



# The Creek

Volume 28 No 2, Winter 2024

*Caring for our local environment*

## A GENEROUS BEQUEST FROM MARGARET MACKIE

*By Sue Milton*

Margaret Mackie, who died just over 12 months ago, greatly admired the vital work of BERG Mt Martha in caring for the Mt Martha natural environment. Always a generous person, she has remembered BERG in her will, leaving \$5,000 to help continue the organisation's excellent environmental work.

Although unable physically to participate in working bees, Marg was always interested in the science of the natural world, and much enjoyed the technical articles in *The Creek*.

Marg was an enthusiastic member of the WaterWatch team for over six years, in the role as scribe for the data sheets at the monthly monitoring sessions, as well as morning tea provider. She was very observant, a skill most helpful for the sampling team, but drew the line at scrambling down the creek bank to collect water samples! The quarterly macro-invertebrates monitoring was a highlight; she loved identifying the water bugs.

*Right: Marg Mackie (left) helping Sue Milton with WaterWatch at The Briars in 2017*  
*Photo: Angela Kirsner*



## OUR ESO IS NEARLY THERE

*Eric Smalley reports*

It's been seven years in the making, but on Tuesday 11 June the Mornington Peninsula Shire Councillors voted unanimously in favour of a planning amendment that will see the Balcombe Estuary Reserves given the highest level of protection possible: an Environmental Significance Overlay or ESO.

The ESO now goes to the Victorian Planning Minister for final approval.

The motion was moved by Cr Despi O'Connor and seconded by Cr Debra Mar who, together with Cr David Gill, praised the efforts of BERG Mt Martha in bringing the amendment into being. Our particular thanks to these Councillors, as well as to the many Shire officers and other Councillors whose work and support have been critical in achieving this outcome.

### Overwhelming public support

BERG started to work towards an ESO back in 2017, with the support of the Shire's Strategic Planning Team. The planning amendment (technically an ESO32) received massive community support when it went to public consultation in 2021 and again in 2023.

Importantly this ESO32 will protect the Balcombe Estuary Reserves and their ecological and environmental values into the future, to enrich the lives of generations to come.

We are assured that final approval should be granted in the next 2-4 months, setting the ESO formally in place.

Many thanks to everyone who has contributed in one way or another to this historic outcome.

## CROWDED WATERS

Over much of summer the estuary was closed, the water level high, and water-birds scarce. The March long weekend saw this change dramatically. The mouth was open, the water level low, and estuary was alive with birdlife trawling for food in the shallows. See below and page 4.



**Thank you!**  
**Mt Martha Community Bank**  
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## THE COASTAL BANKSIA HAS ITS ROOTS IN ANCIENT GONDWANA

This is a slightly shortened version of an article by Gregory Moore, Doctor of Botany, The University of Melbourne, published in The Conversation, June 12, 2020 (click [here](#) for the original article).

If you fondly remember May Gibbs's Gumnut Baby stories about the adventures of Snugglepot and Cuddlepie, you may also remember the villainous Big Bad Banksia Men (perhaps you're still having nightmares about them).

But banksias are nothing to be afraid of. They're a marvellous group of Australian native trees and shrubs, with an ancient heritage and a vital role in Australian plant ecology, colonial history and bushfire regeneration.

The genus *Banksia* has about 173 native species. It takes its name from botanist Sir Joseph Banks, who collected specimens of four species in 1770 when he arrived in Australia on the Endeavour with Captain Cook.

One of those he collected was *B. integrifolia*, the Coastal Banksia, often a small to medium tree about 5m to 15m, but growing up to 35m in the right conditions.

It's found naturally in coastal regions, growing on sand dunes or around coastal marshes from Queensland to Victoria. These can be tough environments and while *B. integrifolia* tends to grow in slightly protected sites, it copes well with sandy soils, poor soil nutrition, salt and wind.

### From ancient origins

Banksias belong to the protea family (Proteaceae). But given that the spectacular flowering proteas are of African origin, how did our Australian genera get here?

The members of the Proteaceae belong to an ancient group of flowering plants that evolved almost 100 million years ago on the southern supercontinent Gondwana. When Gondwana fragmented more than 80

million years ago, the proteas remained on the African plate, while the Australian genera remained here.

