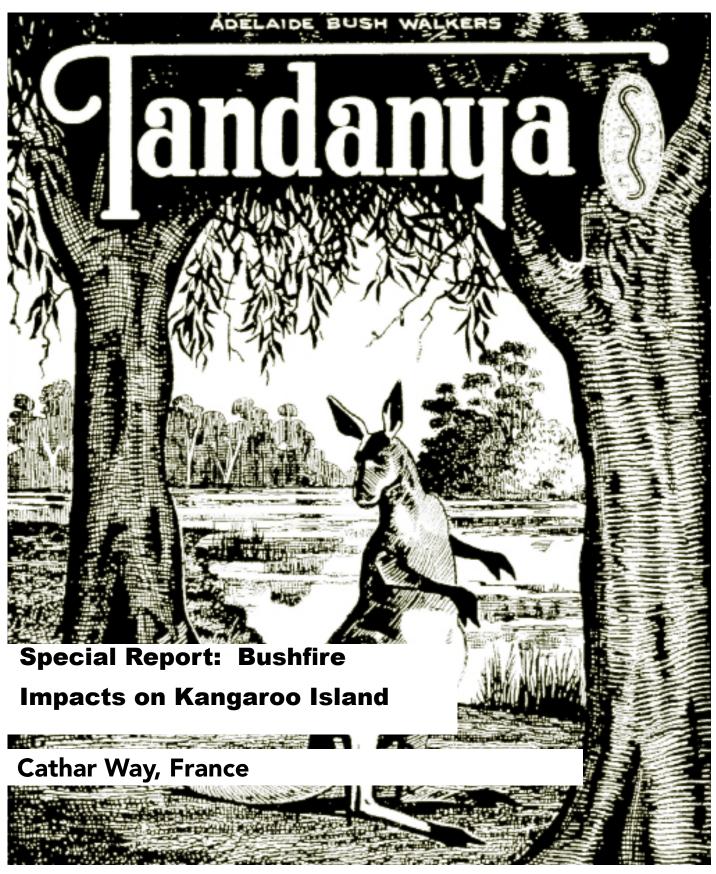
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Adelaide Bushwalkers Magazine

Volume 49 Number 4 AUTUMN 2020



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"Never rest on your laurels. Nothing wilts faster than a laurel sat upon."

Mary Kay

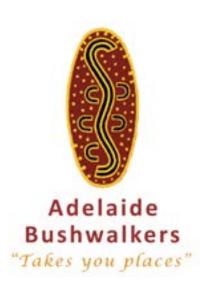


Mary Kay Ash was the founder of Mary Kay cosmetics. She had a strong belief in people and was a very successful business woman.

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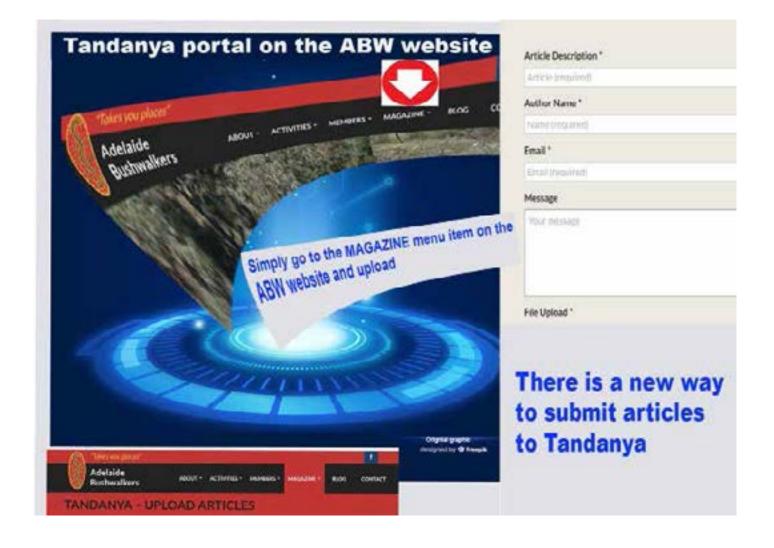
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Adelaide Bushwalkers specialise in multi-day wilderness hiking with full packs and camping gear, along with other complimentary activities such as day walks, kayaking, cycling and social activities for our members.

Please use the contact details opposite.



ABW club information

The club meets at the North Adelaide Community Centre, 176 Tynte Street, North Adelaide on the first Wednesday of each month at 7.30pm (February to November)

Annual subscription fees

Category	Normal	Student
Prospective Membership	\$60	\$30
Full Membership	\$60	\$30
Associate Membership	\$10	\$10

Family membership is no longer available for new members

Contact details

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Membership queries

Contact the Membership Secretary Bec Thomas on 0474 894 433 or via email through *gohiking@adelaidebushwalkers.org*

For privacy reasons, the names and contact details of other office bearers are no longer published in the magazine. Please use the contact details above.

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Cathar Way, France

— Lee Marling

e Sentier Cathare (Cathar Way) is in the south west corner of France in the region of Languedoc. The walk, 250 km in length over 12 days, starts on the coast of the Mediterranean Sea at Port-la-Nouvelle and ends in the foothills of the Pyrenees at Foix.

Attracted by the history and culture, this is a region of France I have always wanted to visit.

The walk is named after the heretical Christian sect known as the Cathars who were repressed by the King of France and the Pope in the Albigensian Crusades of 1209-29. The region was strongly contested by the Spanish and the French for centuries. The walk takes in many historical rural villages and castles associated with this history.

Beginning on the coast of the Mediterranean Sea in the Corbieres district the walk featured low scrubby coastal vegetation with wild rosemary and thyme growing along the path. Corbieres is a well known wine appellation so we passed many vineyards and enjoyed sampling the local produce.

After a few days we encountered forests, gorges, farmland and views of the Pyrenees along the way. Most of the walk was on four wheel drive tracks. We passed through many lovely small villages, built of stone and often in beautiful rural settings. Sadly, some

of them were largely deserted. Cathar castle ruins were often found within the villages and could be seen far in the distance as we walked toward them.

The accommodation which was all booked by email was in 'gites'. A French institution commonly associated with walking trails. Perhaps best described as a cross between a hostel and a B'n'B. They provided dinner (usually four courses), bed and breakfast, usually for around 45 euros per person.

We thought they were great value. They were often beautiful old homes or buildings, the hosts were always helpful.

We followed the suggested stages from The Cathar Way: A walker's Guide to the Sentier Cathare by Alan Mattingly, Cicerone Guides. It is a well maintained and signposted trail, navigation is easy.

The local government provides lots of information that is easily accessed via an internet search.

I hadn't done this walk before so a big thank you those who bravely came along: Jackie, Pam, Kerry, Ellen, Gary, David, Ben and John. •

<< le Corbiere valley on the first day

—Autumn March 2020 7

RANDONNÉE

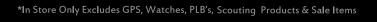


Left:: Chateaux Foix, the end of the walk.

Bottom: High above the valley.







"Takes you places"



The First Kayaking Weekend of the Summer

- Mark Darter

"Everyone ready to go?"

The paddle barely made a sound as it dipped into the flat water, but a gurgle was heard as it was pushed back to propel forward. And a very pleasant sound at that.

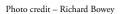
It's mid-November, the walking season has all too quickly come to its warm end, and so it's time to hit the river. Welcome to Blanchetown, and what would be a most enjoyable kayaking weekend. Only four of us - Richard, Paul, Georgia and I - on a trip billed as "A kayaking weekend of moderate distance, exploring the creeks and lagoons adjacent to the Murray, north of Blanchetown".

It's possible to head north from the town and largely avoid the main, wide and busy Murray River to camp some 14km away. A series of lagoons, backwaters, creeks and swamps alongside redgum forests and towering walls of sandstone cliffs provided constant variety all the

way to camp on a rare day of no wind. That campsite was spacious, scenic and shady, and provided a very sociable and enjoyable focus.

Sunday, and by mutual agreement, we were paddling by 8.00am on what was very flat water away from the main river. Once again, paddling through a connected series of creeks and lagoons – and under one very low bridge - would take us back south a shorter 11km to Blanchetown. As planned, we were off the water by late morning, loaded up, and on the road towards home. Importantly, and not just a coincidence, the Truro bakery was en route.

Summing up, a very pleasant weekend of perfect weather, flat water, creeks and lagoons of trees and birds, and most enjoyable company. All the reason to look out for more such trips. •



Description

An expo to celebrate the start of the South Australian bushwalking season. With the arrival of cooler autumn weather, hiking is an ideal outdoor activity. South Australia's bushwalking clubs and Walking SA are coming together to celebrate the occasion with a unique day in Belair National Park.

