



**Berg**  
Mt Martha

Caring for the Balcombe Estuary Reserves

# THE CREEK

Volume 20 No 6, December 2016

## 20 YEARS ON MEASURING OUR PROGRESS IN THE RESERVES

Angela Kirsner reports

BERG Mt Martha turns 20 next year. A meeting on 1<sup>st</sup> March 1997 agreed unanimously to set up a friends group to regenerate the bushland of the Balcombe Estuary Reserves and the first committee met three weeks later.

To those who have known the reserves over that time, it is obvious that we have made a huge difference. Vast tracts of woody weeds have gone, leaving flourishing indigenous bushland. These changes and how we have achieved them was the topic of Liz Barraclough's inspiring talk at our AGM in October.

Actually *measuring and quantifying* the gains, however, is a challenge we have confronted only recently. It is important to be able to demonstrate to the community, to the Shire and granting bodies, and to ourselves, just what we have achieved as well as what is yet to be done.

### Developing a measure

The challenge has been to find a measure with sufficient detail to be meaningful but not overwhelming. Liz put her mind to the task, with back-up from a number of others, notably Sue Betheras, and has developed a Bushland Quality Index

(BQI) with four colour-coded levels:

- Level 1 (Red) – poor quality. Indigenous species 0-25% cover; diversity low. Weed invasion and disturbance high.
- Level 2 (Orange) – low-moderate quality. Indigenous species 25-50% cover; diversity low-moderate. Weed invasion high-moderate.
- Level 3 (Blue) – high-moderate quality. Indigenous species 50-75% cover; diversity moderate-high. Weed invasion low-moderate.
- Level 4 (Green) – high quality. Indigenous species: 75-100% cover; diversity and structural integrity high – ie the best we could expect given the constraints of the site (the reserves are relatively small, with high public use, dogs, and surrounding urbanization).

### Applying the BQI

In 1998 BERG commissioned ecologist Gidja Walker to carry out a detailed survey of the reserves' flora. Liz was her scribe and assistant. Gidja later formalised the survey into colour-coded maps of vegetation quality as part of the 2002 management guidelines for the reserves, commissioned from Peninsula Bushworks, and Liz has adapted these maps to her 4-colour BQI to form our baseline. The next step was for Liz and her team to develop the map of our current

status – no mean task.

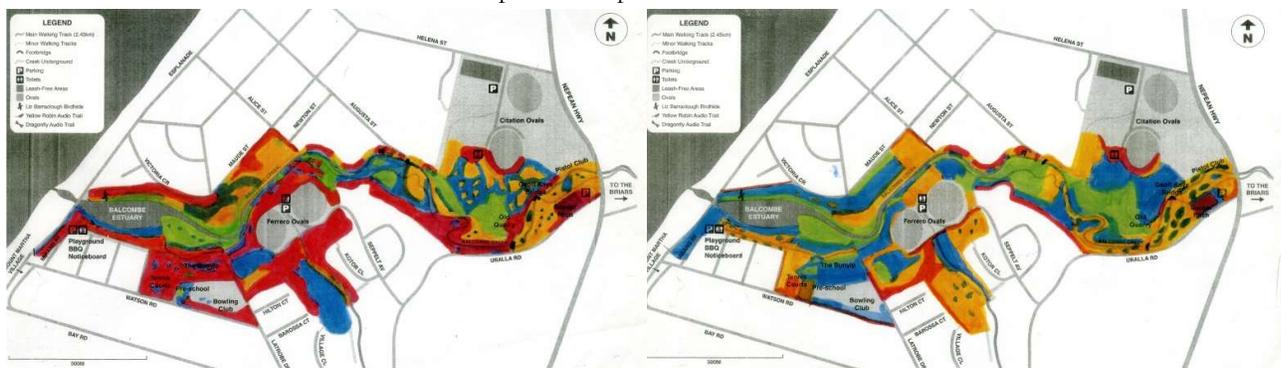
These two maps – baseline and now – show clearly the dramatic difference BERG MM has brought about in the quality of bushland throughout the reserves.

The measure is necessarily simplistic. The estimates are based largely on woody weeds. Problem weeds differ from zone to zone, and grassy annual and scrambling weeds vary widely with time of year.

To complement the maps, therefore, Liz has put together a detailed description, for each zone of the reserves, of its state in 1998, its state now, and action required. This will be invaluable for ongoing planning and assessment. It records the many areas that have gone from 'dense' or 'heavy infestations' of woody weeds to 'few' woody weeds.

