

ADELAIDE BUSH WALKERS

Tandanya



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Volume 48 Number 3 Spring 2018

Arthur Range Traverse/Federation Peak, Tasmania

Envenomation and the Pressure Immobilisation Technique for snake bit first aid

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*A determined soul will do more with a rusty monkey wrench than a loafer will accomplish with
all the tools in a machine shop
Robert Hughes - art critic and author*

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Adelaide Bushwalkers

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Oladdie Hills
photo Dean Johnson



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

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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.



Arthur Range traverse , March 2017,
Photo Ben Trainor

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



Don't forget your ICE

Adelaide Bushwalkers In Case of Emergency 'ICE' Emergency Medical Information

Each walker is to carry an Emergency Medical Record in a sealed envelope in the top pocket of their pack. Ensure your emergency contact is not on the same walk/activity.

<http://www.adelaidebushwalkers.org/wp-content/uploads/2016/07/Emergency-Medical-Information-Adelaide-Bushwalkers.pdf>



Trevor Jones descending Federation Peak poised 600m above Lake Geeves, March 2017,
Photo Ben Trainor

Envenomation First Aid

Reviewing The Pressure Immobilisation Technique

Garry Tretheway provides here a critical review of the use of compression bandages in the treatment of venomous bites. The opinions expressed are those of Garry. We would welcome some response to the article.



The PIT is not recommended for the first aid of:

Redback spider

Jellyfish stings

Fish stings including stonefish bites

Stings from scorpions, centipede or beetles



Australian Snake Bites

In Australia there are about 3,000 snake bites per year, resulting in about 500 hospital admissions (Weldon, 2017). Many receive antivenom; on average two per year will prove fatal. About half the deaths are due to bites from the brown snake; the rest mostly from tiger snake, taipan and death adder. While some deaths occur soon after the bite, it is uncommon to die within four hours of a snake bite.

Deaths from anaphylaxis following bee, hornet, tick or other arthropod bite happen as frequently as deaths from snake bite.

Struan Sutherland's 'Death from snake bite in Australia, 1981-1991' (The Medical Journal of Australia, December 1991, Volume 7, pages 740-46) contains some graphic descriptions of the 18 known fatal snake bites in that ten year period.

In 1906, the untreated death rates were as high as 40% to 50% for death adder and tiger snake bites! Improved supportive treatment and the availability of effective antivenoms has reduced this considerably.

<http://www.anaesthesia.med.usyd.edu.au/resources/venom/snakebite.html>

Alice Down the Rabbit Hole: Snakebite bandages, snakebite first-aid and snake-oil salesmen

by Garry Tretheway



Over the last couple of years, I've noticed articles about Setopress and other 'snakebite' bandages in various magazines and on various websites concerned with bushwaking, 4WDing, gold panning, shooting, etc. And I've noticed that various claims are pretty much without foundation. Investigating further, I found myself down a rabbit hole of fiction dressed up as fact.

Here I do a serious disclaimer. While it's easy to demonstrate that most commercial claims of efficacy are baseless, and some of the prominent medical recommendations conflict and are fairly baseless, it's really difficult to find out what is actually the best way to do snakebite first-aid. So I'll state here that I'm not recommending anything. Without better information, you probably won't do better than follow the advice of the big-name government and non-government agencies. And even the dodgy commercial products are probably a bit better than nothing.

I was first drawn to an ad for 'Setopress'. I'm going to hammer Setopress, not because it's the worst, but ironically because it's the best. It's the only one that includes an actual product insert with instructions and numbers that can be checked.

The Setopress product insert says it is for venous leg ulcers. It makes no mention of snakebite.

However, TacMed Australia does a promotional demonstration YouTube claiming great efficacy of Setopress for snakebite. Their 'personality' cites no relevant sources or qualifications and demonstrates ignorance, eg he confuses mmHg with mg of Hg. Independence Australia, another purveyor of Setopress, runs a page in which the 'Descriptions' tab quite rightly contains 'management



of venous leg ulcers' and no mention of snakebite. However, in the 'Reviews' tab an anonymous person claiming to be a snake expert makes several unsupported claims recommending use for snakebite. I believe this is deliberate but deniable trickery. Other resellers make similar claims.

Two other competing brands, Aero and SMART both explicitly state they are used for snakebite. Other than nonspecific claims of “the right pressure”, neither offers any validation.

All three of these feature the same method of monitoring tension. Rectangles printed on the stretchy bandage become squares at the right tension. The problem here is that they all have a different ‘right tension’. I bought all three bandages for testing. Hanging weights on these bandages, the Setopress rectangles become square with 0.75kg, Aero with 0.49kg, and SMART with 1.32kg. So SMART ‘right tension’ is 2.6 times that of Aero.



Another problem with ‘right tension’ is that the tension on the bandage seems to be taken to be a proxy for the resulting limb compression. It’s not. The diameter of the limb makes a big difference. For the same bandage stretch, different limb diameters result in different compression. Setopress applied as directed for venous ulcers, on my wrist, gives about 45mmHg. Above my knee, about 23mmHg, and at the top of my thigh, about 18mmHg.

Now, at this stage, I’ll say that most medical authorities tend to talk about required



Before Application



Correctly Tensioned



pressures being 55 - 70mmHg. So clearly the Setopress bandage only works for a snakebite on a skinny person’s wrist, or a child’s ankle. Aero won’t work at all. SMART seems better, but is problematic. It will apply useful pressure on bigger limbs, but if used on a small limb, it may well apply too much pressure, effectively forming a tourniquet.

And there’s another problem with the 55 – 70mmHg. How was this pressure decided? Initially I thought this was a no-brainer - as tight as possible without cutting off blood supply.

But no. The lower limit of 55mmHg came from SK Sutherland, a snakebite expert, in 1979. He pioneered the pressure immobilisation technique, for which we are grateful. However, his methods left a lot to be desired. What he wanted to find out is, if you get bitten by a snake, and do / don’t use pressure immobilisation, how soon does venom turn up in your blood? Fair enough. But instead of injecting venom into any vascular tissue, like a long fanged snake, or just under the skin, like a brown snake, he injected venom into the aponeurosis. Big word, but think of the hard silvery sheath on the outside of a muscle. And he used not people but small skinny monkeys weighing 2 - 2.6kg (a cat weighs 4kg), and found ‘firm crepe bandages’ effective. And to judge the pressure in mmHg resulting from the ‘firm crepe bandage’, he used human volunteers with ‘firm crepe bandage’ on one arm, and a kind of pressure cuff on the other, and judged when they were equal as being 55mmHg. (Remember, think of the difference in diameter of a human arm and a 2.5kg monkey’s leg.)

So the intuitively sensible 55mmHg seems

to have been obtained by some convoluted guesswork, and then quoted by every article or advice we see nowadays.

And the upper limit of 70mmHg? That seems to be another magic number that has stuck and been rationalised in various ways. One authority explains it by saying that higher than 70mmHg cuts off circulation. Another says that higher than 70mmHg makes tissue more permeable. Another recommends a pressure pad that must be a minimum of 70mmHg, as well as applying the compression bandage. As far as I can see, the two add up, forming a tourniquet.

And there are still further problems with applying the right tension. Who knows what 55mmHg looks like? I don't.

So the common advice of 'do the bandage as tight as for a sprained ankle' is probably sensible. Or is it? Again, searching through the literature, I couldn't find anything at all to say how tightly a sprained ankle should be bandaged.

Struan Sutherland

Struan Sutherland (1936–2002) was a key figure in the field of envenomation and an authority on the management of envenomated victims in Australia. In 1981 as Head of Immunology Research of Commonwealth Serum Laboratories (CSL), he produced an antivenom against the Sydney Funnel-web Spider (*Atrax robustus*)—a remarkable accomplishment that had defied previous attempts.