The spikes of woody fruits (or 'cones') on the Australian banksias are made up of several hundred flowers. The flower spikes are beautiful structures, soft and brush-like. Those of *B. integrifolia* are pale green and can be hard to see within the canopy at a distance.

Up close, the fruit spikes can look quite spooky, almost sinister, especially when wasps have caused extensive gall formation. Galls are swellings that develop on plant tissues as a result of fungal and insect damage, a bit like a benign tumour. But while galls may look unsightly, they rarely do serious harm to banksias.



Photos Angela Kirsner

### Indigenous use

The fruit spikes of Coastal Banksia look like brushes, and Indigenous people did indeed use them as paint brushes. The flowers are rich in nectar, which attracts insects and birds. Run your hand along a flower spike and lick the nectar off your hand and, like generations of Aboriginal people, you can enjoy the sweet taste. Or soak the flowers in water to make a sweet syrup.

In the garden, *B. integrifolia* is a magnet for native insects, birds and ringtail possums. It's easy to establish and, even up to a few metres high, can be moved and transplanted.

Unlike many banksia species, *B. integrifolia* does not need fire to release its seed. In many Australian species, it's only when fire comes through that the solid, sealed woody fruits burn, dry, crack open and release their seed.

This can happen with *B. integrifolia*, but in a garden setting the fruits will mature, dry, crack open and release seeds without fire. The seeds germinate readily.

### In touch with its roots

Perhaps one of the more important but less obvious attributes of *B. integrifolia* is its roots. They are a special type of root possessed by members of the protea family.

The roots form a dense, branched cluster, a bit like the head of a toothbrush, which can be 2-5cm across and greatly increases the absorbing surface area, as each root has thousands of very fine root hairs.

This makes these Proteoid roots very handy for a plant in sandy and other poor soils, where water drains quickly and nutrients are scarce.

Also described as cluster roots, Proteoid roots are often visible in a garden bed just at the interface of the soil with the humus or mulch layer above it. They're very light brown, almost white, in colour.

*B. integrifolia*, like other banksias, also has the ability to take in nitrogen and enrich the soil, which can be very

handy in soils low in nitrogen. It's like a natural living and decorative fertiliser.

The downside of Proteoid roots is that they are unfortunately very well suited to the presence of *Phytophthora cinnamomii*, Cinnamon Fungus. The fungus causes dieback in many native plant species, but can be particularly virulent for banksias.

But *B. integrifolia* is one of the more resistant species to the fungus. Promising experiments have been done on grafting susceptible species onto the roots of *B. integrifolia* to improve their rates of survival.

This could be important. Banksias have a role in bushfire regeneration in many parts of Australia, so the occurrence of Cinnamon Fungus can compromise fire recovery.

## WOMINJEKA TICHUNGGORROC

'Welcome to this estuary of frog sound'

We are delighted that the new sign honouring the Balcombe Estuary as Bunurong Country is finally in place in the old campground, overlooking the estuary it celebrates. The art work and wording are those approved for the original sign many years ago, while the much improved layout and weathered steel stand match the other interpretive signs erected through the reserves in 2022.



## SEWAGE SPILL

You may have noticed in early June the many South East Water trucks around Balcombe Creek. On 5<sup>th</sup> June, SE Water reported to BERG that there had been a sewage spill at The Briars Woodlands Walk with overflow into Balcombe Creek and probably the estuary.

SE Water crews were rapidly onsite to contain and clean up the spill, and fix the problem. The clean-up included educting the spill area (essentially pumping out sewage both upstream and downstream of the spill to dilute any contamination) and thoroughly flushing with clean water.

The spill was caused by failure of the 300mm sewer siphon. Operation was switched to the 450mm overflow siphon which runs parallel to it, until the 300mm siphon was restored to service on 9th June.

Signs were erected warning that the water was not safe for the community (or their animals) to use or handle. Water quality was tested daily at 10 sites, from 200m upstream of the spill downstream to the estuary entrance and 100m north and south of it. SE Water continued flushing the creek and estuary with potable water and educting from the spill site, Augusta Street and the estuary mouth until testing showed that the water quality had returned to background levels. This was achieved on 13th June

Throughout, SE Water kept the EPA, Melbourne Water and Victorian Fishing Authority and local community groups updated on the situation.