Expo of walking tours, walking destinations, outdoor retailers, walking clubs, free entry. 9am to 2pm.

Guided hikes ranging from 45mins to 3 hours, including child-friendly and Accessible options. Guided Walks will depart every 10 minutes from 9:20am to 12:20pm.

You can secure a place on a specific guided walk by registering online, or just arrive on the day and choose a guided walk to join.

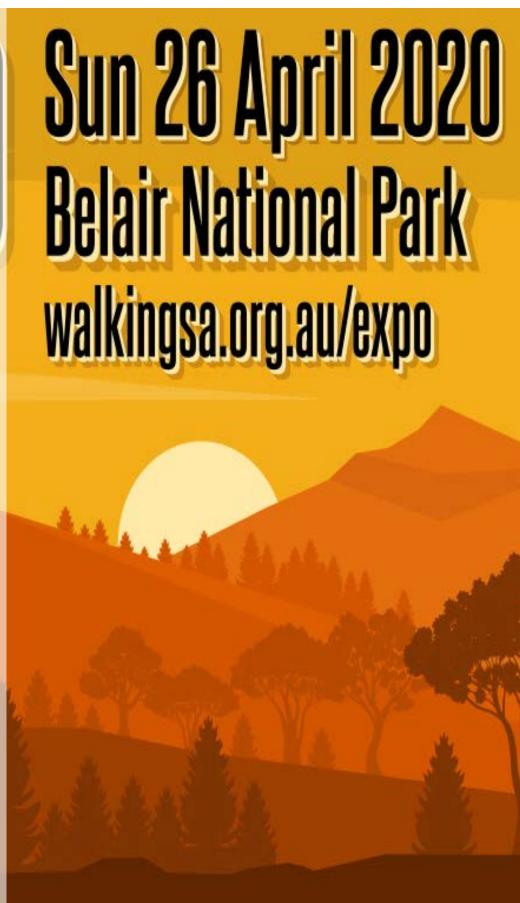
Location: Main Oval, Belair National Park

9am—2pm Sunday 26 April 2020

FREE vehicle entry to national park for expo visitors

FREE entry to expo

Guided Walks: \$5 on the day to participate, or secure a place on your chosen guided walk by purchasing a ticket online from March 2020



The Flinders Less Trodden

— Mike Round

While there are plenty of peaks and places in the Flinders Ranges that get visited by the club on a fairly regular basis, there are others that only rarely if ever get a visit. Maybe those neglected places are seen as too remote or awkward to get to or perhaps they've just been overlooked but whatever the cause, they surely deserve to get more attention from walkers. The most notable of these lesser trodden peaks and ranges are listed below.

The Peaks

Here are ten peaks in decreasing order of 'merit' or attractiveness to bushwalkers according to my own assessment.

1. Mt Deception.

This prominent peak with its almost ruler-straight and treeless main slopes falling north and south to the arid plains, is extensive enough to also be thought of as a range. It lies 8 km west of the main road between Beltana and Leigh Creek and was climbed and named by Eyre in 1840. From the summit, Eyre looked out over 'endless waste' while mistakenly expecting to see Lake Torrens continuing around to the northern horizon. We know that it doesn't but where was the deception? The summit's extensive views, surveyor Parry's masterful stone cairn, the commemorative plaques, the bare moonscape foothills and old Beltana homestead at the eastern foot of the range, all add to the peak's interest. Notification of Beltana Station and a possible small fee for vehicle access, is required. Surprising to me anyway, the

whole area seems to be completely devoid of spinifex.

2. The Fortress.

This impressive mesa lies on Umberatana Station and I certainly felt tempted to step up the pace a bit after momentarily glimpsing part of its flat summit while approaching it along Freshwater Creek. It's even more impressive when it comes into full view once you finally exit the hills. A circumnavigation indicated that the summit has only one access route past its all-encircling cliff. It may be a bit of a walk to get there but it's well worth it. Flattish plains with low hills beyond lie to the N and W of the peak while the eastern approach involves walking along generally broad creek beds winding through low hilly country. This area offers easy walking and is especially attractive if there's a bit of water in the creeks following a good rain. Bally marvellous in fact!

3. Mt Chambers.

This peak lies in dry country well east of the main range and north of Wirrealpa. With its harsh outline, broken back and barren looking slopes, my impression on first seeing it was that it looked to be a truly God-forsaken place. That first impression however belies the fact that Mt Chambers and its gorges is one of the most impressive and interesting places in the whole of the Ranges. My opinion did an abrupt U-turn in the mid-90s when my family was invited to join a group of Victorian Field Naturalists at a camp hosted by Graham Medlin, author of Field Guide to Chambers Gorge, Flinders Ranges published in 1993. That book is a masterpiece and it includes the story of Medlin's decade of field work all done in the company of high school students. Its main finding was identifying the time of extinction of many animal species in the broader region and the evidence for this came from Medlin's meticulous sectional analysis of a large pile of dung below a sheltered owl's nest and the subsequent identification of its many thousands of tiny bones.

Below: Mt. Deception



A small ABW party visited the area in April last year and this further impressed on me just what a fantastic place this is and how much more there is left to explore. The Gorge is accessed by a PAR (Public Access Road) so that no permission is required to enter and visitors seem free to wander about the area to their heart's content.

4 & 5. Mt Andre and Cocks Comb.

Perhaps this is getting a bit tiring (the peaks were promoted in two fairly recent issues of Tandanya) but there's no apology as they just have to be on the list and there's not a lot that I can otherwise do about it. They are headlined together because they lie just a couple of km apart and with a not too serious loss of elevation between them. If you go there, you could try to do both on the same day and if you try that from the low ground, I'd be very interested to hear how it went. (I did three separate visits to the area, one a through trip, to bag the pair and never the both on the same trip.) Go there and I promise you that you'll wonder why the complex range that they sit atop has not previously been on your radar! The peaks are located on the very accommodating Narrina Station and a couple of landform curiosities are also located nearby. Curiously enough, Andre is named after a French military officer killed in battle and is pronounced à la Français as Mt Ondray.

6. Wyacca Hill.

This peak is the high point of the Wyacca Range which is seen to stand out abruptly to the SW as you drive south from Gordon to Quorn. It's only a small range and is shaped like a galvanized fencing nail with Wyacca Hill lying on the bend of the two ridgelines, each about 2.5 km long. While modest in scale, one of its saving graces is its southern rocky ridgeline which in places is sharp enough to be balance-defying. Another is the views it offers to the nearby hills and glades of native pines and more distant, to the blueish higher ranges to the north. A scattered rock field with some huge boulders, litter the foot of the south

side of the range adds to the interest. Maybe the presumed rock-fall is evidence of episodic erosion that helps to account for the range's quartzite being a fresh creamy colour instead of the aged rusty red iron-stained colour more usually seen in the Range's quartzite cliffs. It's the same rock.

7. Mt Craig.

What a little gem this is and it can appear as just such a thing if you're there during a reddening sunset when the peak's western flanks can glow a deep purplish-red. Not remote as it's only 15 km east of Hawker and lies aside the PAR to Worumba. It's likely that walkers miss out on this peak because they're heading to and from other better known destinations. If you've not been there, try and make time to stay overnight as there are some great camp sites. It's only a short walk and then a 20-minute climb to the summit which looks north over a complex expanse of low hills and wooded flats. That was the site three years ago of Rogaining SA's 12/24-hour event and the area was predictably very attractive and interesting to navigate in. The area is of diapiric rock with its associated rock turrets and caves and although Craig is a low peak, few other Flinders peaks can match its sharp profile as seen viewed from the north. Again, Mt Craig is a little gem.

8. Yudnamutana Hill.

This 818m peak on Arkaroola lies at the western end of a large area of high ground with, to the east, even higher ground with an unnamed 890m peak. Despite its prominence, location has never worked in this peak's favour as far as most bushwalkers are likely to be concerned. That's probably because it's in a dry place (although it obviously had a supply of water when the C19 mining camp was operating there) and lies a day or more of walking west of Arkaroola's better known attractions such as The Armchair etc. The nearest surface water may be Balancing Rock Waterhole but that was dry in June 2018 and would have remained so for all of last year. The situation with regards to water has changed thanks

to the fairly recent instillation of a water tank by ABW at Yudnamutana as part of the Warren Bonython Memorial Water Tanks Project. That new tank will hopefully help to broaden the scope of walking done on Arkaroola. (The two afore-mentioned peaks are separated by a fairly direct 5.5 km walk with a 280m climb in and out of the intersecting creek or by walking double that distance along the very curving high ground that connects them. That's assuming of course that you want to bag the pair of them on the same outing and which would be a very long day.)