Of relevance to the previous article he also invented the pressure-immobilisation technique of first-aid for snake bite. This is a simple but safe and effective technique for the first-aid management of snake bite and of some other types of envenomation. It made redundant the use of tourniquets and other dangerous first-aid treatments.

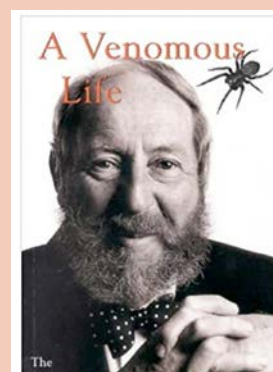
What the literature does say, though, is that snake-bite first-aiders, both trained and untrained, almost never apply enough pressure. Immediately after intense training they do better, but often still not tight enough, and they soon revert.

So I suppose full marks to the 'rectangle stretched to square' idea, which tries (but fails) to address the need.

The advice from the likes of St John, Melbourne University's Faculty of Medicine, Survive First Aid or Australian Resuscitation Council seems clear enough, as long as you only read one. If you carefully read several, you'll find a wealth of conflicting, therefore confusing advice. And purveyors of bandages and first aid kits are worse.

If you're wondering about a clear recommendation, you're on your own. But please re-read my second paragraph, the disclaimer. You're still probably better doing something than nothing.

Atrax robustus



A Venomous Life
by Struan K. Sutherland

Adam Kershaw
info@survivefirstaid.com.au

Bruce Marquis

Adelaide Bushwalkers

Hi, I have attached a draft copy of our magazine Tandanya with an article re compression bandages in the treatment of snake bite. The author is critical. I am looking for a response to his article/ or information supporting their use. Can you help?

Thanks,

Hi Adam and Bruce,
I have CC Craig Adams from SSSafe in this email and a brief comment on this. For further information, please contact Craig.

Sincerely,

Mike Tyrrell

General Manager

Survival Emergency
Solutions



"With about 10 of the most venomous snake species on the planet – calling Australia home – we owe it to ourselves to learn as much as we can about snake bite first aid!"
Craig Adams, SSSafe



"It was always our aim to improve on the Setopress bandage. Considered one of the best options available at the time, our testing saw it fail to achieve recommended pressures for snakebite, not surprising, really, given that this was not the intended use - it had simply arrived in the absence of anything better.

The SMART bandage represents a significant improvement. Add a couple to a proper snakebite kit and people of all walks, regardless of their level of training, have something they can really sink their teeth into. After all, this is first aid it's not meant to be rocket science - it's about DOING SOMETHING!

When I read or hear about snakebite fatalities, I am struck by the level of confusion and often complete lack of any reasonable attempt at first aid...Can anyone point to a fatality where the correct procedure (PBI) was followed? Or, to say it another way, the patient still died in spite of the fact of receiving the very best treatment? I can't. But I can think of plenty of cases where they didn't.

Right now, we are adhering to the recommendations of the ARC and we should continue to advocate the most proactive approach to this particular medical emergency until the facts say otherwise. "

Craig Adams from SSSafe <http://www.sssafe.com.au/>

Pressure Immobilisation Technique (PIT)

One method of immobilisation for bites on a limb. There may be other PIT methods that are acceptable to use.

Step 1

Broad pressure bandage*

Lay casualty down and stop them from moving

Apply firm pressure on bite

Apply a broad pressure bandage over the bite as firm as for a sprained ankle

(You should not be able to easily slide a finger between the bandage and the skin)

*Elasticised bandages 10-15cm wide are preferred, if unavailable, use clothing or other material, torn into strips if possible



Step 2

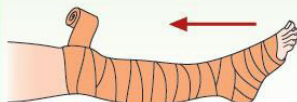
Second pressure bandage*

Apply a pressure bandage

Start at the fingers or toes of the bitten limb

Continue upward covering as much of the limb as possible

*No second bandage? – apply the initial bandage to fingers, or toes of the bitten limb, and work up the limb as far as possible



Step 3

Splint the limb

Splint the limb including joints on either side of the bite to restrict movement of the limb

Keep the casualty and the limb completely still

Bring transport to the casualty if possible, get to medical care urgently (preferably ambulance)



Buy some bandages and practice!



Below are current recommendations for the use of the pressure immobilisation technique from the Australian Resuscitation Council. Please consult their other Guidelines on treatment of envenomation and/or attend a first aid course for comprehensive training.

It would be a good idea to have get Adam Kershaw from Survival First Aid to attend a general meeting and get members to practice using the PIT. In the panic of someone being bitten on a walk the time saved by having members adequately trained or at least familiar with the technique could save lives.

GUIDELINE 9.4.8 ENVENOMATION - PRESSURE IMMOBILISATION TECHNIQUE INTRODUCTION

The pressure immobilisation technique (PIT) was introduced for the treatment of Australian snake bites and is suitable for other elapid snake bites. It is also recommended for envenomation by a number of other animals.

The PIT retards the flow of lymph by which venoms gain access to the circulation. It has also been shown that there may be inactivation of certain venoms and venom components when the injected venom remains trapped in the tissues by the pressure bandage.

USE OF THE PRESSURE IMMOBILISATION TECHNIQUE

The Pressure Immobilisation Technique (PIT) is recommended for application to bites and stings by the following creatures:

- All Australian venomous snakes, including sea snakes [Class A; LOE III]
- Funnel Web spider [Class A; LOE IV]
- Blue-ringed octopus [Class B; LOE Expert Consensus Opinion]
- Cone shell [Class B; LOE Expert Consensus Opinion]

The Pressure Immobilisation Technique is NOT recommended for the first aid management of:

- other spider bites including:
 - redback;
 - jellyfish stings;
- fish stings including stonefish bites
- stings by scorpions, centipedes or beetles.

Guideline 9.4.8 Page 1 of 4 August 2011

The evidence for PIT evolved from small-scale animal studies, and tracer studies in humans. No field based direct comparisons of first aid techniques in humans affected by snakebite exist. Where field based studies have reported outcomes after application of PIT no clear benefit has been shown. This may be confounded by poor quality PIT application, as most observational studies report inadequately applied PIT in the field.⁵⁻⁷

It has not been shown clearly which component of the PIT inadequately applied (the local pressure, the full limb bandaging or the limb immobilisation) is potentially causative of the lack of observed clinical efficacy, if not all three. There is insufficient evidence to determine which technique or method of bandage application is most effective in the field in minimizing venom absorption. Techniques reported include local pressure first then a fully limb encircling pressure bandage, or a limb encircling bandage only.

Furthermore whilst commencing the encircling bandage distally and moving proximally may improve comfort and tolerance of the bandage, it may act to increase venom movement. Starting proximally and working distally may further minimise venom movement but may cause distal oedema /fluid retention and make the bandage too uncomfortable for prolonged use. Training (using manometer feedback) has been shown to improve the pressure achieved with PIT, and the use of elasticised bandages may also improve the pressure obtained in PIT application.^{5, 6} [Class A; LOE: III-2]

MANAGEMENT

If resuscitation is needed it takes precedence over the PIT (refer to ARC Guideline 8).

However the resuscitation team should apply PIT as soon as possible to potentially minimise further venom flow. If on a limb, apply a broad pressure bandage over the bite site as soon as possible.. Elasticised bandages (10-15cm wide) are preferred over crepe bandages, if neither are available, clothing or other material should be used.⁵ [Class A; LOE: III-2]The bandage should be firm and tight, you should be unable to easily slide a finger between the bandage and the skin.