### Never forget the weeding!

Ongoing monitoring and weeding are essential to maintain these gains – what Sue Betheras calls the 'house-keeping' of bush management, obvious only in the failure to do it. In two places, the Rabbit Paddock and below Citation Oval, we were guilty of such failure after work done before the 2002 map, and in both areas we have lost ground. It is an object lesson, a mistake we are rectifying in both places. This time, we will keep up the weeding!



State of the reserves in 2002 (left) and 2016 (right) – see key to colour coding in the article above

## ACTION ON SEDIMENT

*Graham Hubbard reports*

After three years of meetings, the Sedimentation Action Group (SAG) and the Mornington Peninsula Shire have agreed on a set of actions to reduce the sediment flow into the Balcombe estuary. Short-term actions are:

- Fix the failed rock drop structure on the western side of Hopetoun Creek, opposite Balcombe Pre-school, to stop erosion there.
- Realign underground drainage near Balcombe Preschool.
- Reduce erosion of various walking tracks in the reserves by better grading.
- Revegetate the above areas.
- Trial a vegetated soak-well in Reeve St.
- Develop and implement various other measures to reduce sediment from steep roads off Watson Rd.
- Help residents reduce stormwater flows off key properties that cause sediment to flow into the estuary and creek

The Shire has allocated \$100,000 for the work in this financial year – a big win for SAG's proposals. The Shire has also allowed BERG MM to take responsibility for some items, recognising that in certain areas we have the on-ground expertise to achieve the best results.

Deep-core sampling of the estuary sediment has also been done in (see following article). This may result in further action if the results, available soon, suggest a detrimental effect on the estuary's ecology.

Longer term, SAG and the Shire have agreed to seal the steep entry road to and car park of Ferrero Reserve, as part of the approval of the draft Recreation Master Plan. The Shire is also working on how to

address the Augusta Street area, another major area of sediment flow.

Thanks to 'SAGers' Graeme McMillan, Peter McMahon, Tom le Cerf, Liz Barraclough, John Inchley and Jock Macmillan for their consistent support for this project.

## WHAT'S IN THAT MUD?

*Melissa Burrige, Integrated Water Officer, Mornington Peninsula Shire*

It has been long in the planning, but on 20<sup>th</sup> October, a team comprising Melbourne University geomorphologists, Alluvium Consulting and myself extracted three sediment core samples from Balcombe Estuary.

Conditions at the start of the day were uncertain, but we were fortunate: water levels at low tide allowed us to extract all the samples, and all were a good length/depth.

Analysis of the samples is underway and results will be available soon. They will provide scientific data vital to understanding the timeline of past sediment deposition, sediment retention and sediment sources.

Three locations were sampled to provide a picture of potential stormwater outlet influences and deposits from the upper catchment. This involved many

crossings of the main water body with heavy equipment!

To obtain each sample, a cement vibrator motor and vibrating head is attached to a 2-3 metre aluminum pipe, which is vibrated down into the sediment until it will go no further, forming a bottom 'plug'. The pipe is then vacuum-capped and an aluminum tripod and pulley system used to extract it, with the sediment core sample inside it. The core sample pipe is measured and labelled for analysis back at the laboratory.

You may also have noticed autosamplers (see photo), now removed, in place for some time at three major storm outlets, to capture sediment flows during high intensity rainfall – notably the recent storms.



*Inserting the sampling pipe into the estuary mud (below & above right) and extracting it again (below right).*

*Photos Melissa Burrige*



## STRIATED PARDALOTES IN THE ROOF

**B**ERG Mt Martha member Kevin Conlan reports that his family, in Silkhorn Crescent, just above Hopetoun Creek, has had Striated Pardalotes nesting in the roof of their house every year since they moved there in 2009.

Each year, the birds raise 3-4 broods over spring and summer. 'A brood just fledged last week', said Kevin in late November, 'and already the female was going back into the nest yesterday to do it all again.' Generally they appear around late August and leave in March or April.



*The parent birds (left) & their tiny entry hole above the verandah (below) Photos Kevin Conlan*



## SACRED KINGFISHERS ABOUT

**G**ill Gordon told the AGM that her friend Lynn Murdoch had seen a Sacred Kingfisher on 17<sup>th</sup> October in the Old Quarry, just near the Uralla Road bridge. Gill could not provide on a photo, but your editor has one – taken in our Malvern garden where, extraordinarily, this beautiful bird appeared for three days running in early November!