9. Mocatoona Hill.

This peak on Angepena Station gets the nod mainly I think because of a very pleasant time I once spent on its summit enjoying the changing light of distant ranges during the approaching dusk. While there I was also trying with limited success to photograph butterflies flitting around the cairn. This peak has an attractive crescent-shaped ridge that arcs around while gradually loosing elevation. It's actually a very pretty peak or at least that's how it struck me at the time. There was no record of ABW in the cairn's container of very few notes at the time of my visit. Angepena Hill, cone-like with its many spurs, lies just over 2km to the east and both of these peaks reward the climb. (In 1948, an ABW party of four climbed Angepena Hill during a walk from Yankaninna to Warraweena. A.L. Richardson's account of that walk illustrates just how much, both life in the station country and several aspects of the walking itself, have both changed over the intervening decades.)

10. Mt Roebuck.

A crooked little peak with a crooked little cairn wouldn't seem to have much going for it as a bushwalking destination but it scraped onto the list anyway and probably out of sheer contrariness but whether mine or the peak's is uncertain. Perhaps it's included only because my own ascent turned into a pathetic melodrama when, once the slope steepened, every third step of the climb forced me to

stop, bend over almost double and very noisily gasp for air. I must have presented like some sort of B grade actor auditioning.

'Next please.'

'Aaarh! Aaarh! Aarrh!' Plod. Plod. Plod. Aaarh! Aaarh! Aa..'

'NEXT!'

That was four years ago and I put it down to a heavy fall onto my chest at the start of the walk. Start as in six steps after setting off from camp at Narrina

While not that impressive or even graceful, Mt Roebuck does offer extensive views that you'll get from nowhere else and one of those views I found to be very educational. The summit looks NE to the 30km long Stirrup Iron Range which, with barely a named summit, stretches south for ages from near the Mt Hawker Range before veering sharply west and losing height. It finally comes to a stop 6 km north of Mt Roebuck. I had plans to one day go and traverse the whole of that long, dry, dusty, bumpy and impersonal looking range but Roebuck taught me not to be such a damn fool.

Possible other contenders. Well that's a good start but there's a number of others that missed out and which might have replaced the last two or more on the list. Some of these peaks are (and heading from south to north): Wilyerpa Hill and its neighbour Black Hill (50km ENE of Hawker) and Mt Uro which lies NE of 'Narrina Range'. (Richardson's 1948 party crossed the 'Mt Uro Range' and found it 'difficult' due to the complex nature of the range at their crossing point.) Further north is Mt Goddard (west of Mt Hack) and Castle Rock with its most engrossing setting. Then there's Mt Rose north of the Angepena-Yankaninna Road and further along it and more remote, Hodgson Hill. Finally, there's the isolated twin peaks of Mt Harris and Mt Crocker on Mt Freeling Station. Rarely visited I suspect and of identical elevation, at least they have each other for company.

THE RANGES

Now for five apparently less visited ranges but they are not listed in order of 'merit' but instead are listed from north to south according to location. Rest assured however that none of them come even close to being thought of as 'a peevish collection of hills' as a club member decades ago described the Trezona Range! (There's all sorts of interesting stuff in old and ancient issues of Tandanya!)

1. Nepouie Range.

With a skip and a hop, this low twopiece range runs SW for 9km from Nepouie Spring to (almost) Balcanoona HS. You can see it stretching along the SE skyline as you drive south from Arkaroola to Italowie Gap. That view is likely to give little indication of just how sharp that a large part of the ridgetop is. But like similar places that lie off the roads to more popular bushwalking destinations, there's generally no time made or left for walkers to check it out. A small ABW party spent a few hours traversing the range in April last year and this may have been a first for the club. Traversing this range can be a real delight and it's well worth the time and (not too much) effort.

2. Hawker Hill Range.

Situated bang up against the south side of Italowie Gap, it's safe to say that bushwalkers normally drive past this range on the way to bigger game - either the Gammons, Arkaroola or Mawson Plateau. Despite that, Hawker Hill will certainly reward the time and effort put into climbing it but the whole range is full of interest. Mount McKinley Creek courses south along much of the range's western flank before it veers east around its southern limit and then courses a good way north along its eastern flank before heading across the plains towards Lake Frome. This compact north-oriented, cowrieshaped range (11km and 5.5km) really deserves closer investigation and a minimum of three days would be required to do it justice. Such a stay could include traversing the whole of the range, visiting the waterholes and springs along its south flank and most especially, visiting its totally unexpected circular Pound. This pound is clearly

evident on Google Earth images but much less so on the topographic map. It has two outlet creeks that cut through the east side of the range and with the more southerly of the two exiting through an astonishingly narrow, winding and steeply walled gorge.

3. Jubilee Range.

'Noticing my anxiety to leave, the host became less genial and drawing himself up to his full height of at least two metres, barred my exit while calling his giant Irish Wolfhound to his side'.

Those words were written by Frank Hall some thirty years ago after a night of real or fanaticised imprisonment in the Blinman Hotel's cottage! Despite that harrowing experience, Frank did manage to escape (and he alone knows the full truth of the situation) and join his ABW party for some peak bagging on the southern part of the Jubilee Range. This experience was enough for him to recommend that the range would 'reward further exploration' by club members though I don't think that that recommendation has ever been taken up. The range's highest point is unnamed and lies near the northern end of range but this end lacks the more rugged nature of the southern end as climbed by Frank's party. Most of the 15 km range is on Narrina Station. A full traverse of the range would likely make for a good 'overnight' outing. (Frank's trip is described in Tandanya, V19:2, 1989)

4. Chace Range.

The club has been there two or more times but I think the last visit was a long time ago. This range is one of a small number in the Flinders that is oriented east-west rather than the more usual north-south. As with the Nepouie and Jubilee Ranges, its highest point is unnamed and it is more easily approached from the south although the steep north-facing slope provides direct access from the road. This latter approach is as arduous as it appears when seen as you travel south from Wilpena. Certainly you'll have your hands full. Of rock mainly. A brutish sort of a range in places but don't let that put you off.

5. Yappala Range.

This range runs NNE for 18 km and all the while approaching Yourambulla Range with the two ranges coming to a closely adjacent stop about 8km NW of Hawker and enclosing a triangular pound. The northern half of the range is very rugged and so offers great walking. In fact, it can often feel like an exciting place to be. There's some fairly edgy rock ridgetop in places and a number of steep jutting peaks with the highest two named. Whether you are driving north or south along the bitumen towards Hawker, those dramatic peaks come briefly into view about 15 km before you reach the town. Heysen did at least two pen and wash drawings of them from the plains and I'm very interested to one day try to identify the spot or spots where he stood or sat at his easel to do them. The steep rock slopes on the western side of the range are home to a colony of yellow tailed rock wallabies. This northern part of the range is on Yappala Station (Aboriginal Land Corp) and permission for access must be obtained.

Concluding thoughts

It seems that it's been three decades or more since ABW last visited some of the places listed above and also that a small number of them may be still awaiting a club visit. That at least is according to what I've so far seen in the club's records. Peak bagging is planned to be one way of celebrating the club's 75th anniversary next year and I think that it would be good if some of that time and energy, or better still, additional time and energy, were directed at climbing peaks that the club only rarely visits. In this respect and further into the future, I hope that this article helps to broaden the club's focus when it comes to thinking about where to go on future trips in the Flinders. The Flinders' less visited areas and summits can be really worthwhile walking in and perhaps especially so for members who have already experienced the more popular areas. And even otherwise.

I hope that you enjoyed reading this article.

O







Top: Hawker Hill.

Centre: Mt Chambers.

Bottom: Yappala Range.

Dealing With Snakes

— ABW February general meeting demonstation





Dean Clarke adresses the ABW audience while handling a deadly Red Bellied Black Snake



ABW members were privileged to be able to get up close and personal with a number of South Australian snakes including the Brown Snake, Death Adder, Mulga Snake and Red Bellied Black Snake. The event was organised by Roxanne Crook and presented by Snake Catchers Adelaide. Presenter Dean Clarke emphasied that snakes are never interested in people and will go to all efforts to avoid a confrontation, prefering to find somewhere to shelter and hide. However some species, particularly the Brown Snake, are extremely sensitive to movement and it is essential to remain calm and still if your encounter one.