In order to further restrict lymphatic flow and to assist in immobilisation of the limb, apply a further pressure bandage, commencing at the fingers or toes of the bitten limb and extending upward covering as much of the limb as possible.³ [Class A; LOE: III-2] The bandage should be applied over existing clothing if possible. The purpose of this bandage is to further restrict lymphatic flow and assist immobilisation. (Alternatively, a single bandage may be used to achieve both pressure on the bite site and immobilisation of the limb. In this method, the bandage is initially applied to the fingers or toes and extended up the limb as far as possible including the bite site).^{4, 8} [Class A; LOE: Expert Consensus Opinion].

Splint the limb including joints on either side of the bite, to restrict limb movement. The splint material can be incorporated under the layers of the bandage. For the upper limb, use a sling. [Class A; LOE: Expert Consensus Opinion].
Guideline 9.4.8 Page 2 of 4 August 2011

Keep the victim and the limb completely at rest. Bring transport to the victim if possible. Transport the victim to medical care, preferably by ambulance. If alone, the victim should apply the pressure immobilisation bandage as completely as possible over the bite site and affected limb. They should keep immobile until assistance arrives.

If they are unable to obtain urgent help to come to them, then apply local pressure if possible, immobilisation is contraindicated and they should move themselves to seek urgent help. Do not remove the bandages or splints before evaluation in an appropriate hospital environment. [Class A; LOE: Expert Consensus Opinion]

If the bite is not on the limb, firm direct pressure on the bite site may be useful. Do not restrict breathing or chest movement and do not apply firm pressure to the neck or head. [Class A; LOE: Expert Consensus Opinion]

Note:

DO NOT cut or excise the bitten area, or attempt to suck venom from the bite site. DO NOT wash the bitten area. DO NOT apply an arterial tourniquet. (Arterial tourniquets that cut off circulation to the limb, are potentially dangerous and are not recommended for any type of bite or sting in Australia)

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Osprey Atmos and Aura 50

Review by Jeannie Pope

At the June Meeting, the Scout Shop donated two brand-new 50 litre backpacks! ABW members will be able to hire the male-fit Osprey Atmos AG in dark grey and Orange or the female-fit Osprey Aura AG in silver and lilac. Thanks to this generous donation, I decided to take one of these packs on Trevor May's Mt Falkland walk on the June Long weekend Bus Trip and try it out.

As Both the Aura and the Atmos are 50 litre packs with a recommended load rate of 12-18kg, it required a certain degree of discipline to pack. Up until now, the smallest, lightest and most popular back packs in gear hire are the 60 litre Osprey Viva and Volt. With more of us carrying ultralight gear, we expect to see more ABW members packing into 50 and even 45 litre packs, even for extended walks and I expect both packs to be popular.

The Aura/Atmos however, are not ultralight packs in themselves, weighing in at 1.8 kilos. Incidentally this is same weight as the Osprey 60 litre Volt, for 10 litres less storage. The weight difference is made up with the Aura/Atmos having additional features which are reviewed below. Generally, an ultralight pack is 1 kilo or less, and Osprey make the Talon and Exos at 1.05 and 1.1 kg respectively. There is a sacrifice of durability, features and comfort in packs weighing one kilo or less.

The Osprey Atmos and Aura have the AntiGravity™ suspension system on a Lightwire™ frame, which distributes the weight around the body and according to the website, "makes you feel like you're carrying less weight". I was very impressed with the intelligent weight distribution system and found walking fully loaded to be very comfortable. I purposely packed the backpack unevenly

before getting on the bus, knowing that I could repack in the morning, to test how the suspension system dealt with hasty and uneven packing and was seriously impressed at how comfortably it sat under adverse conditions.

The lightweight mesh lining system efficiently wicked away perspiration and was extremely comfortable and well ventilated. The straps and harness were comfortable without being over-padded.

The pack also features generous stretchy mesh side and back pockets which are

wonderful for last minute forgotten items and can stretch into awkward shaped when you realise you have forgotten to pack your mug, and don't want to open your pack again.

The internal hydration reservoir sleeve was very well designed and by far my favourite feature, well worth the additional weight. My 2-litre tapered platypus bladder shifted around





pretty much empty. The extra straps, dividers and zips add weight to the pack. It is more a feature that would come in handy for hostel, cabin and hotel-based travel than tent-based camping.

All Osprey packs come with the “All Mighty Guarantee” which states that “Osprey will repair any damage or defect for any reason free of charge – whether it was purchased in 1974”, Osprey’s inception date, “or yesterday”. If they are unable to repair they will state they will replace the pack. I have not tested this warranty and would love to hear from any ABW member who has used this guarantee.

uncomfortably in a space designed for a 3-litre bladder, but it would be easy change to a 3-litre rectangular bladder for a perfect fit and very comfortable walking.

The pack comes with four side compression straps that worked well, but because of the tapered shape of the pack there is a skill to reaching them and pulling them tight when the pack is on, and I needed to ask for help from fellow walkers, but familiarity with the pack would overcome this issue. There are also side mesh water bottle holders if you are not using a bladder, again they require a good deal of flexibility to reach.

The tapered pack shape carried the load effectively but I found it difficult to put on with the hip straps getting caught behind the waist. I found the Dual zippered front panel pockets in the waist strap to be the least useful feature. Some people like items up front for constant sunblock application and snacking, but they had an awkward shape and I found I did not use this feature and extra zippers and padding adds weight and the items in the pockets made the straps more difficult to use.

The Atmos and Aura packs have the lower zippered sleeping bag compartment and a divider and elasticated strap to keep the sleeping bag in place. Some ABW members are not fond of this feature, as it adds weight to the pack without much additional convenience, most of us don’t want our sleeping bag until our tent is up, and once our tent is out, the pack is

The pack also feature Stow-on-the-go™ system for stashing trekking poles and dual ice tool loops. I did not use either feature, not being a pole fan or needing an ice axe to the Flinders! There was also an integrated safety whistle in the sternum strap, great for when you lose people, and no need to rummage in your pack during emergency.

I did not use the removable top “FlapJacket™ for lidless use” feature but have read on line that walkers generally remove this feature to cut pack weight. It is not usable as a day pack, which would make it worthwhile. I suppose if I had owned the pack, you could modify it, at the risk of voiding the warranty!

I appreciated the female-fit Aura’s lovely silver colour, I found the colour of the pack stood out from the crowd when unloading the bus. It is easy to see in the dark and catches torchlight nicely. But I felt bad about getting mud on it! The Male Atmos in the dark grey has a more robust, grot-resistant colour with patches of stand-out orange, great for being found in emergencies!

In summary I found the Osprey Aura to be a wonderfully comfortable pack with a great suspension system, and lots of great features, some more useful than others. I recommend this as a great hire for a short walk or a disciplined walker who does not want to carry too much weight. Many thanks to the Scout Shop and I hope ABW members will reward them with customer loyalty!

Arthur Range Traverse

Boardwalk to Federation Peak

Photos and words by Ben Trainor

In March 2017, Trevor Jones led Bruce Hood and me (Ben Trainor) on a 14-day walk traversing the Western and Eastern Arthurs, in the wilderness of the Southwest National Park, Tasmania.

Soon after discovering overnight hiking in around 2012, I read about the Arthur Range and marvelled at its jagged peaks and alpine lakes. Photographs by famous Tasmanian wilderness photographer Peter Dombrovskis and prominent Sydney Bushwalker Dave Noble inspired me to dream of exploring the range.

