Suzanne Ryan 0418 387 604. ❖ Friday working bee: weekly between 9.30am & 12 noon. Call Liz Barraclough 0408 388 430 or David Street 0418 342 298. 	<ul style="list-style-type: none"> ❖ Waterwatch & Estuary Watch testing: monthly, 4th Sunday. WW, meet 9.15am at Augusta St bridge; call Sue Milton 0407 350 175. EW meet 9.00am at the Rotunda; call Bruce Ferres 0435 389 804. ❖ BERG Mt Martha Committee meets monthly at Mt Martha House, 9.00am, usually the 2nd Saturday. Next meeting 9th February. All members welcome. 	<ul style="list-style-type: none"> ❖ BirdLife Mornington Peninsula bird-watching 2nd Wednesday and 3rd Sunday. Enquiries to Max Burrows 9789 0224, mornington@birdlife.org.au or www.birdlife.org.au/locations/birdlife-mornington-peninsula. ❖ SPIFFA 1st Monday, 7.30 pm, at Seawinds Community Hub, 11A Allambi Ave, Rosebud West. Enquiries 5988 6529, or www.spiffa.org. ❖ Sunshine Reserve working bee 9.30am, last Sunday of month. Call Pia Spreen, 5974 1096
<p>BERG MT MARTHA PATRON: TERRY DENTON</p> <p>COMMITTEE: PRESIDENT GRAHAM HUBBARD • VICE PRESIDENT PETER MCMAHON • SECRETARY DIANNE LEWIS • TREASURER JULIE ZAMMIT</p> <p>• FIELD OFFICER LIZ BARRACLOUGH • COAST GROUP SUZANNE RYAN • WATERWATCH SUE MILTON • ESTUARY WATCH BRUCE FERRES</p> <p>• COMMUNITY AWARENESS BARBARA THRIVES • PHILANTHROPY BRONWYN STREET • NEWSLETTER ANGELA KIRSNER</p>		
<p>Balcombe Estuary Reserves Group Mt Martha Inc. No. A0034645Y ABN 50 224 628 623</p> <p>Mail: PO Box 433 Mt Martha 3934 Email: info@berg.org.au Mob: 0447 160 288 Web: www.berg.org.au</p>		

THE CREEK

Print Post Approved pp100003761
 If undelivered, please return to:
 BERG Mt Martha, PO Box 433
 Mount Martha 3934

**SURFACE
MAIL**

**POSTAGE
PAID
AUSTRALIA**