

BALCANOONA REVEGETATION – APRIL 2022 REPORT

- Convenor, Roger Mathers decided not to attend the April working bee and asked member Mark Darter to supervise the daily events.
- With temperatures hovering in the low 30's most of the work was carried out during the morning or the cooler end of day.
- With focus on maintenance this trip the team worked on checking and cleaning lines and drippers, removal of tree guard where required and carrying out miscellaneous odd jobs under Sian's guidance.
- The significant January rain has given the Curly Mallee a growth spurt.
- A general cleaning up of plant support equipment was undertaken and Wayne Hooper completed another stocktake.



<u>Fishers and Hikers</u>- L to R: - Mark Darter, Amanda Tilley, Helen Stone, Mike Tanner, Shauna Tanner, Annette Vincent, Chris Kirby, Rob Gabb, Ray Hickman, Janet Stone, Glynn Bartel, Mary Bartel, Jill Tugwell.

Report of the Friends working visit to Balcanoona & Weetootla 7-14 April 2022

The following report was edited from a report by Martin Caon on 26th April 2022.

Twenty six members assisted in the continuation of the Balcanoona re-vegetation and the Weetootla fish and water monitoring projects, this made for a full Shearer's Quarters and several

groups were camping in their own accommodation.

- Department houses were occupied by Talitha Moyle (the re-introduction ecologist) and several Interns who were radio-tracking the Quoll (Idnya) and RT Phascogale (Koongoor) captive bred in Alice Springs that had been released into V-GRNP on 3rd April. Rob Brandle who accompanied us on the visits to Nepouie and Weetootla to work with his Honours student Tenn Haigh, using backgrounds and underwater cameras to monitor fish and to measure their length.
- 21 Red River Gums (northern form) were planted on the western bank of Balcanoona Creek at Weetootla Campground that Martin had propagated from collected seed. The trees are protected by corflute tree guards and were watered in. Upper photo right.
- Lots of Datura weeds were removed from near where the red gums were planted and piled up. Seed pods were removed and taken back to Balcanoona for disposal. Middle photo right.
- Ray and Martin walked up "Sian's walk" to the cairn and continued across the saddle and climbed to Mt McCallum to the twin cairns there. They continued down the western slope and returned to Balcanoona by walking parallel to the road. No Quandong or Slender Bell Fruit trees were sighted.
- A large group went to Nepouie for Fish and water monitoring activities using baited fish traps for the first time in our monitoring program and kept the data for trap-caught fish separate from the dip-net data to test the idea that the traps sampled from a different population i.e. from bigger fish! The traps certainly caught lots of bigger fish and very few small ones. Whereas the dip-nets caught few large fish but many small fish including fry. The abundant fry indicated very recent breeding.
- The January flood (after the significant rain events on Jan 19 and Jan 23-24) substantially altered the profile of the stream bed and the distribution of typhus reeds. The flood dumped stones into what were previously pools of water, substantially changing their shape and depth







profile. Photo bottom right – Annette and debris.

- > There were flocks of budgies and zebra finches at Nepouie, swooping in to drink. Such large murmurations of birds have not been seen in the past. This perhaps reflects the recent bloom of vegetation and insects following the January rain.
- ➤ 460 fish were measured with many helpers the baited fish traps worked a treat. Martin recorded an underwater video (Go Pro camera – right) near the spring head and two more at the last Nepouie pool. This still had fish in it, despite being quite exposed and open to the sun. The flood had decreased the size and the shape of the pool by depositing a large amount of river stones in the pool.