Day 1-Buttongrass plains on Port Davey Track - serrated ridgeline of Arthur Range

In late 2016, Trevor posted on the Adelaide Bushwalkers (**ABW**) website that he was leading the Arthur Range Traverse. I was keen for the adventure but at the time I was only a prospective ABW member, and the longest walk I had completed was a four day walk in Tasmania, the Three Capes Track, which is at the other extreme of Tasmanian hikes being hut-based walk with kitchens, gas stoves, water, and toilets and even a makeshift shower all supplied. Despite this Trevor let me sign up. Trevor's benchmark to prepare was to climb Mt Lofty in under an hour, with a full pack.

Even after passing Trevor's training test, I remained daunted by the difficult terrain and the prospect of carrying supplies for 14 days. I also wondered about whether I could climb Federation Peak, when just looking at photos of people climbing it made my hands sweaty. I took comfort in

the knowledge that Trevor had previously walked the Eastern Arthurs and climbed Federation Peak in 2012 (ABW walk led by Romano Mihailovic) and also walked the Western Arthurs in 2008 (ABW walk led by Steven Boyle), both in the opposite direction, as well as completing multiple long walks in Tasmania's wilderness, and had survived.

Summary of the walk

The walk commenced from Huon Campground (near Lake Pedder) and finished at Farmhouse Creek. We covered over 80km distance plus multiple side trips including climbing Federation Peak in the Eastern Arthurs.

Day 1 - An easy walk from Huon Campground along the Port Davey Track through buttongrass plains and some mud with impressive views of the jagged Western Arthurs. We made camp at



Day 9 – Having a rest from the tiring boardwalk Eastern Arthurs with Federation Peak

Junction Creek choosing the tent sites beyond the creek just before the junction. From here we watched as an impressive band of clouds rested and rolled over the range.

Day 2 – After continuing along the Port Davey Track we turned up Alpha Moraine for a fairly steady 800 metre or more vertical climb to the top of the Western Arthur range (with full packs). Let's just say it was a bit harder than Mt Lofty. We entered clouds part way up. After we reached the top of the range we made the short detour up Mt Hesperus. As we continued the clouds began to lift and we made it to Lake Cygnus for lunch. We had planned to camp on the tent platforms at Lake Cygnus but after making good time we continued. We climbed Mt Hayes on the way to Square Lake where we camped for the night. This was a spectacular spot enclosed on three sides

by massive quartzite cliffs. Still our tents were exposed to strong winds overnight keeping me awake for a few hours. The others slept through it. Perhaps they chose better positions for their tents.

A full report of this walk was published in *Wild* magazine Issue 165 (May-June 2018) which includes cover shot of Bruce forging up Mt Pegasus in the Western Arthurs.



Day 3 - We progressed only about a kilometre along the range but climbed three peaks. Early in the morning, without packs, we climbed Procyon Peak above Square Lake. On top we were above a blanket of cloud which stretched into the distance. After returning to Square Lake we walked up from Square Lake and climbed Mt Sirius and Mt Orion (both of which provided magnificent grandstand views of the famous Lake Oberon and the range behind), before we made the steep descent to Lake Oberon.

Day 4 – Hiking/scrambling from Lake Oberon to High Moor was one of the hardest days, yet most spectacular of the walk. We enjoyed beautiful light around Lake Oberon before the very steep climb up Mt Pegasus. Near the top was a narrow chasm just wide enough to fit through. A boulder blocked the way. I got on hands and knees and was just able to get under it. I stood up. From here it was a vertical climb up the chasm for a few metres. It was too narrow to turn around or take of my pack. When I reached the top, I exclaimed “*That is the hardest thing I have ever done*”. Shortly after we were on top enjoying the brilliant views back down to Lake Oberon. From Mt Pegasus, there was much scrambling down, then up over Mt Capricorn and steep scrambling down before some easy boardwalk for the last stretch to reach High Moor. After setting up camp, the fog rolled in. We put on all our clothes, gloves and jackets, just to keep warm.

Day 3 – Ben Trainor on Procyon Peak with the Western Arthurs stretching behind

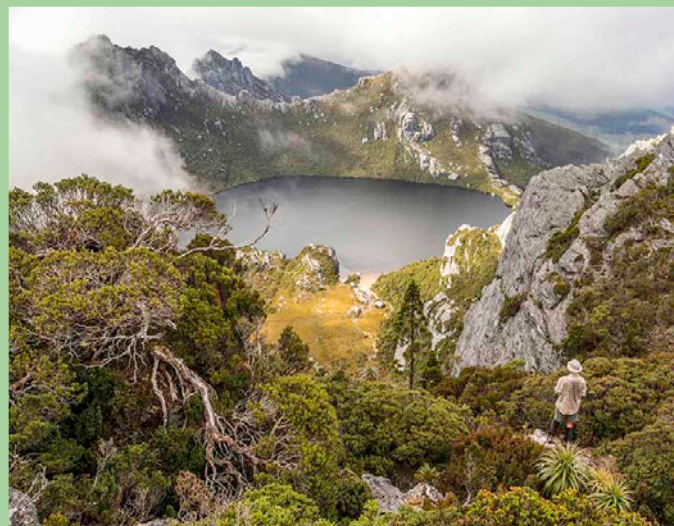
In the words of Bruce Hood:

"The High Moor loo was another of those with a spectacular view. After a visit, I was following the boardwalk back to camp in the chilly night air under a full moon. Upon rounding a corner on my return, in the swirling High Moor mist, I was confronted by an attractive, naked, young lady bathing under a bucket of icy cold water. Seemingly unperturbed, we chatted briefly about the plummeting temperature as I continued on my way back to a tent and a warm sleeping bag."

After tea, around sunset, the fog started to lift. We all rushed to grab cameras and phones as the views transformed around us. Trevor and Bruce climbed Mt Columbia. As I only had thongs on my feet I made it only half way up but took loads of photos of the amazing place above the clouds.

Day 5 – This was another difficult but spectacular day from High Moor to Lake Sirona. I woke early for a short jaunt to watch the sunrise over Federation Peak in the distance. We began through Titled Chasm and then the up and down of the Beggary Bumps. Trevor led the way down all the steep sections of rock. On more than one occasion I would have been in some difficulty if it was not for Trevor guiding my feet to the right places to make it down safely down the wet, slippery rock.

Our planned goal was Haven Lake. We made good time. We all had a swim in the Lake before pushing on to camp on the sensitive and exposed plateau adjacent to Lake Sirona. From here there were phenomenal views in the distance to Lake Pedder on one side and Federation Peak the other. We climbed to the top of a large cliff to watch the sunset. It was another amazing day.



Day 3 – Trevor gazing at Lake Oberon from the saddle with above Square Lake, Western Arthur Range



Day 4 - Dusk at High Moor, Western Arthur Range

Day 5 - Sunset from cliff near Lake Sirona

Day 8 – The day commenced with rain; amazingly the first we had experienced for the whole trip. We descended off the Western Arthurs down to cross Pass Creek, then up Luckman's Lead to the Eastern Arthurs. We set up tents at the platforms at Stuarts Saddle, amid stunning pandani laden forest, just in time to retreat when it started to rain heavily. From the tent platform we could see Federation Peak across the valley.

Day 6 – After a superb sunrise we climbed Mt Scorpio just off the track (I stupidly decided not to take my camera but from memory the views were stunning.) Shortly after, we continued past the turn off down Kappa Moraine where many parties exit the range. From the junction it was a relatively easy walk to Promontory Lake. In the afternoon, we made the return side trip to Mt Canopus. But once we returned we were too tired to climb the nearby Carina Peak given we had a long day ahead.