Bruce Marquis

FIRST AID: snake bite

The bite wound should not be tampered with in any way. DO NOT wash or clean the wound as this may interfere with detecting the venom in hospital. Lay the victim down and remain still. All rings or other jewellery on the bitten limb, especially on fingers should be removed, as this may act as tourniquets if oedema develops.

If the bite is on a limb, a broad bandage should be applied over the bite site at moderate pressure (as for a sprain), then take the bandage one width below the bite, then up as high as possible, then down again covering as much of the bitten limb as possible – including fingers and toes. Several bandages may be needed.

The bitten limb must NOT be exercised. Do not let the bitten person walk to help. Bring transport to the victim and transport to the nearest hospital or call an ambulance on 000.

The Eastern Brown snake has extremely potent venom, this snake causes more snake bite deaths in Australia than any other.?

Signs and symptoms

The bite site is usually painless and may only resemble a scratch. Injected venom is mainly distributed by the body's lymphatic system, which is heavily influenced by patient movement.

DECREASED PATIENT MOVEMENT = DECREASED VENOM DISTRIBUTION.

1 hour – Headache, irritability, confusion, vomiting, diarrhoea and loss of

consciousness.

1-3 hours – Abdominal pain, hypertension, cranial nerve paralysis, haemorrhage.

3 hours – Limb and Muscle paralysis leading to respiratory failure, Peripheral circulatory failure and eventually death.

Do not attempt to remove or kill a snake yourself.

97% of human snake bite cases are due to people trying to interfere with the snake. Snakes are a native animal and are protected in Australia. It is illegal to harm or kill a snake and it's environmentally damaging. They serve a purpose – just like you!

Snakes are defensive, not aggressive creatures. They have numerous predators such as lizards, birds and mammals, and fear anything bigger than themselves such as humans. They will always flee if possible and only act aggressively if they cannot escape and feel threatened. They are usually shy, quiet animals who enjoy keeping down populations of rodents such as mice and rats.

https://snake catchers adelaide.com. au/snake-bite-first-aid-for-you/

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ABW 2019 Photographic Competition





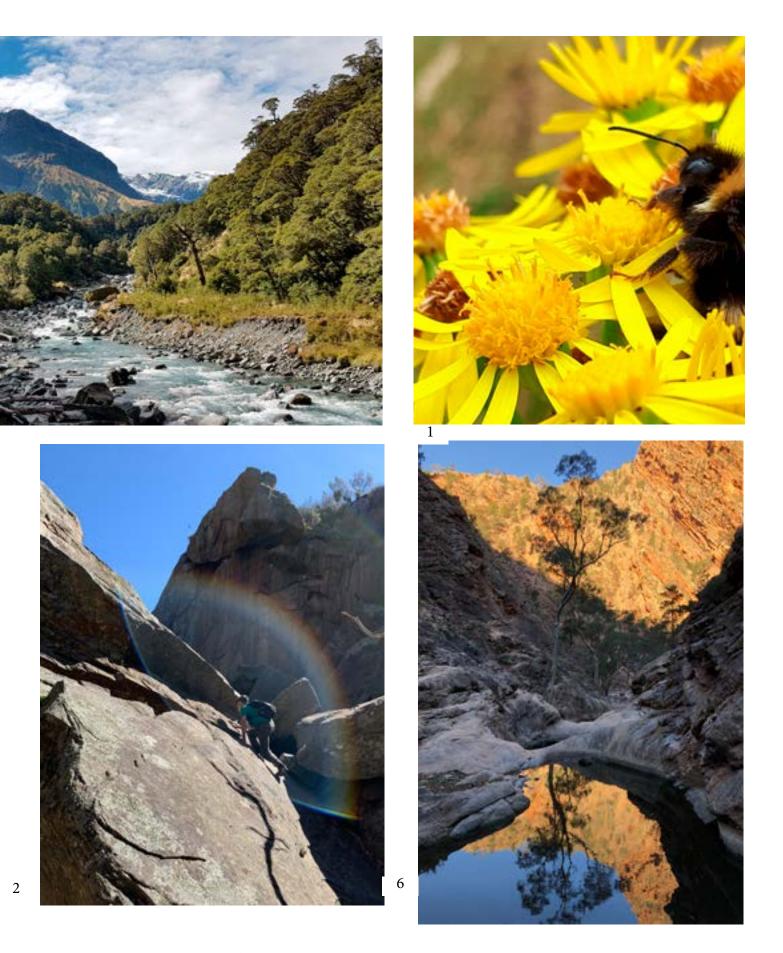
3

The winners were:

- 1. Flora & Fauna Trevor Jones
- 2. Open Mark Darter
- 3. Extreme Jason Quinn
- 4. People Marta Matthews
- 5. Water Sofia Oliver
- 6. Landscape Mal Watt



4



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The future of the Kangaroo Island Wilderness Trail Development Since the Bushfires

David Bevan and Ali Clarke, ABC Radio

— ABC radio transcripts_21/1/20

David Speirs, Environment & Water Minister [& Callers] (ABC RADIO ADELAIDE) KI bushfires / Australian Walking Company plans for KI /

(Bevan: Right now, ... we've got ... David Speirs in our studio ... there's lots to talk to him about of course because of the fires and how we're going to respond and ... it's terrible what's happened but are there some opportunities now to get some things right which we have not got right in the past? ... I was talking to you a couple of weeks ago and we were arranging items for a special segment that Spence and I did the day after the fires roared through and wiped out half of KI, and ... you helped us put together access to the new coordinator ... but one of the impressions I came away from our conversation ... was that we just didn't know how bad it was. Two weeks on, have we got a better idea?)

I think we've got a better idea ... it will take some time to get a real good grasp of the long-term environmental damage in terms of the impact to wildlife and rare species that are found in Kangaroo Island, but we certainly have a better idea of the extent of the damage. I've been able to visit the island three times in the last couple of weeks; the first visit I had with the Premier we did an aerial tour of the damage. That was the day that you and I spoke ... had a good look at Flinders Chase National Park – 100% of that national park burnt. All the built assets - the visitor centre, the café, the research centre, campaign grounds - burnt. The Kangaroo Island Wilderness Trail, that multiday trail through Flinders Chase National Park, destroyed. Kelly Hill Caves

Conservation Park destroyed including the visitor centre there, and the boardwalk. So ... the damage to both the natural environment in terms of species and flora and fauna ... very serious on the island, but also the built assets that are managed by the Environment Department have also taken a big hit, which is a financial hit on the state.

(Bevan: Here's a practical example of the impact of the fires. There was that huge debate last year about the cabins that were going to be built in the park by the Australian Walking Company on the Wilderness Trail ... and a lot of people really opposed to that because of the damage they said it would do to the park ... just putting in a fire track to those cabins was going to cause enormous damage to the park. There's no park left now)

There's no park and there's no trail.

(Bevan: So, here we were worried about a road – well, the whole thing has gone. What does that mean for that project – has the Australian Walking Company said to you ... we don't want to put cabins in a place that's not a park anymore? Have they spoken to you?)

We've been in regular contact with the Australian Walking Company and there is no doubt that project was controversial. The Government believed the project was a good project for the island's tourism economy, it was a high-end experience with eco-pods put along the walking trail, but there's no doubt there was a fair bit of angst and particularly the conservation community about that. Now, it gives me an opportunity as the responsible minister to step back and say, let's



take a good look at this again. That project was to progress throughout 2020; now that won't be the case now because simply the landscape and the place where that was going to be is completely different, it's completely burnt. So, it gives us an opportunity to sit down with the Australian Walking Company; we want to continue with the relationship with them in some form. We think they offer something good to South Australia's tourism economy and that's ... even more important now than ever before. But given the extent of community angst and the unhappiness about that ... we're talking about the Australian Walking Company about stepping back, taking a good look at this project and what it will look like going forward because ... it's not going to look the same in the immediate term.

(Bevan: Right. So, we might be able to get the same project up and running but in a more inclusive way – getting everybody on side, or more people on side than previously.)

I think so. I don't think you'll ever get everyone on side with a project like that because some people believe national parks shouldn't be places where accommodation is put. But I think we can work through this and get a better outcome because it had gotten messy ... and divisive, and let's step back and reset

(Bevan: Has the company got the \$800,000?)

The previous Labor government provided them with a grant of \$830,000 or thereabouts to advance this project. When we came to office that deal had already been done

(Bevan: So they've banked that money)

I presume so.

(Bevan: ...I just wonder what happens to that now?)