## ESTUARYWATCH IN TRANSITION

EstuaryWatch monitoring and testing have been suspended for some months since the storeroom break-in and theft of BERG's water monitoring equipment late last year. Bruce Ferres has handed over to a new EstuaryWatch team, who are still waiting for the last of the new replacement equipment. Delivery we understand and hope is imminent.

The new team is headed by Geoff Pritchard who is assisted by Ian Horton. Helen Carroll will continue to transfer the collected data and images to the Melbourne Water EstuaryWatch portal.

Friday grouper Lynn Murdoch snapped these photos of a butterfly chrysalis and moth casing in Mistletoe.



## IN THE RESERVES



A pair of Galahs have found a splendid hollow (with two apparent entrances!) in the Old Campground. As we watched, one was working on the entrance (above) while the other looked on from nearby (below). Photos Angela Kirsner



Fungi!



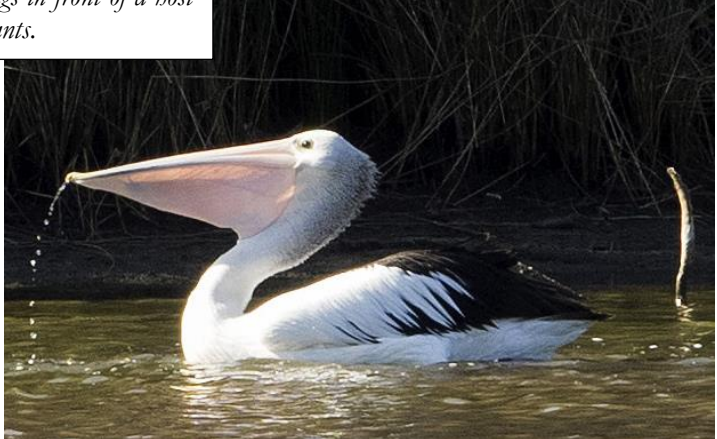
**Above:** This tight packed clump of small agaric fungi, probably Fairy Inkcaps, crowded the top of a rotting Swamp Melaleuca stump by the boardwalk. Fairy Inkcaps typically live on rotting wood. **Below:** A bracket fungus, probably Trametes versicolor Rainbow Fungus (AKA Turkey Tail) with a small red agaric mushroom popping up from its base.

Photos Angela Kirsner





*Top: Feeding frenzy under the bridge! Ibises, Coot, White-faced Heron, Royal Spoonbill, Great Egret  
 Second row: Great Egret feeding, displaying some breeding plumage, and in a hurry; White-faced Heron  
 Third row: Little Pied Cormorant, Yellow-billed Spoonbill.  
 Fourth: Yellow-billed & Royal Spoonbills feeding together; Pelican  
 Bottom: Pelican flexes its wings in front of a host of assorted ducks and cormorants.*



## THANKS TO OUR BUSINESS PARTNERS

### FEATURING HELLOWORLD TRAVEL MT MARTHA

The office and friendly faces behind the desks at Helloworld Mt Martha may be new, but their travel experience is certainly not.

Owners Kim and Kate have been travel professionals for over 35 years with their business in Rosebud.

Long-time Mt Martha locals, they jumped at the chance to move their office to Mt Martha Village.



Kim

A testament to Kim, Kate and their staff is their large number of repeat clients.



Kate

Give these professionals a call when next thinking of your holiday or business travel arrangements.



Fiona

7A Bay Rd, Mt Martha  
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- Mount Martha Yacht Club
- Proscape Landscaping
- Regeneration Projects
- Ritchies IGA
- Rotary Club of Mount Martha
- Sea Side Shacks
- Volpino
- Warlimont & Nutt Pty Ltd

## MT MARTHA GROUPS GET TOGETHER

Saturday 11<sup>th</sup> May saw the first meeting of a potentially very effective alliance between seven Mt Martha environmental and friends groups.

The alliance is the idea of Councillor Despi O'Connor. 'I wonder,' she wrote to each of the groups, 'if we can have more impact if all our groups here in Mt Martha are working together to create opportunities and support each other through a larger lens to look at biolinks and bushland connections from Nepean Highway to the bay.'