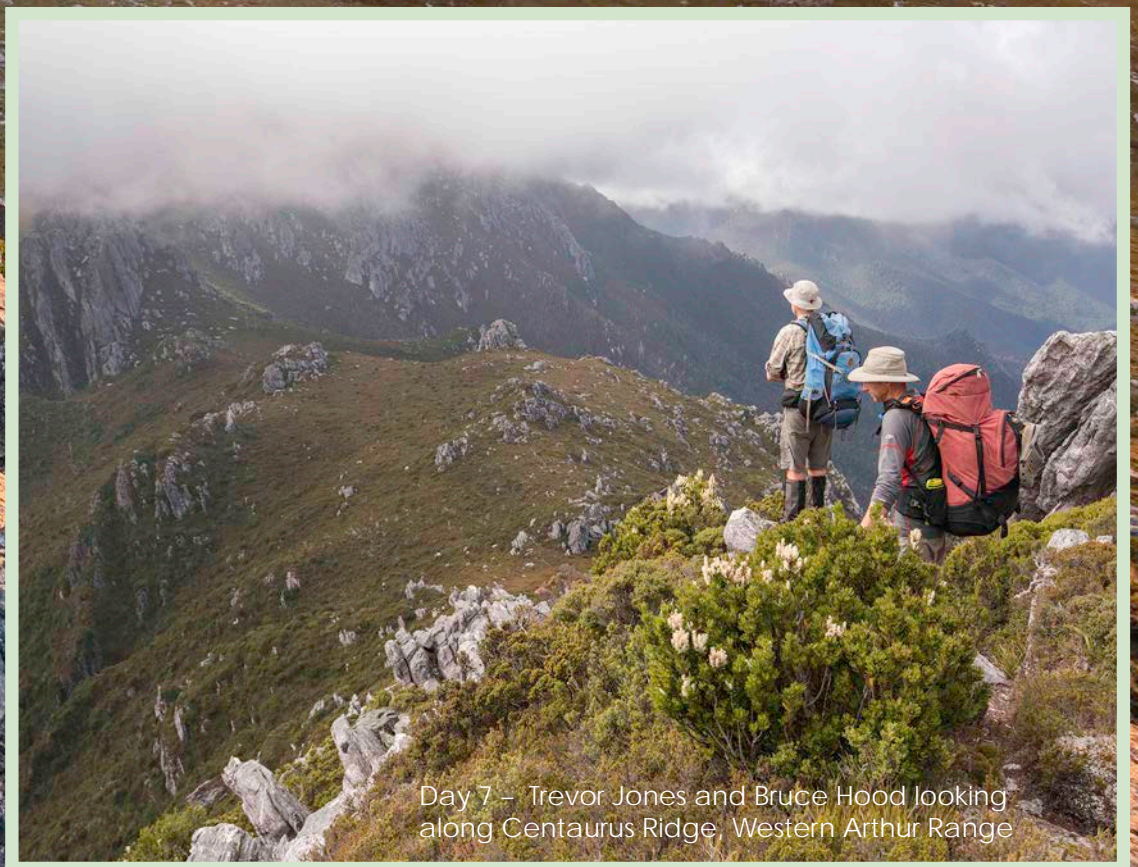
Day 7 – In the morning we began walking in thick fog and the track was hard to find. Trevorr used the GPS and map on his phone to navigate for the first time. If I was alone, I would have been utterly lost. After we found the track, we continued along Centaurus Ridge and the fog cleared. We had lunch before climbing West Portal, the highest peak in the Western Arthurs for some more spectacular views.

Actually, Bruce climbed it twice. The second summit was reached in record time after realising when we returned to our packs that he had left his beloved (and by now worse for wear) gloves on the top. From here it was fairly easy walking to Lake Rosanne to camp for the night. I camped beside a large boulder, and the others camped closer to the lake. The campsites looked like they could get quite wet after rain.

Day 9 – We continued through the heart of the Eastern Arthurs to a Hanging Lake, very close to our goal of Federation Peak. It was another day of phenomenal views. There was boardwalk protecting the sensitive alpine herb fields. At some point, Trevor remarked that we must take as many photos as possible of the boardwalk to include in a trip report to prove just how the Arthurs walk is really easy and flat. But that might be a bit misleading. At one point around Four Peaks, we were met with a cliff about 5-6 metres high.

Part way down Trevor threw his pack to the base of the cliff. Bruce and I lowered our packs with a rope (the only time we used ropes to pack haul on the trip). Coming down was still scary. We later discovered that there is an easier route around this cliff.

We made it to Hanging Lake. Just below the lake tent platforms was a toilet with possibly the best view in Australia. It is perched high on the slope which falls hundreds of metres down to Lake Geeves. After watching a blood red moon rise we retreated to our tents ahead of summit day.



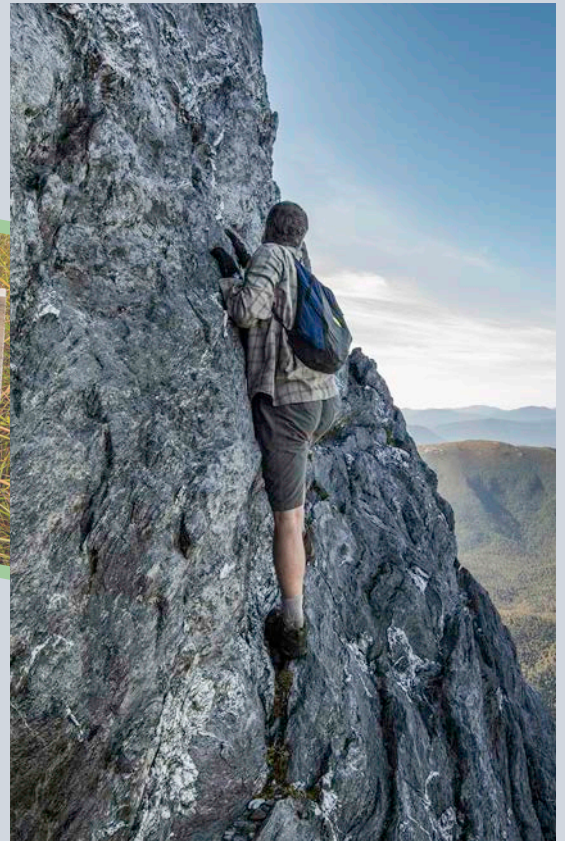
Day 7 – Trevor Jones and Bruce Hood looking along Centaurus Ridge, Western Arthur Range



Trevor Jones with Federation Peak in the background



Day 9 – Proof of more boardwalk Boardwalk across sensitive alpine herbfield - Thwaites Plateau