Well, we still have an agreement of sorts. We still have got a contract with the Australian Walking Company which had been in place since ... early 2018, before the previous State election ... so we have to work through that. And we've been in very active conservations with the Australian Walking Company since the day after the fire really, to make them aware that things had changed markedly. The KI Wilderness Trail, upon which all this hinged on, was destroyed

(Bevan: ... there's a court case pending isn't there?)

There is a court case pending, a court case initiated around the planning approval by a community group that weren't happy that was given approval by the State Planning Authority

(Bevan: The State Government would be party to that action; are you going to send the Government lawyers along saying ... there's no point in this going ahead because the trail doesn't exist anymore?) Yeah, I'm working through that. We have to have that conversation and say is there any point this going ahead? Now, some people say ... maybe that should be pursued to get an answer one way or the other. I would say, this is a chance for us to save a lot of money, a lot of resources, not just government but also community resources, and try and come to a landing going forward.

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Neil Lynch, Executive Director, Australian Walking Company (ABC RADIO ADELAIDE) Future of the KI wilderness trail accommodation project

(Bevan: Let's go to Neil Lynch ... Executive Director of Australian Walking Company ... who wants to put this development in the park ... is it too dangerous to have this kind of project in that park?)

The simple answer is no ... for 32 years we've been operating in a wide variety of parks dealing with not only fire, but other weather events. In December we had evacuations for snow in [unclear] so working in consultation with local experts as we have in South Australia and the local fire authorities, we believe you can manage that risk but importantly, to pick up on a point that's been made, you don't stay and defend. You evacuate and you evacuate early and leave behind the buildings.

(Clarke: So do you still want the same development that you were pitching before in exactly the same way?)

At the moment we hold valid approvals for the same development in the same way. What we've agreed to at the state's request is, to take a pause while we concentrate on ... dealing with the fires and supporting the local community while it rebuilds.

(Bevan: ... are you open to the suggestion that the Government might be able to revisit this project ... you've heard the interview ... David Speirs gave us yesterday ... what do you make of that? What signals is he sending?)

... we've had a number of discussions with the Department, not with the Minister personally but with the Chief Executive about what all this means ... it's important to note that these are long-term projects for us. We've been involved in this project now since 2015 when the State, led by the Labor Government approached us to be involved in the Kangaroo Island trail. So we see it as a long-term project and if that involves more discussions on top of the 21 sessions we've already held

with people on the island and in South Australia, we're happy to be a part of that because the community support ... the broader community, not just special interest groups, is important to

(Bevan: Just to clear up, have you got any money from the Government?) No we have not. We have not put in any claim and we've not received any monies whatsoever.

(Bevan: Right, because the former Government promised you money and the current Government made good on that promise saying ... if you go ahead with the project, we'll give you ... about \$800,000 but you haven't banked that cheque yet?)

No. We have not put in a claim, it's connected to certain performance obligations including actually completing the construction, but then future obligations over ten years ... connected to jobs.

(Bevan: How keen is the Australian Walking Company to get the project up and running because there's no wilderness trail any more ... the ocean's still there so you can ... sit in the cabin and look at the ocean ... or is that just silly, you're going to need another couple of years before anybody would want to walk it?) ...these projects take a couple of years anyway ... even if we were to deal with it today on the original timeframe, because of the court action that had been commenced against the state, we weren't even in court until February, they could take six months to deliver that and then twelve months to build beyond. So, if the park is going to start, as we've been told, showing signs of regeneration within two to three years, we were on that timeframe anyway ... it's important to keep that in perspective when we're looking at what's happened.

(Clarke: Alright, Neil Lynch ... and Fraser Vickery ... continue following that ... some texts saying, "If they build pods in there, they should have to pay for emergency volunteer services" ... "Aren't the planning laws changing in April, would this have any effect?")

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The scale of the Kangaroo Island fires is unprecedented, A rolling suite of fires, collectively known as the Ravine Complex burned about half of the Island, all started by natural lightning events. Community impact has been significant - with losses of property, livestock, fences, vehicles, 95 homes and tragically, the lives of two people.

In terms of environmental impact, fires have burned in Flinders Chase National Park, four Wilderness Areas and six conservation parks. In total the "Ravine Fire Complex" covers an area just over 210,000 hectares, which represents 47% of the land surface, leaving about 230,000 hectares - the eastern half of the Island unaffected.

On Saturday the 3rd of January the 'Wiluwilya' and 'Wilderness Valley ' properties were swept up in this uncontrollable fire roaring out of the surrounding plantations of Tasmanian Blue Gums and leaving our beautiful heritage area bushland a blackened and smoking ruin along with our houses and everything else in the fires path.

The fire was so hot it turned the laterite gravel typical of these sorts of ecosystems on W Kangaroo Island from orange to black

There were tens of thousands of immediate casualties of the fire. The roads and paddocks were littered with carcasses of the larger animals. Most hardly had their fur singed they had just breathed in fire, and dropped dead on the spot as the fire moved on. Small bush birds and insects were simply vaporised while those animals that died in the bush sometimes left a few bones behind, but were mostly completely consumed as the fire burnt down to the underlying mineral soil.

But you say, we have all been taught that 'the Australian bush is adapted to recovering from wildfires' and I say, not these sorts of fires.

Because birds are the group of Australian animals that is best known scientifically, the ornithological group 'Birds Australia' were quick to come up with an analysis of the impact of these fires Australia-wide on our birds, and their preliminary results, prepared by Dr Steven Garnett and others were released to the media on 24 January 2020.

They suggested that over eighty species across Australia have lost more than a third of their habitat, while 19 species had more than half of their former habitat seriously affected by fire. Of these 19. 15 were subspecies from Kangaroo Island.

This assessment is based purely on overlaying the burnt area in

early January across Australia over the distribution data in the 'Atlas of Living Australia'. As a first step in assessing the impact of such fires it is interesting, but the actual picture taking into account the ecology of each species on Kangaroo Island is much more complex and so for the rest of this talk I will take you through about 30 species of plants and animals that have been variously affected by the fires.

First a reminder of the extent of the fires. Species possibly at risk of extinction on Kangaroo Island include:

plants: Gosselands Logania and Twining Hand-flower

mammals: Kangaroo Island Echidna, Kangaroo Island Dunnart, Little Pigmy Possum and Swamp Rat

birds: Glossy Black Cockatoo, Kangaroo Island Southern Emu Wren, Kangaroo Island Western Whipbird and Kangaroo Island Shy Heathwren.

While these 10 species have had much of their range within the fire footprint, they each have different ecological needs and occur in a range of different ecosystems.

The Gosse Lands Logania is a 1 metre tall understorey shrub of the Kangaroo Island Mallee-ash low mallee community of the laterite plateau. Before the fire it



Extent of the fires on Kangaroo Island



Destroyed timber plantations behind destroyed native bush.

https://www.theislanderonline.com.au/story/6600445/kangaroo-island-letters-to-the-editor-january-2020/

had been recorded from only 11 localities all within the fire footprint. At this stage we have no idea how much of the soil seed bank remains after this extremely hot fire. There are clearly no surviving adult plants. It is probably extinct.

The twining hand-flower is a spectacular climbing plant that is endemic to Kangaroo Island. While there are quite a large number of records its main stronghold was within the fire footprint where it was associated with moister areas in the deep valleys on the laterite plateau. Like the Gosse lands Logania, we have no idea at this stage how the soil seed bank for this species fared during these fires natural vegetation further east on and it may be extinct over more than half of its previously known range.

In 2016 this island subspecies was identified as one of the 20 Australian mammals at greatest risk of extinction. The Wiluwilya and Wilderness Valley Heritage Agreement bush supported the largest known remaining population. 12 months of continuous camera trapping in this area had increased our understanding of this population of dunnarts significantly. They have now been recorded 35 times at four different trap sites with the majority of observations being in the summer months from October to February, with only a single record in May. Since their original discovery in 1969 when a dog caught two escaping from the base of a yacca during land clearing operations, very few additional



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Sharing Our Grief by Clare Power, Climate Change and Sustainability Officer with illustrations by Cate Dudley, a Blue Mountains artist.

https://www.bluemountains.org.au/documents/hutnews/ archive/2002-hutnews.pdf

populations have been discovered. The last major surveys in 2018 only recorded dunnarts from 11 separate locations, five in Flinders Chase National Park and four on privately-owned bushland. All these existing populations were on western Kangaroo Island within the fire footprint. They clearly need extensive areas of habitat to survive on Kangaroo Island and hence their progressive disappearance from the more fragmented areas of the island since 1969.