Coincidentally Kevin Conlan also saw a Sacred Kingfisher on 20<sup>th</sup> November at the Peninsula Link trail in Moorooduc, right at the Balcombe Creek part of the trail.



*Sacred Kingfisher sitting in a Judas Tree in Kirsners' Malvern garden Photo Angela Kirsner*

## ...AND BIRDS IN ART

**B**irds: *Flight Paths in Australian art* is showing at Mornington Peninsula Regional Gallery from 2<sup>nd</sup> December until 12<sup>th</sup> February. The exhibition ranges across painting, sculpture, decorative arts, photography, print-making and installation, to explore the science, symbolism, beauty and curiosity of birds. In a country proud of its unique birds, many of the contemporary works consider the threats to our fragile ecology.

Artists include Albert Tucker, Rover Thomas, Ginger Riley, and contemporary artists such as Brook Andrew, Fiona Hall, John Wolseley, Ben Quilty, Christian Thompson, Kate Rohde, Petrina Hicks, Trent Parke and Louise Weaver.

MPRG has developed a range of public programs alongside the exhibition, including talks with extraordinary bird whisperer and storyteller Professor Gisela Kaplan and editor of BirdLife Sean Dooley.

## YOUR NEW COMMITTEE

**T**wo long-standing members of the BERG Mt Martha committee retired at the Annual General Meeting on 22<sup>nd</sup> October: **Richard Kirsner**, Treasurer since 2006; and **Jenny Selby**, who does so much in schools liaison as well as running the Tuesday working bee. Jenny will continue these activities, and Richard will continue to manage the website and help with other technical matters.

**Julie Zammit**, who was introduced to readers in the August newsletter, replaces Richard as Treasurer. We also welcome three other new committee members:

- **Peter McMahon** is our new Vice-president. A 'hands-on' BERGer since 2014, Peter has done the Habitat Conservation & Management (HCM) course, and is part of the Sedimentation Action Group, to which he brings his expertise in software systems engineering and automation.
- **Suzanne Ryan**, recently retired from book-keeping and administration, is the dynamic coordinator of the new Coastal Group and one of the four BERGers on our on-ground assessment team. She rivals Liz for energy!



- **Sue Milton** has stepped up from her role as BERG MM's Honorary Auditor. A recently retired Chartered Accountant, Sue is revelling in the world beyond figures! She is a regular at working bees, has also done the HCM course, and, like Suzanne, is part of our on-ground assessment team.



We are most grateful that **Geoff Kidd** has agreed to replace Sue as Honorary Auditor.

## FIELD NEWS

*Field Officer Liz Barraclough reports*

### Sunday working-bees

In October, eight sure-footed BERGers woody-weeded the steep area below Victoria Crescent where it meets Maude St. We removed most of the flowering Polygala, Flaxleaf Broom, Pittosporum, Cotoneaster, Italian Buckthorn, Briar Rose, and a good sweep of garden escapes, cutting and bagging the flower heads. This was part of our contribution to work under our Melbourne Water grant.

In November another eight hardy volunteers turned out in miserable weather to rabbit-proof the fence round the 2005 burn site. They attached some 50m of chicken wire up the fence with a 30cm skirt, and we also removed grassy weeds and thistles inside the fence. Naturelinks completed the job next day.

### First burn site

Our first control burn, done in 2005, was in the area below the Mt Martha Preschool. The diversity in the regenerating indigenous vegetation was amazing and apart from weeding, we did not interfere; we wanted to see how the vegetation

sorted itself out.

Black Wattle seedlings dominated in the upper section (see photo below). We thought these would thin out and achieve a natural balance, but in fact, while some died, the rest largely out-competed the rich diversity of ground species. The recent the influx of rabbits has not helped.



*The thicket of regenerating Black Wattles three years post-burn, in 2008 Photo Angela Kirsner*

So we are keen, under Vyv Stryder's (Naturelinks) guidance, to do some 'citizen science' and monitor a couple of quadrats under different treatment regimes. After excluding the rabbits, we will trial selective Black Wattle removal in one quadrat, and possibly a small re-burn in another.

### Friday morning group

Like most groups, we have been flat out trying to control the season's prolific weeds before they seed ('one year's seeding, seven years' weeding!'). We have concentrated on the Quarry, the Jaw and around Uralla Bridge.