Day 10 – Trevor on the ledge climbing Federation Peak - Eastern Arthur Range

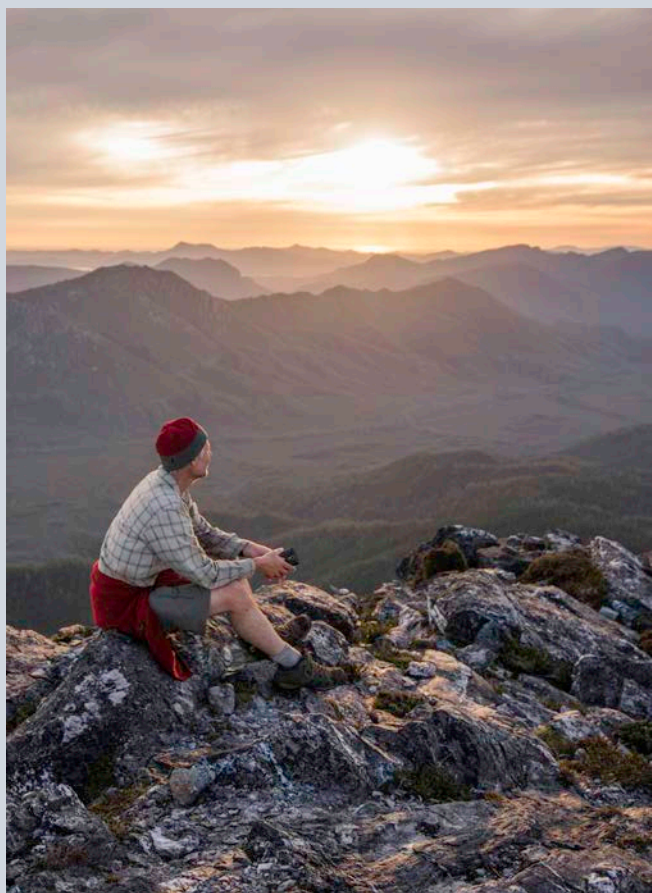
Day 10 – Federation Peak: summit day. From Hanging Lake, we followed the Southern Traverse. Trevor led the way up the direct ascent of Federation Peak. He consulted John Chapman's notes and followed the cairns. Initially there was some steep scrambling and then near the top was a narrow traverse across an almost vertical rockface with Lake Geeves 600 metres below. As always, Bruce and I let Trevor go first. Trevor continued further than necessary and ended up the other side of nasty bulge. Instead of turning back (he said he was too scared to do it again) he forged his own substantially harder route up before he told us to go the easier (normal) way. After the ledge it was an easy scramble to the top of Federation Peak where we enjoyed magnificent panoramic views of mountainous wilderness in all directions including back across both the Eastern and Western Arthurs. After returning to Hanging Lake we climbed Geeves Bluff for another glorious sunset.



Day 10 – Bruce Hood climbing the last stretch to the summit - Eastern Arthur Range



Day 10 - Dusk from Geeves Bluff with Hanging Lake, Federation Peak and Geeves Lake - Eastern Arthurs (spot Trevor Jones for scale)



Day 10 - Trevor enjoys the sunset from Geeves Bluff - Eastern Arthurs



Day 10- Trevor Jones on top of Federation Peak

Day 11 - Hanging Lake to Crest Camp. This was another tough day heading around Federation Peak on the Southern Traverse (with packs this time) then down Moss Ridge which was about five hours of steep slippery descending through thick forest. Bruce raced ahead. By now Trevor had only one fully functional knee. I was also starting to feel my knees were not at their best. I felt like the descent continued forever. I barely took my camera out for any photographs as I was deep in concentration, for hours, watching where to put my feet, and trying to avoid hitting branches with my head, just hoping it would end.

Day 12 – After I slept in the others helped me pack up my tent in the rain. We walked through the forest from Crest Camp to an unnamed Camp on the Lake Sydney Track. Although walking was relatively flat through buttongrass plains and beautiful rainforest it was a hard day of mud and leeches. In the evening we all retreated early to our tents to escape the mosquitos, leeches and ticks.

Day 13 – With a day to spare we set off on a side trip to Lake Sydney through cold, muddy, wet forest, then back again before walking on to another unnamed campsite beside a creek three or so kilometres before the end of the walk.

Day 14 – After a couple of hours easy walking and we made it to Farmhouse Creek completing the Arthur Range traverse.

This was by far the most difficult but most spectacular walk I have ever done. We had amazing weather and saw some brilliant cloud formations in the rugged terrain. Massive thanks to Trevor Jones for leading Bruce Hood and me there and bringing us back safely. ABW really does take you places. I am so grateful to be able to see such a spectacular corner of creation. I often dream of returning.



Day 11- On the top of the chasm on the Southern Traverse above Bechervaise Plateau - Eastern Arthur Range



Day 11 - Federation Peak from the Southern Traverse - Eastern Arthurs



Caroona Creek Conservation Park walk

by Bruce Marquis



A Few Facts

View towards Tourilie Gorge
photo David Carmichael

Walkers: Jonathon Brice(L), Lee Marling, Ben Campbell, David Carmichael, Carlos Garrido, Michael Close, Nino Fioretti, Roxanne Crook, Tai Lim, Bruce Marquis

Where: Caroona Creek Conservation Park is on the western edge of the Olary Plain and around 6km E of Hallett on the Barrier Highway. Tourilie Gorge is in the northern section of the park. This park was proclaimed on 18 February 2010.

Indigenous history: The Mount Bryan East Area had been occupied by the Aborigines for thousands of years and evidence of this occupation, such as grinding stones, hammers, axes and camp ovens, is still found in the area.

Habitat: This large park contains a number of habitats including:

Low Open Shrubland – Black Bluebush (*Maireana pyramidata*) and Bladder Saltbush (*Atriplex vesicaria*)

Low Open Shrubland – Bladder Saltbush (*Atriplex vesicaria*) +/- an Open Mallee overstorey of Mallee Box (*E. porosa*)

Woodland – Inland South Australian Blue Gum (*E. leucoxylon* ssp. *pruinosa*)

Birds: Total Species Recorded to Date: 92 (non-passerines 35, passerines 57)

Common Species: Wedge-tailed Eagle, Nankeen Kestrel, Brown Treecreeper, Variegated Fairywren, Southern Whiteface, Spiny-cheeked Honeyeater, White-browed Babbler

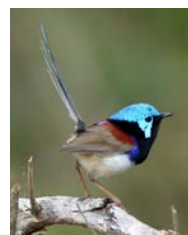
Less Common Species: Stubble Quail, Little Eagle, Spotted Harrier, Tawny Frogmouth, Sacred Kingfisher, Inland Thornbill

I can't remember how long it had been since I had been on an overnight walk but I knew it was overdue and it was time to do another one. I had never been to Caroona Creek Conservation Park but the walk seemed within my fitness. I owned a great Macpac pack but the rest of my gear wasn't really up to speed but I thought I would 'crash through'. Bad idea. For example, I had a four person dome tent that packed up into a neat package and didn't seem to weigh too much. Should have weighed it (like everything else) as it was probably 3-4 kgs.



Sheltering from the wind before starting the walk, photo D.Carmichael

Below: The large bunks in the old school



Variegated Fairy Wren





Old Cobb & Co. road, photo Lee Marling

On arriving at the meeting point of the old Mt Bryan East school on Friday night I was filled with apprehension as there was a howling wind blowing and accompanying horizontal rain. Everyone else were regular overnight walkers except for Carlos who was a new member. They were all so organised and relaxed!

The next morning I watched as the others effortlessly swung their light packs on their backs. I need a two handed heave-ho onto my knee and then my back. Oh well, it will all be over tomorrow afternoon, how bad could it be? Someone was making bacon sandwiches for everyone; some nice comfort food.

The rain had stopped but not the wind which had not subsided in intensity, but fortunately it was on our backs. Hmmm, seem to keeping up OK. The track was an easy walking graded track with steady inclines. The landscape reminded me of the Flinders Ranges as it was in an area bordering on the arid zone right on Goyders line. Lots of salt bush, low mallee eucalypts and red dirt. Eventually we descended into Tourilie Gorge, a short but attractive section of rocky outcrops.

An interesting feature was the remnants of an old Cobb and Co road. Imagining a 'stage coach' powering through the gorge gave the view a Western movie feel. The area was very dry although interestingly around the old school house towards Mt Bryan East the landscape was a lot greener.