Before the fire the species was classified as being 'critically endangered' it has had two 'Recovery Plans' prepared for it, one by Jody Gates in 2011, and one in draft form prepared last year. Since the fire, camera traps have recorded a single living dunnart on two separate areas of privately-owned bushland where small patches escaped the fire. One of these sites is in the process of being enclosed by a feral cat proof fence to protect it/them from predation. The species is still here, but can now probably be considered 'functionally extinct'.

Western pygmy possums are widespread and abundant across most remaining areas of natural vegetation on Kangaroo Island and although tens of thousands will have been killed in the fire



footprint, they are not in nearly the serious trouble as their close relative the little pygmy possum appears to be in. Always much rarer than its relative, the 27 localities from which it has been recorded are all within the fire footprint. It may now be extinct on Kangaroo Island, but as populations are also known from the Australian mainland the possibility of a re-introduction could be considered. Any such plan depends critically on ongoing fire management in the natural vegetation areas of western Kangaroo Island to promote recovery of the nectarproducing plants, particularly Banksias, on which both species of pygmy possum depend. I will have more to say about these complex ecological relationships when I discuss the plight of the green carpenter bee later in this talk.

Know only from five localities all within the fire footprint, swamp rats live in a specialised habitat which was not very widespread on western Kangaroo Island. They are associated with swampy areas along permanent river valleys and the margins of freshwater lagoons. Such areas produce dense stands of the native sedges that this species primarily feeds on. The much more common and widespread bush rat, like the more common of the pygmy possums discussed before undoubtedly has been very badly affected by the fires, but will still be present in many



Kangaroo Island Dunnart

https://www.naturalresources.sa.gov.au/kangarooisland/plants-and-animals/native-animals/Kangaroo_Island_Dunnart



Western Pygmy Possum

https://www.environment.sa.gov.au/news-hub/news/articles/2019/06/pygmy-possum

unburnt areas further east. Swamp rats are probably now extinct on Kangaroo island but, like the little pygmy possum, still have an extensive distribution in mainland Australia and could be reintroduced if their specialised habitat regenerates some time post-fire.

This spectacular bird is now only found on Kangaroo Island. It once also occurred on the southern Fleurieu and Eyre Peninsulas but is now extinct on the South Australian mainland with the last mainland record being in 1977 from southern Fleurieu



Carpenter Bee

https://www.naturalresources.sa.gov.au/kangarooisland/plants-and-animals/native-animals/Insects_of_Kangaroo_Island/green-carpenter-bee-project

Peninsula. The first systematic population survey on Kangaroo Ísland was in 1982, when it was estimated that the population numbered at least 115 individuals and probably no more than 150. The number of breeding pairs was at least five but probably did not exceed thirty. Clearly something had to be done to give these birds a helping hand and one of Australia's most successful threatened species recovery programs was begun on Kangaroo Island. Before the fire the birds had made a significant recovery with the highest population so far recorded in the

annual winter count being 373 in 2016. There were many parts to this recovery program which were implemented after significant ecological research to identify threats to the population and effective and practical measures that could be implemented in the field to minimise these threats. These included artificial nest hollows, protecting nesting trees from egg and chick predation by the very large Kangaroo Island population of brushtail possums. Removing feral honey bees from nesting hollows and an extensive program of planting stands of their specialised food tree the drooping sheoak on both public and private land all over the island.

Before the fire we routinely saw flocks of 5-10 glossies in our heritage agreement bushland and at least one pair nested in a big hollow sugar gum beside the NW River. We have seen individual cockatoos over our property since the fire so at least some have survived, but many areas of drooping sheoaks (including those on our property) planted as cockatoo habitat have been burnt and it is as yet unclear if any, even those 10 to 20 year old plantings will survive this fire and most will probably have to be re-planted. A large proportion of the natural sheoak stands on the west and north coasts within the fire footprint were also severely burnt. In past fires these areas have regenerated but we do not know if this will happen this time. It takes about 10 years for a drooping sheoak regenerating from seed to produce fruits of its own and be available as a glossy feeding tree.

Before the fire, the endemic sub-species of the delightful little southern emu-wren was considered the largest and most secure population of this species, which is doing it tough in tiny patches of suitable habitat remaining across the rest of its southern Australian mainland distribution. It has now lost around 50% of its former coastal mallee on limestone and Kangaroo Island mallee-ash low mallee on the laterite plateau habitat on the western half of the island. These tiny birds are known to not fly significant distances to re-colonise other areas and there is considerable experience within the Australian conservation management community of carrying out translocation programs to try and expand their mainland population size. Such programs take considerable time, money and staff and,

like all the rest of the species which will require such assistance it will all depend on how much of their former habitat regenerates from this fire and how long it will take to again be able to support populations of emu wrens.

Much rarer than the southern emu wren, the kangaroo Island sub species of the western whipbird has most of its known distribution in the coastal mallee on limestone habitat completely within the fire footprint. There will remain a small number of populations on the southern coast of the Dudley Peninsula, but we know very little about the dispersal ability of this illusive bird and, again, translocations may need to be considered. Like the emu wren, before the fire, the Kangaroo Island populations of this species were considered the largest and most secure anywhere in southern Australia.

Almost all of the known records of the Kangaroo Island sub species of the shy heathwren are within the area of the fire footprint. The main habitat where this species was found was the Kangaroo Island mallee-ash low mallee of the laterite plateau of which very little escaped the fire. Heathwrens may now be in serious trouble on Kangaroo Island and as a small territorial bush bird with limited ability to colonise potential habitat recovering post-fire, there may need to be a serious search for remaining populations in their less favoured habitat of coastal mallee on limestone, which have survived the fire further east as possible sources for re-introduction once their more favoured habitat recovers.

Known only from coastal limestone habitats from Cape DuCouedic to Cape Borda on the far western coast of Kangaroo Island. This is a snail which, at this time of the year, goes into aestivation sealed to the underside of limestone rocks right on the coastal clifftops. In spite of what the ALA map says, my understanding of this species very limited distribution means that it is very likely now extinct with the possibility of survival in the small area of unburnt vegetation around Cape Du Couedic.

Species for which Kangaroo Island was a significant stronghold include:

- plants: Hibbertia and the Kangaroo Island Mallee-ash
- mammals: Southern Brown Bandicoot and Tammar Wallaby
- birds: Bassian Thrush and Beautiful Firetail

- reptiles: Heath Goanna and Pygmy Copperhead
- insect: Green Carpenter Bee

Two sub species of Hibbertia may have been significantly affected by the fires. Hibbertia empetrifolia ssp. radians is a twining understorey shrub which lives beside the remaining natural river valleys on both Kangaroo Island and the Fleurieu Peninsula. Much of its distribution on Kangaroo Island is within the fire footprint. The second species Hibbertia platyphylla ssp. halmaturina is a shrub confined to Kangaroo Island. It is a relatively uncommon plant of the Kangaroo Island mallee ash low mallee of the laterite plateau on western Kangaroo Island all of which have been burnt. A second group of populations occurs in remnant areas of unburnt natural vegetation south of Kingscote and could provide a source of seed for re-introduction if the seed bank of this species has been destroyed by the fire.

Interestingly, Hibbertia species are, under 'previously normal wildfire conditions', considered to be early post-fire colonising species so we should be able to make an assessment of the status of these two species within the next 12 months on the fire ground.

Endemic to Kangaroo Island, the Kangaroo Island mallee ash is the predominant overstory tree on much of the laterite plateau within the fire footprint. There are hundreds of thousands of trees in this area and many of them are already sending out epicormics shoots or are sprouting from their woody basal lignotubers. Clearly they have survived even

this fire storm. Their ecological importance lies in their very abundance, they provide a large proportion of the nectar, pollen and habitat which supports numerous insects as well as pygmy possum and honeyeaters. In 2004 most of the Gosse Lands section of Flinders Chase National Park was burnt in a relatively intense wildfire. All the mallee ash trees sprouted immediately following the fire as they are doing this time. Their first actual flowering season however was this year with this part of the park covered with gum blossoms last December. This is 16 years postfire. This is a long time in the life of most of the species of animals that intimately depend on this tree for a major part of their food supply.