### Extra on-ground works

Outside regular working bees, various willing volunteers have removed the Angled Onion among the Melaleuca next to Old

*November Sunday working bee at the first burn site: Left: Graham Hubbard & Eric Smalley securing rabbit proofing to the fence. Below: weeding the site, Liz Barraclough (left) and Jenny Selby & Suzanne Ryan (centre).*

*Photos Angela Kirsner*



Campground carpark; weeded the bird hide area, which was inundated by thistles and grassy weeds; and weeded and mulched the fenced area near the Lifesaving Club.

### Grants and projects

Weed control works along Maude St funded by the Sally Oatley Memorial Fund are almost complete. This takes weed control about 15 metres in from the road. Work on the substantial area beyond this down to the creek will continue with grant funding (applications are currently in) and/or donations to BERG MM under the exciting \$50,000 donation challenge and its matching gifts (see page 5), as well as the funds already generously donated by members for this project.

In October, at the top of the Rabbit Paddock (below Village Close), where work is funded by a Port Phillip & Western Port Catchment Management Authority 2015-16 grant, Vyv Stryder (Naturelinks) and I weed-burned emerging Polygala seedlings, while Jenny Selby bagged the seed heads and cut and painted remaining Boneseed and Polygala. Naturelinks will finish work under this grant soon, drilling and filling the smaller Mahogany Gums plus selective control of grassy weeds. We have applied for a 2016-7 grant – watch this space!

### Student visitors

On 14<sup>th</sup> October, BERG MM hosted some 80 students from St Mary's College, Seymour, on a walk from The Briars to the Estuary, then a Sea Shepherd-style rubbish clean-up along the south of the estuary, picking up, sorting and counting every bit of rubbish, no matter how tiny. The students were on camp at Dromana and the Principal was keen that they contribute to the natural environments they had hiked through and enjoyed. Thanks to BERGers John Inchley, Barb Thraves, Lyn Dell, David Street and Debbie McMahon.

Thanks also to Jenny Selby and Di Lewis for meeting with Chisholm TAFE Conservation & Land Management students to discuss BERG MM's role in managing the reserves and estuary, and our interpretation signs and audio trails.

## COASTAL GROUP

*Suzanne Ryan reports*

At the October working bee, twelve BERGers rescued new plantings from rampant weed grasses – a challenge, as the stakes marking the plants had mostly been removed and the new plants swamped by the grass.

We also cut and painted woody weeds, mainly Polygala, between South Beach car park and Bay Road walkway, and the November volunteers braved the dense bush on the slope below the road to cut and dab the hidden roots of large Polygalas. Heroic work! We plan a monthly walk-through to remove smaller seedlings and regrowth.

A few of us also returned to hand-weed and rack out grass in the bush between the BBQs and beach boxes and up the slope behind the car park.

Gratifyingly, the weed spraying done in September has been effective. A large infestation of Bridal Creeper has died back and spraying of other WONS (weeds of national significance) has had an impact.



*Above: Morning tea at South Beach car park for the Coastal Group in November: Lyndy, Tamara, Ian, Eric & Barb Photo Suzanne Ryan*

## TUESDAY GROUP

*Jenny Selby reports*

Below Mt Martha Bowls Club, on the slope cleared for fire management, the grassy weeds have flourished. In October, the Tuesday BERGers moved felled timber to form a visual barricade at the bottom of this patch, weeded around emerging indigenous grasses and other plants (Boobialla, Hop Goodenia), and planted lots of *Rhagodia candolleana*, which will spread to provide a low-fire-risk ground cover and, with luck, will out-compete the grassy weeds. We plan to continue this weed management further along the bank towards Latrobe Drive next year.

November saw more weeding, this time around indigenous plants beside the Mt Martha Preschool and path. Sun Orchids and Onion Orchids, were of special interest!



*Above: This beautiful grass, Stipa mollis, has been flowering beside the preschool (Photo Angela Kirsner).*



*Left: Morning tea for the Tuesday Group at 'Mary's seat' Photo Jenny Selby*

## DOUBLE DOLLARS FOR BERG MM!

An anonymous donor has made ABERG MM a most generous offer – but there is a catch. The donor will match dollar-for-dollar any gifts for on-ground works up to a grand total of **\$50,000** – potentially

**\$100,000**

for on-ground works. It is up to the rest of us to make this happen!

Committee member Bronwyn Street announced the challenge donation at the Annual General Meeting and handed over a cheque for \$10,000 from herself and husband David. Already two other donors have stepped up, giving another \$5,000 between them.