After a break at the Tourilie Gorge Hut we headed for a Heysen Trail shelter with a water tank for our water for the night and the next day. The fatigue was really setting in and I lagged behind as the unofficial 'tail end Charlie'. I made sure I 'fuelled up' at the evenings campsite with a big meal hoping that would power me on the next day. However the following day was off track up and over the hills with



A short break at Tourilie Gorge hut, photo David Carmichael

a lot of loose rock and spinifex bushes to contend with. As the walk drew to a close and we made our way back along the tracks a cold wind sprang up and chilled me and I seriously wondered if I would need to be picked up by car. I was using a heavy branch as a substitute walking stick.

With some encouragement from Roxanne who lent me a real walking stick and walked with me I stumbled back to the cars. Once back at Burra and after a coffee I felt refreshed and promised myself to get back to regular bushwalking to stay in shape.

Volunteer at Coastrek 2018 and support Beyond Blue

VOLUNTEER ON FRIDAY 21 SEPTEMBER 2018
Checkpoints, start and finish line, team leaders, marshalling on the course

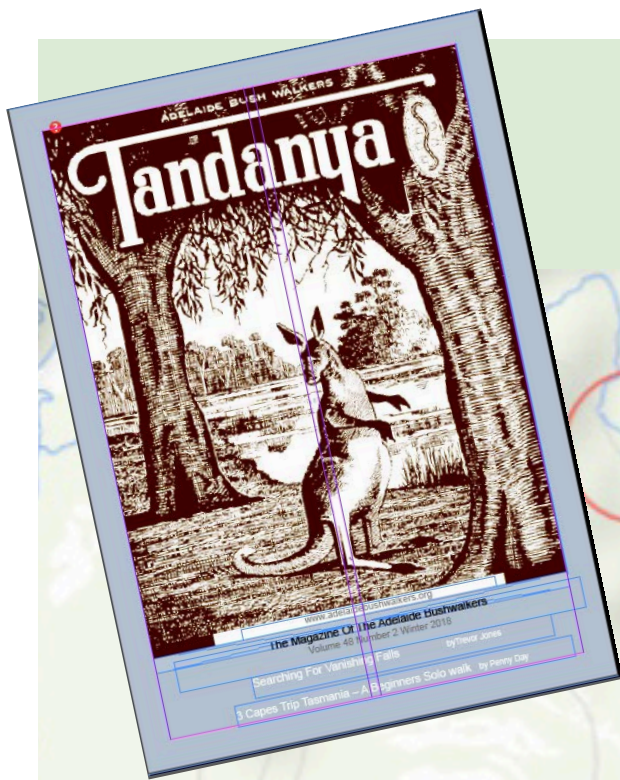
Coastrek volunteers play a central role in the success of Coastrek, supporting our community to raise money for Beyond Blue and improve mental health and wellbeing in Australia.

Locations will span across the Fleurieu Peninsula, along the route between Parsons Beach and Goolwa.

REGISTER: [ADELAIDE.COASTREK.COM.AU/VOLUNTEER](https://www.beyondblue.org.au/volunteer)

<https://www.beyondblue.org.au/>





Correction and Apology

Vanishing Falls article
published in Winter 2018
Tandanya

In the last edition of *Tandanya* we ran a story by Trevor Jones about his and Bruce Hood's quest to find Vanishing Falls in Tasmania. It was called "Searching for Vanishing Falls". If you read the article you will realise that they did not find Vanishing Falls. But you might have also realised that the story covering the last few days of the walk had also vanished!

The reason was an editing error in the preparation of the story in the printed version of *Tandanya* - Winter 2018. The editorial team of Bruce Marquis and Mark Proctor humbly apologise for this error and hope that readers will be able to catch up with the final days of the walk now printed here.

Note that the online version of the magazine had the full account of the walk.

Bruce Marquis



Searching for Vanishing Falls

by Trevor Jones (continued)

Day 10 - Sunny and calm! Finally, a nice day.
Where was this when we needed it earlier ...

We had a fun (if nervous) day paddling down New River, with plenty of rapids to negotiate as well as many submerged, and partly submerged trees. We came to one section of about 400m of log jams where we carried our rafts through the forest. The rafts held up really well - taking a battering on rocks and branches without any punctures.



Start of a 400m section of log jams across the river.

We got to Cavern camp for a late lunch - having covered about 14km in 5hrs - a nice change from battling thru scrub! And after lunch decided to paddle on to Prion campsite while we had a tail wind.

On arriving at Prion, we hung out our wet things - basically every item in our packs ... We covered about 20km this day - all by raft - with the help of a fast-flowing river.



New River – finding its way to the ocean.



Crossing South Cape Rivulet (without getting your feet wet!)

Day 11,12,13

Back on the beautiful South Coast track - we really appreciated having a track (and bridges!) – even if it was muddy. Out to Cockle Ck, back to Hobart and a hot shower. Yah. Enough challenge for a while I think.

On our last day we met a solo walker coming in - Andy Szollsi, who was just starting out on his little 88 day walk! He has pre-placed 9 food drops. Walking some of the toughest walks in Tassie – PB, Arthurs Traverse, Eldon Range, Frankland Range and others! Carrying about 32.5kg. In the Tassie winter! Finishing early July. Well that humbled us

Will we try for VF again? Maybe!

P.S. Ask Bruce about the small 35mm splinter he smuggled back into SA!



The elusive Vanishing Falls

https://waterfallssoftasmania.com.au/waterfalls/vanishing_falls

Cactus Busters



Who You Gonna Call?

by Bruce Marquis

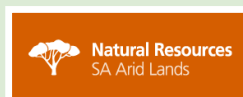


Drilling a cactus to inject Glyphosate, (Bruce Marquis drilling and Peter Beer poisoning)
Photo Roger Kempson

Huge, ancient Red Gum photographed with ABW members on a cactus eradication trip on Gum Creek Station, Flinders Ranges, August 2018. The trip was led by Peter Beer. Our hosts were Jane and Bill McIntosh. (Our guess of the tree's age was 400 years.) Photo Roger Kempson

The Natural Resources Management Act 2004 divides South Australia into eight regions :

Adelaide and Mount Lofty Ranges
Alinytjara Wilurara
Eyre Peninsula
Kangaroo Island
Northern and Yorke
South Australian Arid Lands
South Australian Murray-Darling Basin
South East.



The ABW voluntary work is part of the

Blinman Parachilna Pest Plant Control Group

The Blinman Parachilna Pest Plant Control Group (BPPPCG) are a collection of communities who work with volunteers and contractors to help control pest weeds, mainly cactus, Flinders region. Below are each of the volunteer groups that work with the BPPPCG

Toyota Landcruiser Club

The Toyota Landcruiser Club run various working bees in the region. Each year they travel to Gum Creek Station to undertake cactus control as part of the BPPPCG's activities. The group also the Kudriemitchie Outstation located in the Innaminka Region Reserve near Coongie they help maintain the heritage listed site and control buffel grass.

[Website / Facebook](#)

Overland 4WD Club

The Overland 4WD club travel out to Oratunga each year to undertake cactus control BPPPCG's activities.

[Website](#)

Australian Retired Persons Association (ARPA) Bushwalkers

The ARPA Bushwalkers travel out to Alpana each year to undertake cactus control as part of the BPPPCG's activities.

[Website](#)

Adelaide Bushwalkers

The Adelaide Bushwalkers travel out to Gum Creek Station to undertake cactus control as part of the BPPPCG's activities.

[Website / Facebook](#)

Mitsubishi 4WD Club

The Mitsubishi 4WD club travel out to Moolooloo each year to undertake cactus control as part of the BPPPCG's activities. The group also undertakes heritage restoration on the property.

<http://www.nrm.gov.au/news-and-resources/resources/natural-resource-management>

Blinman/Parachilna Pest Plant Control Group of the SA Arid Lands region.