Even before the fire, the distinctive long-spined sub species of echidna endemic to Kangaroo Island was classified as Endangered on Kangaroo Island. This classification was largely based on the size of Kangaroo island, meaning that the sub species had a relatively small 'area of occupancy'. In addition, there was evidence that echidna numbers have declined and that road kill was a major and ongoing threat to the population. Now that half of their distribution on the island is within the fire footprint they are clearly going to be severely impacted. As you have already seen, some at least survived the fire. Unlike many birds, small mammals and reptiles which feed in invertebrates in the air and on the vegetation and where any post-fire survivors may well starve to death, echidnas feed on ants termites earthworms and insect larvae that they dig up and so will have food available for some time. These underground food resources however have to feed

on green vegetation and their surviving post-fire populations will undoubtedly be reduced. The surviving echidnas will have a tough time for a couple of years, but they have been around in pretty much this well-tried design since the time of the dinosaurs so they have probably survived such challenges many times in the past. They will be OK.

Kangaroo Island was a major stronghold for southern brown bandicoots in South Australia. They always seem to have had a patchy distribution in a range of habitats across the island. About half of their previously known distribution is in the fire footprint. They shelter in nests made in a scrape on the surface of tucked in under bushes and it is unlikely that any would not have been killed immediately in these fires. As omnivores with a preference for eating ground-dwelling insects it is anybodys guess when the burnt area will again provide any suitable bandicoot habitat.

Like the mallee ash there are hundreds of thousands of tammar wallabies on Kangaroo Island and many in the farming community regard them as serious agricultural pests. They occur in virtually all the range of habitats across the island, but critically depend on the presence of large areas of thick natural vegetation to provide a daytime refuge safe from predators such as eagles and feral cats. Although huge numbers were killed directly by the fire there are survivors even in the heart of the burnt area on our heritage agreement bush. There is already green shoots of grass appearing following the recent rain and there is ample drinking water in the spring-fed pools of the NW River so there is a good chance for a slow recovery across the fire ground. This is important as tammar wallabies have been

extinct on the mainland of South Australia since the 1950's and, although the re-introduced population in a fox controlled area of Innes National Park seems to be establishing well, the population on fox-free Kangaroo Island is critical for the long-term survival of this species.

The deep gullies of western Kangaroo Island Island was one of the strongholds of this species in South Australia as the populations in the Mt Lofty Ranges are in serious decline. All the known island populations were within the fire footprint and the species may well now be extinct there. There are still mainland Australian populations outside of South Australia which could potentially provide a source of birds for re-introduction, but it is doubtful if they could be sourced from the nearest populations in the Adelaide hills.

Although there are lots of records of beautiful firetails from across Kangaroo Island, their stronghold was areas near to water on the laterite plateau all within the fire footprint. When these habitats recover to a point where they can again support these little flocks of seed-eaters it may be that there will be re-colonisation from unburnt areas further east. Like the Bassian thrush, beautiful firetail populations in the Mt Lofty Ranges are in a serious state of decline.

The South Australian stronghold for the heath goanna has been Kangaroo Island where as the top terrestrial predator (except for feral cats) they seem to be very common right across the island. Unfortunately, those living near roads frequently scavange road-killed animals and themselves often end up dead as well. Some goannas have survived the fire on our heritage agreement bushland

and undoubtedly in other areas of the fire footprint as well. They have plenty of dead animals to eat at the moment, but once they have to revert to their normal insect food may find longer-ter survival in this area a bit tougher. They also require termite mounds in which to lay their eggs and we do not as yet know how the millions of termite mounds in the fire ground survived.

The pygmy copperhead is a small snake which often goes unnoticed on both Kangaroo Island and the south Mt. Lofty Ranges which constitutes its total distribution. It is found right across the island and, like the black tiger snake, which is already known to have a few survivors in the fire footprint it may be able to persist in places on western Kangaroo Island and then spread out as the habitat recovers and its potential insect, frog and small mammal food reestablish.

This spectacular iridescent green native bee is about 1.5% larger than an introduced honey bee. The story of the decline of this bee across south eastern Australia is a very sad indictment of a failure of conservation management which is probably all too common among other species of native Australian insects as well. Insects often develop complex and obligatory ecological relationships with the ecosystems that they evolve in and I will briefly describe the story of the green carpenter bee. Two South Australian biologists, Remko Leijs and Katja Hogendoorn have been working to save the Kangaroo Island populations of this species for the last 10 years and have come up with some ingenious and practical ways of helping to sustain these populations

The green carpenter bee was originally distributed from northern NSW along the coast and ranges into Victoria, the Mt Lofty Ranges and on Kangaroo Island. Although still present in parts of its range in NSW, the species has not been recorded from the mainland of South Australia since 1902 and Victoria since 1938. Found in open scrub and forest, this bee seems to be at least partly dependant on periodic and small scale bushfires, due to its preference for nesting in decayed trunks of Banksia and sometimes also Hakea, that become available after some cooler fires. Also used are old flower stems of yaccas, which mass flower after a burn and become suitable as an abundant nesting substrate 3-7 years later. Hot wild fires however kill all adult Banksias and there is intensive regeneration from seed dropped from the seed capsules into the ash bed following the fire. The new Banksias take at least 20 years for the trunks to reach a size and condition suitable for carpenter bee nesting.

Unlike honey bees, green carpenter bees are solitary and they are also buzz pollinators which many Australian plants depend on rather than just the simple pollen transfer service provided by honey bees. In response to the 2004 and 2007 Flinders Chase National Park fires which produced lots of yacca stalks but killed virtually all the banksia shrubs Remko and Katya have developed an artificial nesting substrate which the bees have readily accepted and used. This should have carried the population through the serious limitation in nesting substrate across the whole national park

between when all the yacca stems fall over and the regenerating Banksias are not yet old enough to provide nesting substrate. It is likely that most of the 440 nesting stalks for the green carpenter bee, set out at various locations in the park by Remko and Katya have been lost. This includes the approximately 140 occupied nests, which would have contained mature brood at this stage.

They conclude that 'the green carpenter bee may now be critically endangered, as most of its remaining habitat in NSW has burnt as well. It will be a while still before we will be allowed into the areas to assess the impact of the fires, but we will certainly do this as soon as possible. In addition, both on Kangaroo Island and around Sydney, there are still areas with unburnt habitat where the bee occurs. We will keep on trying to protect this species in these areas, and encourage recovery. On Kangaroo Island, we hope that nature will help by providing a large amount of yacca stalks, which should become available to the bees for nesting in three to seven years from now. We will set out new nesting substrate at various locations every winter and monitor its usage'.

Those of you who are still keeping up will have noticed that 10 of the 15 endemic Kangaroo Island bird species listed on the 'Birds Australia' list of species most threatened by the Australia's recent fires have not been dealt with yet and included in either of the two categories discussed so far. There is no doubt that many hundreds of thousands of individual birds of these remaining species will have perished in these fires, but as you will see from the next few slides, all have lots on records in the unburnt eastern half of the island, and all of these species have

much less specialized habitat requirements than the birds we have already considered.

After all this doom and gloom, there are three huge opportunities provided by fires of this intensity and magnitude to significantly improve the long-term conservation value of the island.

For those who do not know, or had forgotten that one of the major reasons that Kangaroo Island is so important for wildlife conservation in southern Australia is that it has remained free of foxes and rabbits which are such important predators of and competitors with wildlife on the Australian mainland and now on Tasmania since foxes were introduced there a few years ago.

Kangaroo Island does however support significant populations of feral cats, feral pigs and introduced koalas

For about the last five years, the Federal Government has been funding three feral cat eradication programs across Australia. One of these is on Kangaroo Island. This has advanced to a stage where a cat-proof fence is in the process of being erected across the narrowest part of the island and the original plan was to refine techniques for feral cat eradication on the Dudley Peninsula and then extend to the much more complex task of attempted eradication across the remainder of the island. The fires should have changed the focus and most effort over the next few years needs to be directed towards cat control around all the few unburnt remnants of natural vegetation within the fire footprint to give any surviving animal populations using these habitats the best chance of survival. Cat control also needs to be implemented immediately at all the Kangaroo Island dunnart

populations known before the fire on the off chance that some individuals may have survived there against all the odds.

The overall Kangaroo island feral cat eradication program is seriously under-funded and under staffed at present and it would be a great pity if all the work done to date was wasted for lack of proper funding.

After the 2007 fires that burnt over 90% of Flinders Chase National Park the opportunity was taken to eradicate the small population of feral goats from within the park, through a combination of helicopterbased shooting while the goats were easily visible in the burnt vegetation and a follow-up ground shooting and a 'judas goat' program to find and kill the last remaining goat. This program was successfully completed due very largely to one NP&W rangers' dedication to track down the last remaining goat.