BERG was at the meeting, represented by Liz Barraclough and Eric Smalley. The other groups represented were:

- Sunshine Reserve Friends Group
- Hopetoun Norfolk Reserve Friends Group

- Mt Martha Park Friends Group
- Fairbairn Bushland Reserve Friends Group
- Hearn Creek Friends Group
- Mt Martha Beach Patrol

The expertise within these groups is impressive, and together they identified a number of issues across three broad areas that would be better approached collectively:

- Establishing a shared strategy and priorities for action based on canopy mapping, threat control (eg development, weeds) and biolinks.
- Educating and engaging the community on environmental issues, and running membership drives and expos to showcase what the individual groups are achieving.
- Finding ways to share and optimise our resources to address larger local problems more effectively, protect

our natural assets, and foster climate resilience.

Campaign possibilities might include, for example, weeds; bay health; biolinks and wildlife corridors; protection for wildlife crossing roads; and education through village businesses and real estate agents.

### ***In a nutshell***

*How can we all work together and support each other to further protect and restore our bushland areas, reserves, roadsides and streetscapes, as well as encouraging and protecting the general 'greening' of our area?*

We will keep you posted on further developments.

### **BERG Mt Martha welcomes new members**

Sarah Grounds & family  
Ashley Batchelor & family  
Andrew McClintock & family

## FIELD NEWS

### WORK ON THE GROUND

*Field Officer Liz Barraclough reports*

The Friday stalwarts continue their weekly war on weeds. Their targets have included Tobacco Plant near Geoff Kaye Bridge, and on Lower Hopeton Creek they removed Arum Lilies, Forget Me Nots, Rambling Dock, Cape Ivy, thistles, Blackberry, and any other incidentals.

#### From Pines to Manna woodland

On Citation Hill the Friday crew, together with Naturelinks (working under our **Victorian Landcare Grant**) are making a concerted and successful effort to edge out the existing Pines and establish an indigenous Manna Gum woodland. Over recent times they have removed Polygala, small Pines and Pittosporums, and done some infill planting. Watch this space!

We are concerned to see new bike jumps and track construction through this area.

#### Our Landcare friends lend a hand

Balcombe and Moorooduc Landcare Group joined us at our March Sunday working bee, bringing together two local groups with a common purpose (see photos). Thanks to BERGer and Landcarer Tony O'Connor for making it happen.

With a great turnout, we removed lots of English Ivy in the Swamp Paperbark riparian area between Victoria Cres and the Esplanade. The

Friday group has also worked in here, and Naturelinks is tackling the remaining large Ivy patches through the Shire's Bushland Management Strategy. Garden escapes are an ongoing problem along this section of the reserves.

#### And back to the Rabbit Paddock

The Sunday crew has swept through the area above the ovals, from the Rabbit Paddock to La Trobe Drive. In April, May and June they vanquished many Polygala and Pittosporum both seedlings and a few larger ones, plus the odd Boneseed, and some Arum Lilies and Blackberries. And they pulled out yet more old cubby mess among the bracken below Hilton Court.

#### Naturelinks

Naturelinks continues to control weeds in many areas through the reserves, funded by the Shire under their **Bushland Management Strategy**. They have worked in the Old Campground and Swamp Scrub further upstream, our sensitive 'Orchid area' and the Bunyip, along Victoria Crescent and Maude Street, and in the vicinity of the Geoff Kaye Bridge and the Pistol Club. This work is invaluable! Naturelinks gets into places and tackles projects beyond the scope of our working bees, and they have the skills to work safely in our most sensitive areas

Naturelinks is also working along Maude St under our **Biolinks 2023/24 Support Grant**.

#### Planning Meeting

On Monday 22<sup>nd</sup> April Eric, Liz, and Suzanne from BERG MM met with Hannah Brown (MPS Natural Systems Team), and from Naturelinks, Dan Suffern, Pia Spreen, Justine Lund and Natarsha Martin, to discuss on-ground works, grants and funding, and working bee arrangements and priorities. Plus, as always, a range of related things like rabbits and blackberries and hard waste and weed flyers and more. These annual meetings underpin all the work we do in the reserves.