- 24 people went to Weetootla spring head for fish and water monitoring activities; five used the baited backgrounds and cameras to monitor fish length. Michelle & Garry Trethewey attended to some weeds but few tobacco plants were found.
- About 430 fish were caught thanks to the increased catch effort due to more helpers and to the use of baited traps. Two cameras were retrieved from the spring head and the two from above the lovely pool to download the SD cards and replace the batteries at Balcanoona. The flood had displaced one camera, but surprisingly, Glynn Bartel located the star dropper to which the camera was attached. He was able to unbury the camera from creek pebbles in working order!
- On the Monday eleven walkers opted for this exercise on a rather warm day. They drove to the start of our bushwalk a few kilometers to the west of Grindell's Hut and met the Interns going about their radio-tracking work. The cars were left adjacent to the gate. They climbed the steep vehicle track onto the Gibber Plain walking south along the Italowie track to Mt McKinlay Spring
 - noting the vegetation and any wildlife. The walk proceeded uneventfully; they made good time as the walking was along a vehicle track reaching the spring where there was some water and quite a few frogs. The gum trees had recovered noticeably from the recent drought they continued west along the creek to follow the spectacular narrow gorge there until our way was blocked by a substantial pool of water across the gorge floor. We saw no Quandong or Slender Bell Fruit trees.
- On Tuesday a group of 5 vehicles left Balcanoona headquarters at about 6:00 am to travel to Lake Frome to observe the bird life there at the optimal morning time. Chris Kirby and Mark Darter organised the twitchers into groups of three for observations. A great many birds, including previously un-recorded ones were observed. The rest of us proceeded onto Lake Frome before all returning to Balcanoona for lunch.



Wednesday, another walk this time from the Weetootla camp-ground, through Hell's gate and to Yuwanhinya Spring stopping at the 4th Weetootla water testing site and found fish there for the first time. Clearly, the recent rains and ensuing flood had washed fish down-stream. Yuwanhinya had more water present than at any of our previous visits so the trend of declining volume of water, noticed over the previous three years had reversed. For the first time they found fish fry, indicating a very recent breeding. However, no fish had managed to move upstream to re-populate the pools that had water and fish present in 2018. Again the flood event had moved a large amount of debris onto and into our previous fishing spot so we were unable to sample the fish there, but nearby, other pools had fish present.

During the return walk they inspected the pools at Hell's Gate and found fish ~3cm in length to be present. Again this was the first time that fish had been detected here during our monitoring period. It will be interesting to see whether the fish persist in these pools over the next few years and so consolidate their flood-driven range extension. This would allow the population size in the Weetootla Gorge to increase substantially.

The two cameras above the Lovely Pool were replaced with clean SD cards and recharged batteries, and one was relocated to be closer to the YFRW colony. However, no YFRW were seen during the exercise. One camera from the Weetootla Spring Head was relocated to a position close to the Lovely Pool to monitor that site.

At Sian's request we cleared the herb growth from around the Weetootla campground toilet block and fireplaces and found an Iga tree in the campground bearing a surprising number of seed pods and with more on the ground. Some were collected to attempt to extract the seed and propagate for planting in 2023. They watered the 21 gums planted on Friday.

Although YFRW were not seen on any of the walks, lots of frogs; a dragon lizard (*Ctenophorus vadnappa*), a great many Orb Weaving spiders were. Surprisingly, a young diamond dove caught got caught in an Orbweaver's web when it was disturbed when a small flock on the ground was disturbed. Also seen were flocks of budgerigars, zebra finches, cockatiels and diamond doves.

Later that afternoon 23 members traveled to Arkaroola for an evening BBQ after YFRW viewing at the feeding point and also taking the opportunity to view Annette Vincent's exhibition of drawings on display in Greenwood lodge.

On the way home on Thursday Martin, Janet, Ray, Rob, Helen and Henry travelled to Spring Creek in Ikara to monitor the fish that had been translocated in May 2021 and to





take water samples for testing. After dropping in to Oraparinna to collect the key from James T to unlock the access gate he gave us GPS co-ordinates for the 3 release pools.

They set up campsite for the night which was further along the track from the cliff-top access point to the creek gorge. The track to the campsite was challenging, but the campsite was tremendous. The creek which was a tributary to Spring Creek had large numbers of very large and aged Red River gum trees.

Walking north along the tributary and west into Spring Creek they soon found the first release pool. The pool used to be a very substantial body of water. However, the January flood had deposited tonnes of creek stones into its centre so that now you can stand in its centre, where a year ago you would have been waist deep in water. The pool now was a horseshoe shape whereas a year ago it was roughly circular (see photos). Helen recorded some underwater GoPro videos.