There are two ways to attempt to kill cactus. One is to drill into the plant and inject with Glyphosate the other is to break a piece of cactus infected with Cochineal and tie it to a healthy plant.

Carmine (made from cochineal insects) is much more concentrated than the traditional red dyes of madder root, kermes, Polish cochineal and brazilwood. It was in high demand throughout Europe, coloring the fabrics of royalty, nobility, and church leaders. For several centuries it was the most important insect dye used in hand-woven oriental rugs. Michelangelo used carmine in his paints, and the dye lent distinction to the uniforms of the British Redcoats (shown here), the Hussars, the Turks and the Royal Canadian Mounted Police.

<http://www.webexhibits.org/causesofcolor/7.html>



<http://www.webexhibits.org/causesofcolor/7.html>

Cochineal (*Dactylopius coccus*) is an insect very like the kermes insect, and lives on some cacti or prickly pears. The cochineal beetle is a primarily sessile parasite, feeding on moisture and nutrients in the cacti or prickly pears that form its habitat.

<http://www.webexhibits.org/causesofcolor/7.html>

Cactus Eradication Report

by Peter Beer

Adelaide Bushwalkers Cactus Control Project on Gum Creek Station 29th July to 3rd August 2018

The party this year consisted of Group A Alison Beer, Peter Beer, Lorraine Billett, Malcolm Kirkham, Peter Woodlands and Group B Ann Ward, Arthur Ward, Roger Kempson, with newcomers Tai Lim and Bruce Marquis. The weather was generally good throughout until heavy rain on Friday caused us to cancel further work and leave for home a day early. Jane and Bill opened proceedings on Saturday evening with the usual high quality welcome BBQ which was very enthusiastically received. We were delighted to have Matthew Westover from DEWNR at Port Augusta with us on Wednesday and would like to thank him also for his help in handling documentation.

The participants divided into two teams of five led by Peter Beer and Arthur Ward. The main activity was planned to be further spreading and monitoring of Cochineal, and poisoning of isolated cacti.

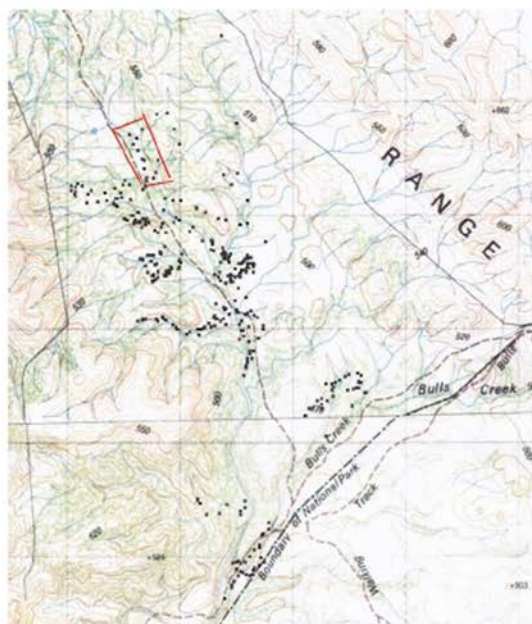


Ann recording a naturally infected cactus

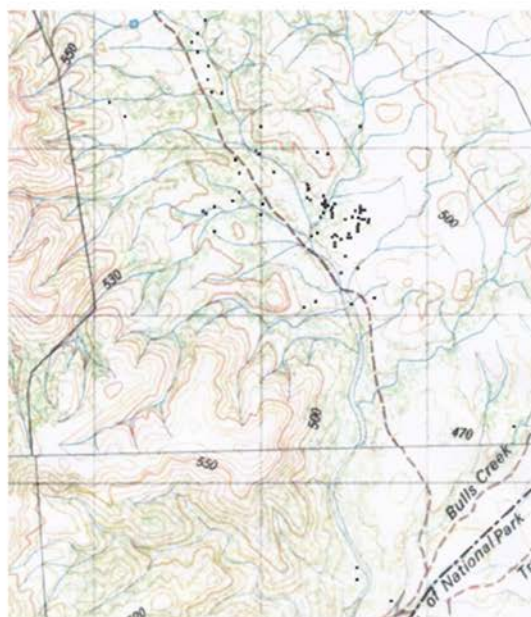
Our observations revealed a heartening increase in the number of infected plants from previous years and a marked decrease in the density of cacti near areas of earlier high infestation. While we were able to cover less than half of our area we recorded 217 naturally infected cacti. This was in addition to the high number of completely killed cacti observed and completely disappeared.

An excellent example is the area shown in red on map 1 which was the formerly notorious *Cactus Gully* and now has few non-infected cacti as a result of work spreading Cochineal in previous years. A comparison between maps 1 and 2 shows that the majority of the remaining cacti in this area have Cochineal attached to them. There are also many dead cacti here. This area was used as a source of Cochineal in the past, but the success of the Cochineal has put the sources of

Cochineal in short supply. There is, in fact, now a shortage of supply of suitable Cochineal for spreading on the property. While we were able to opportunistically source some supplies in the work area for spreading, there was not enough to cover our planned requirements for most of the week. We strongly urge the setting up of a communal nursery for properties in the district as a matter of priority to ensure future supplies, otherwise the effectiveness of the program will be severely diminished.



Map 1. All cacti



Map 2. Naturally infected cacti

A study of Map 1 above shows a large number of cacti in two zones along the southern boundary of Gum Creek with the Flinders Ranges National Park. These would have been ideal for introducing Cochineal due to their size and

density but alas we had run out of suitable material by this time. In the event the cacti were poisoned and will not be available as hosts in the future. It was interesting to note that cacti in the group found near the Bulls Creek name on the map were in an area that has had very few cacti in earlier years.



1. Tai with large cactus



2. Animal bites. Arthur, Bruce



3. Cairn. Tai, Ann, Bruce, Arthur

1. Tai is alongside one of the largest cacti found. It has reached this size in about 3–4 years.
2. Due to the very dry season native animals have attempted to find food by eating cacti.



3. The cairn is on top of one of the highest hills in our area. Few cacti were found on the higher ground and were mainly found along creek lines or under favourable nesting trees. Note the extensive native pine growth in the background. Climbing up through newly-grown thickets can be a challenge.

The long dry period has continued from last year making it easy to spot new growth, and it was noted that there were comparatively few new seedlings present. There was considerable excitement when Group A came upon three large Echidnas near the central track. We have often seen their diggings but have rarely seen any in the past.

All treated and newly infected cacti

Small	Medium	Large
161	199	467
	Total	827

Table 1

Naturally infected cacti

Small	Medium	Large
11	17	189
	Total	217

Table 2

Table 1 indicates that the number of cacti recorded has dropped from a total of 1805 in 2017. There was one less day of activity this year but nevertheless a drop of 1,000 is significant, likely due to the success of our efforts, and probably the effects of the last two dry years. Not all cacti were recorded as often cacti in the vicinity of Cochineal were left to provide a home for new dispersion.

Approximately one day was spent on hillier parts to the eastern side of Gum Creek where there was a much lower density of cacti. Some of this is no doubt due to the good work of the Toyota group over recent years.

In conclusion definite progress has been made and we believe that even better control is possible with a reliable supply of Cochineal from a dedicated nursery in the area.

Thank you everybody from ABW, Bill and Jane and Matthew Westover for your continued cooperation and dedication over the past 11 years. Also Cynthia Kirkham who accompanied group A on several occasions.

The tentative times for 2019 are Saturday 3rd to Saturday 10th of August. This is subject of course to Bill and Jane's confirmation.



View from old Mt Bryan East School, Carroona
Ck. walk, Aug 2018
photo David Carmichael