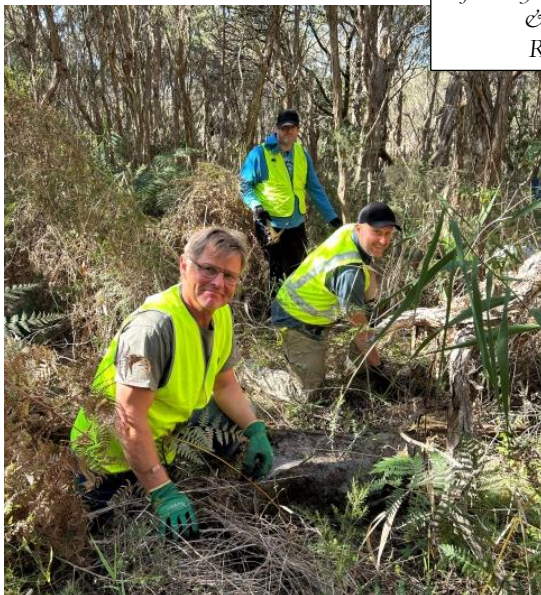
### MONITORING WITH MAL

At two autumn Friday working bees local fauna ecologist Mal Legg demonstrated two techniques he uses to survey our fauna. At the April workshop, he set up motion-sensor cameras and laid small Colorbond 'tiles' (about 20x30cm).

As the sun warms these 'tiles,' lizards (and maybe small snakes) will gather under them to warm up – and be counted! The cameras are excellent for monitoring elusive mammals and birds (particularly nocturnal) without causing stress. Indeed, some creatures respond to the reflection in the lens by preening themselves at length on camera!

In May we returned to check the monitoring sites. With camera at the

*Working in March along Victoria Crescent:  
Left: Tony O'Connor with others from the Balcombe  
& Moorooduc Landcare Group.,  
Right: The crowd at morning tea*



## COASTAL UPDATE: WORK UNDER OUR 2023 COASTAL & MARINE MANAGEMENT PLANS GRANT

*Coastal Group Coordinator Suzanne Ryan reports*



*Above: Mal Legg with one of the motion-sensor cameras in place.*

*Below: one of the Colorbond tiles*



ready, Mal lifted each tile; but we were too early in the day; the tiles were not

yet warm enough to bring out the reptiles. He is still checking the information on the cameras.

Mal strongly suggests that BERG acquire a few motion-sensor cameras. One obvious application would be to look out for our elusive Rakali – never sighted in the Creek but their footprints confirmed many times. The cameras are also good for monitoring nesting boxes.

The workshops were funded by our **Victorian Landcare grant**

### Tackling roadkill

Mal talked about the impact of roadkill on our fauna, with a number of koalas and wallabies falling victim on the Peninsula over recent times.

A new solution, Virtual Fencing, is being installed at local road-kill hotspots, notably by Peninsula Gardens Bushland Reserve. It is an electronic protection system that has proven to be spectacularly effective in preventing wildlife-vehicle collisions in Australia and around the world.

It works from dusk to dawn to alert animals before crossing a road when a vehicle approaches. A series of poles are set at 25-metre intervals along the road in a zigzag pattern. Headlights activate a sensor on each pole, which triggers it to make a sound and flash blue and yellow lights and so deter nearby fauna.

In last October's edition of *The Creek* Gerard Cook, the Shire's Team Leader – Water & Coasts, advised of the Shire's success in obtaining three Coastal and Marine Management Plans Grants 2023. This included \$25,000 to progress and expand our work on the Mt Martha foreshore south of the estuary.

Our aim is to improve the coastal vegetation by planting, weeding and fencing to prevent *ad hoc* trails, and to cover any disturbed middens here.

### Weeding and fencing

Our contractor Naturelinks has removed larger woody weeds and managed other WONS (Weeds of National Significance), with BERG Coastal Team volunteers working fortnightly over the past eight months to complement this work. The weeding is ongoing, we have more scheduled.

The Shire has refurbished fencing to protect the bushland between the Life Saving Club and the estuary mouth, and is working with BERG to find other funding opportunities to complete the fencing upgrade along the pathway from car park to bridge.

### ...and planting

In May, we began laying coir mesh along the new fence lines. Already we have planted over 100 plants into it:

*Spinifex sericeus* (Hairy Spinifex), *Atriplex cinerea* (Coast Saltbush), and *Correa alba* (Common Correa). And we have another 500+ plants to go in along the coastline this winter.