Double all this and BERG MM now has an extra \$30,000 for on-ground works. With this we will be able to complete the habitat restoration works below Maude St not covered by other philanthropic or grant money – and the funds will most likely flow on into other parts of the reserves as well.

And \$35,000 is still available from the mystery donor, to match donations – potentially, another \$70,000 for BERG MM's work.

### Can you help?

Donations of any size, small or large, are most welcome – all qualify for matching. To discuss a donation confidentially, call Bronwyn Street on 0447 160 288 – or simply send your donation (cheque or via the website) to BERG Mt Martha, with a covering note or email that it is for on-ground works.

## Have you paid your 2016-7 subscription?

We value your membership – but if you've not yet renewed, this may be your last newsletter.

## BERG Mt Martha welcomes new members

Bill & Nancy Ferguson,  
Graeme & Barb Martin

## TIDY TOWNS AWARDS

### Bronwyn Street reports

David [Street] and I represented BERG Mt Martha at the Victorian finals of the Tidy Towns awards in Horsham on October 16<sup>th</sup>. Both Mornington and the BERG Mt Martha murals in the Rotunda were short-listed, though not winners. Some of our Peninsula conservationists were, however. Congratulations to Manton and Stony Creek Landcare Group, winner of the Protection of the Environment category for their Red Hill Station Reserve Project; and to Josie Jones, who won the Dame Phyllis Frost Award.



*At the Tidy Town Awards ceremony: David Street; Councillor Antonella Celi (centre) & daughter, Shekinah; Bronwyn Street; & (part obscured on R) David Maddocks, Chairman of Manton & Stony Creek Landcare Group.*

BERG Mt M Working Bees	Other BERG Mt M Activities	Other Groups
<p>❖ <b>Sunday working bee:</b> monthly, 2<sup>nd</sup> Sunday, between 9am &amp; 12noon (<i>not December</i>). Details emailed a few days ahead, or call Liz Barraclough 0408 388 430.</p> <p>❖ <b>Tuesday working bee:</b> monthly, 2<sup>nd</sup> Tuesday, between 9am &amp; 12 noon (<i>not January</i>), meet end of Latrobe Dve. Call Jenny Selby 0432 719 288.</p> <p>❖ <b>Friday working bee:</b> weekly between 9.30 &amp; 12 noon (<i>not January</i>). Call Sue Betheras 0408 808 201.</p> <p>❖ <b>Coast Group:</b> monthly, 3<sup>rd</sup> Wednesday, between 9am &amp; 12 noon, meet in car park by the Yacht Club. Call Suzanne Ryan 0418 387 604.</p>	<p>❖ <b>Waterwatch testing:</b> 4<sup>th</sup> Sunday 9.15, starting at Augusta St Bridge. Call John Inchley, 5974 1095.</p> <p>❖ <b>BERG Mt Martha Committee</b> meets monthly at Mt Martha House, 9.00am, usually the 2<sup>nd</sup> Saturday. No meeting December or January – next is <b>11<sup>th</sup> February</b>. All members welcome.</p>	<p>❖ <b>BirdLife Mornington Peninsula</b> bird-watching 2<sup>nd</sup> Wednesday and 3<sup>rd</sup> Sunday. Enquiries to Max Burrows 9789 0224, <a href="mailto:mornington@birdlife.org.au">mornington@birdlife.org.au</a> or <a href="http://www.birdlife.org.au/locations/birdlife-mornington-peninsula">www.birdlife.org.au/locations/birdlife-mornington-peninsula</a>.</p> <p>❖ <b>SPIFFA</b> 1<sup>st</sup> Monday, 7.30 pm, at Parks Vic, Hinton St, Rosebud. Enquiries 5988 6529, or <a href="http://www.spiffa.org">www.spiffa.org</a>.</p> <p>❖ <b>Sunshine Reserve</b> working bee 9.30am, last Thursday of month.</p>
<p><b>BERG MT MARTHA COMMITTEE</b>                  PRESIDENT GRAHAM HUBBARD • VICE PRESIDENT PETER MCMAHON • SECRETARY DIANNE LEWIS • TREASURER JULIE ZAMMIT                  • FIELD OFFICER LIZ BARRACLOUGH • NEWSLETTER ANGELA KIRSNER • COMMUNITY AWARENESS BARBARA THRIVES                  • PHILANTHROPY BRONWYN STREET • WATERWATCH JOHN INCHLEY • FORESHORE GROUP SUZANNE RYAN • SUE MILTON</p>		
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