Feral Pigs are a whole different issue, they are solitary unlike goats which are social herd animals. Their preferred habitat is beside the rivers in the deep largely inaccessible valleys across the laterite plateau on western Kangaroo Island. Also, as you can see from the distribution map, they are not just confined to Flinders Chase National Park as the feral goats were but are found extensively on privatelyowned land as well. Some helicopter-based shooting has already begun on the park to take advantage of the brief window where pigs can be seen before the post-fire growth obscures their deep valley habitat from the air. This initiative needs some serious funding and staffing commitment immediately and must be coordinated to cover all of the range of the pig population regardless of land tenure. We are rapidly running out of time

Seeking Volunteer Support - Kangaroo Island

Birds SA has been contacted by the Director Conservation and Wildlife, National Parks and Wildlife Service South Australia (DEW) seeking support for on-ground assistance on Kangaroo Island, now that the fire is out. Over 200,000 hectares of habitat across the island were burned.

The request from National Parks and Wildlife is as follows:

"DEW is currently seeking to implement assessment of the fire affected areas and is seeking assistance from the environment community in South Australia to initially undertake these surveys and assessments over the coming months beginning in March to add to work already underway by staff.

To this end, we would like to hear from you as to whether you have volunteers with biological survey skills for a range of biota that would be willing to participate in these surveys on Kangaroo Island.

Experience in undertaking field assessments of mammals, birds, reptiles, amphibians, insects and plants are all going to be in demand and we would appreciate it if you could request volunteers from your membership willing to participate.

The department would meet all out of pocket expenses and costs associated with the field work, supply materials and recording equipment and seek to involve the participating organisations in the preparation of reports resulting from the work.

Can you please provide a list of names, contact details including phone and email, areas of experience and skills eg field assessments of mammals, birds, reptiles, amphibians, insects or plants availability – March, April, May, June and any relevant notes on availability"

This information is required by the first week in March. I have undertaken to provide to National Parks a consolidated list of Birds SA members who would like to put their name forward for this important work.

There will no doubt be questions relating to how this is all going to be implemented but at this stage it would be greatly appreciated if you would send to me by email the information requested in the three bullet points above if you wish to be involved. I need to have this by Wednesday March 4 at the latest.

Thank you for your assistance. Jeff

Jeff Groves Vice-President Birds SA Ph 0401 125 510



to make eradication a serious option.

Finally the 'big one'. Koalas were introduced in good faith to Kangaroo Island in 1923 and 1925 when there was a fear (later shown to be unfounded) that the extensive fur trade operating throughout the koalas natural range in Eastern Australia was driving them to extinction. The introduced Koala population on Kangaroo Island has now been shown to have severely degraded many areas of natural vegetation, particularly the riverine systems through uncontrolled population expansion and over-browsing to the point of killing tens of thousands of their food trees.

Against the best biological advice at the time in 1997, the 'Koala Management Program' was begun. This involved catching koalas, surgically sterilizing them and releasing them back at their site of capture.

An island-wide survey in 2001 estimated a total population of 27 000 koalas on the island and the sterilization program was intensified. The extensive plantations of Tasmanian blue gums planted across the western end of the island since the mid 2000's however greatly increased koala habitat and food trees and in 2017, the latest census, it was estimated that there are about 25,000 koalas in native vegetation and another 24,000 koalas in the

Island's commercial blue gum plantations. In 2017, the last year of the management program 474 koalas were sterilized. Discontinued in 2018 there is now no koala management occurring on Kangaroo Island.

The politics surrounding any suggestion of removing koalas from Kangaroo Island are exactly the same as they were when the sterilisation program was introduced in 1997, but the fires on Australia's east coast could potentially be a 'game changer'. Even before the fires koalas in parts of the Queensland, NSW and, to a lesser extent, the eastern Victorian coast, were genuinely threatened by loss of habitat through the everexpanding urban development.

Since huge amounts of additional koala habitat have been burnt across a large part of the koalas' natural Australian range in eastern Australia, this has, for the first time, provided an opportunity to transfer Kangaroo Island koalas 'back home'. Clearly this needs to be carried out over many years as the eastern Australian habitat recovers to a point where it is again suitable for koalas, but all the participating conservation agencies should begin the planning now. Again it will take significant money and staff to achieve in a publicly acceptable way.

So, here we are, a month after the first fire began on Kangaroo Island. I have outlined some of the catastrophic biological impact of these unprecedented wildfires and made a few tentative suggestions on a way forward for some of the affected wildlife.

It is my firm belief however that, the way forward to postfire recovery on all of Kangaroo Island is fundamentally based on conservation of the natural environment. You cannot run an apiary industry without large areas of flowering native vegetation to overwinter your hives. You cannot have a 'Clean Green' agricultural sector without nature conservation being the basic support. You cannot go fishing without a basic network of Marine Protected Areas to re-plenish stocks of Southern Rock Lobster and the whiting so beloved of the recreational and small commercial fishing sector.

Of course it should go without saying that no tourist comes to Kangaroo Island without wanting to experience the large tracts of 'natural wilderness', particularly coastal wilderness. They might drink some nice wine and do a bit of fishing, but that is NOT why they choose to come in the first

place. This applies equally to both overseas and Australian tourists.

I am only able to provide this perspective on the biological effects of the Kangaroo Island fires because of 150 years of scientific research in Flinders Chase National Park and elsewhere on Kangaroo Island. For most of those 150 years, Flinders Chase was well managed and encouraged scientific research projects and, because it was the largest area of natural vegetation remaining in southern South Australia, it was assumed that it was a large enough area to allow ecosystem functions to continue in their natural way. Since the early 1990's as politicians all over Australia decided that 'green votes' were no longer important, funding to the country's conservation agencies have been reduced every year and scientific and management staff numbers have been slashed as a consequence. On Kangaroo Island this has meant we now have 50% less management staff than at the 'high point' in the late 1980's while the same reduction has happened in scientific support staff based in the NPWS in Adelaide. Those staff that remain are now really struggling to meet the demands placed on them by this catastrophic bushfire event and need all the support we can give them.

If this talk achieves nothing else, I would hope that it might impress on a few of the current generation of politicians that the second oldest, but arguably the most significant conservation area in South Australia, the whole of Kangaroo Island, and Flinders Chase National Park in particular needs a massive injection of State and Federal taxpayer funding and at least a trebling of full-time management and scientific staff in the Department of Environment and Water.



Southern Emu Wren



Glossy black-cockatoo male and female

https://www.environment.sa.gov.au/goodliving/posts/2019/03/glossy-black-cockatoos



Tamar Wallaby

Australian Museum



"...The short-beaked echidna population on Kangaroo Island is considered to belong to a distinct subspecies (Tachyglossus aculeatus multiaculeatus), which was first described by Rothschild in 1905, from a specimen in the British Museum. They have more numerous spines which are longer, thinner and paler in colour compared with the mainland subspecies...."

https://www.naturalresources.sa.gov.au/kangarooisland/plants-and-animals/native-animals/short-beaked-echidna



"...The South Australian stronghold for the heath goanna has been Kangaroo Island where as the top terrestrial predator (except for feral cats) they seem to be very common right across the island...."

Coming back to the report called 'After the Catastrophe' with which I began this talk with, the authors state that: 'The wildfires were beyond anything anticipated in conservation planning and management for Australian biodiversity. Fires of such scale had not been factored into recovery plans for threatened species. Fires burnt through much of the conservation reserve network the bulwark of conservation in Australia - in eastern and southwestern Australia and Kangaroo Island. In many cases, the recent recovery or stabilisation of threatened species hard won from the dedicated and strategic conservation efforts of many government agencies, conservation NGOs and researchers over many decades was subverted in a matter of weeks'.

They also provided a series of detailed responses on where conservation research and management needs to go from here to systematically respond to and recover from where we are now and prepare for the inevitable return of such intense and uncontrollable fires in the future.

- 1. Rapid assessment of biodiversity loss.
- 2. Identifying and responding to compounding threats
- 3. Locating and protecting key

refuge areas

- 4. Communications
- 5. Coordination, continuity and resourcing
- 6. Monitoring
- 7. Prioritisation of species, sites and actions for response.
- 8. Implementation of priority responses
- 9. Linkages with socioeconomic responses
- 10. Caring for the carers
- 11. Rapid assessment and reassessment of the conservation status of affected speciesand ecological communities; and associated policy response
- 12. Research into ecological shifts and transitions; and impacts on ecological processes
- 13. After-emergency management responses
- 14. Review and inquiry
- 15. A changed landscape for conservation
- 16. Preparation for the next catastrophe

Let's hope that the people who can make this happen are listening.