### Why coir mesh?

When placed on the open, non-vegetated portions of foreshore and dunes, coir mesh acts like a natural fibre blanket. It protects the surface from erosion by wind, salt spray and flowing water, and so helps to hold sand, soil, and other sediments in place until the deep-rooted, indigenous, salt-tolerant vegetation we plant into the mesh becomes established.

The blanket also retains moisture to promote seed growth and protect roots. The natural fibres disintegrate over six to 24 months, as the dense root systems of the plants they have protected take over and stabilize the site.

We have laid 80 linear metres of 2-metre wide coir mesh so far, and will extend this soon to behind the new fence-line between the Life Saving Club and Yacht Club, and behind the temporary vegetation buffer panels between the beach boxes south of the Yacht Club – two open, non-vegetated areas that have failed to regenerate over several years.



*Left: New fencing on path from estuary to Life Saving Club car park*

*Above: Fencing along sand dunes with coir mesh laid behind it.*

*Right: Close-up of the coir mesh*  
Photos Suzanne Ryan




**MORE ON THE BUFF-BANDED RAIL**

Remember the report in the Autumn newsletter of a Buff-banded Rail in January on Maude St near Helena St?

It prompted an email from Tim and Jan O'Brien. They too, and their Maude St neighbours, were visited by the Rail in December, when the area was very wet. They also saw a hen and two chicks on Maude St. Hopefully, wrote Tim, now the surface water in the street has dried up, they have moved on rather than come to grief.



The O'Briens also have regular visits from King Parrots, which particularly like their Lilly Pilly berries in Autumn. Tim's photos below show both birds sit sitting on their fence.

Come along to our <b>Bushland Activities</b>	Join us at <b>WaterWatch &amp; EstuaryWatch</b>	<b>Other Local Groups</b>
<p>❖ <b>2<sup>nd</sup> Sunday of the month:</b> between 9.30am &amp; noon. Details emailed a few days ahead, or call Eric Smalley 0403 863 616.</p> <p>❖ <b>Coast Group:</b> fortnightly on Wednesdays, between 9.30am &amp; noon. Call Suzanne Ryan 0418 387 604. Details emailed a few days ahead.</p> <p>❖ <b>Friday Group:</b> weekly between 9.30am &amp; noon. Call Liz Barraclough 0408 388 430. Details emailed a few days ahead.</p>	<p><b>First Sunday of each month:</b></p> <p>❖ <b>WaterWatch testing:</b> meet 9.15am at Uralla Rd bridge. Enquiries to Franc Amendola 0433 626 007 or Sue Milton 0407 350 175.</p> <p>❖ <b>EstuaryWatch testing:</b> meet 9.00am at the Rotunda. Enquiries to Geoff Pritchard 0438 638 600.</p>	<p>❖ <b>BirdLife Mornington Peninsula</b> bird-watching 2<sup>nd</sup> Wednesday and 3<sup>rd</sup> Sunday. Enquiries to Max Burrows mornington@birdlife.org.au or 0429 947 893, or visit <a href="http://www.birdlife.org.au/locations/birdlif-e-mornington-peninsula">www.birdlife.org.au/locations/birdlif-e-mornington-peninsula</a>.</p> <p>❖ <b>Sunshine Reserve</b> working bee 9.30am, last Sunday of month. Call Pia Spreen 0437 299 847.</p>
<p><b>BERG MT MARTHA PATRON:</b> TERRY DENTON</p> <p><b>COMMITTEE:</b> • PRESIDENT ERIC SMALLEY • VICE PRESIDENT (POSITION VACANT) • SECRETARY KATHY SMALLEY</p> <p>• TREASURER SUE MILTON • FIELD OFFICER LIZ BARRACLUGH • NEWSLETTER ANGELA KIRSNER • MEMBERSHIP CHERYL WILKINSON</p> <p>• PETER MCMAHON • MARION ORCHISON • IAN HORTON • TERRY MOAR • GEOFF PRITCHARD</p>		
<p><b>Balcombe Estuary Reserves Group Mt Martha Inc. No. A0034645Y ABN 50 224 628 623</b>  <b>Mail:</b> PO Box 433 Mt Martha 3934 <b>Email:</b> <a href="mailto:info@berg.org.au">info@berg.org.au</a> <b>Mob:</b> 0427 433 585 <b>Web:</b> <a href="http://www.berg.org.au">www.berg.org.au</a></p>		

**THE CREEK**

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