Fish were caught in the 1st pool with dip net and ~8 fish with baited fish trap. Some fish were also caught in the pool immediately downstream of the 1st release pool, these were relocated to the larger pool as it was feared that the small pool would dry out and the fish would die.

No fish were seen or caught with either dip net or Baited trap in either of the 2nd or 3rd release sites. Both these pools had substantial amounts of water in them. Ray measured water temperature, pH and oxygen concentration in the pools at the three original release sites and collected water samples for ion testing on return to Adelaide.

Fish were found in the pool above the 1st waterfall, where Rob Brandle had placed them relocating them from pools downstream of release pool 1, such pools were going to dry out and so the fish in



them would have been lost. 2 were caught by dip net and 3 in the baited fish trap. They did not search for fish in the other pool that Rob had transported fish to. This creek has quite a steep fall over outcropping rock in the stream bed. In flood it would be expected that water would flow downstream quite rapidly and probably too rapidly for the fish to swim upstream against the flow.



Upper: - Spring Creek 1st release site May 2021; Lower: - April 2022 (note the river pebble debris deposited by a flood, thus drastically reducing the size of the pool).

Teflon Saucepan and Frypan

Wanted for the Balcanoona kitchen.

Does anyone have a spare small saucepan and frypan in good condition that they are willing to donate? The last time I was at Balcanoona I could not find either.

Graeme. – gdoats@bigpond.net.au





SA Arid Lands Landscape Board News

April 19.

Parts of the SA Arid Lands received some lovely rainfall last night and additional falls early next week are forecast for all districts.

The SA Arid Lands Landscape Board has weather stations across the region that will allow you to keep a watch on falls in different areas and use the information to guide work and travel plans in your district. See where the rain fell at https://www.landscape.sa.gov.au/.../climate/weather-stations

April 23.

A new population of Western Quolls (Idnya) has been established in Vulkathunha-Gammon Ranges National Park.

Locally extinct from the area, 25 quolls were successfully translocated from Ikara-Flinders Ranges National Park.

The 25 were selected from a record number of Idnya captured at Ikara and were fitted with radio-transmitters to enable the reintroduction team to check their survival and determine how well they are settling in their new home.

The translocation was undertaken as part of the Bounceback and Beyond project, which is supported by the SA Arid Lands Landscape Board through funding from the Australian Government's National Landscape Program. Read more at https://www.landscape.sa.gov.au/saal/news-resources

VULKATHUNHA-GAMMON RANGES SCIENTIFIC PROJECT (V-GRaSP)

In 1988 the Scientific Expedition Group Inc. (SEG) commenced a long term project to record rainfall in the western half of the Vulkathunha-Gammon Ranges National Park (VGRNP) and adjacent pastoral properties. Over the intervening years SEG has installed a number of automated and telemetered pluviometers (rainfall gauges that use Telstra to report to DEW), installed a stream gauge in Arcoona Creek, recorded regular vegetation photo-points and opportunistic sightings of feral and native fauna & flora, as well as other shorter duration projects in the Park.

Members of SEG have travelled to the V-GRNP to retrieve data, and to maintain the pluviometers, initially several times a year and seemingly randomly, due to unreliable equipment and unreliable road access, but more recently, with telemetry, solar panels, reliable equipment and reliable roads, twice a year.

Following the April visit by the Friends of VGRNP to Balcanoona, members Garry and Michelle Trethewey drove to the western entry of the Park and spent a couple of days conducting a data recovery trip for SEG. Garry has written the report below, based on his SEG report.

After a few years of drought conditions, slow recovery and the approx. 125mm January rains there are lots of young or regenerating plants filling out and taking shape. There were almost no large mammals but lots of grass and seed eating birds. No seedling Callitris pine but quite a lot of very young Mulga 10cm high. And quite a few big orb weaver spiders, although notably far less than in the eastern end of the park.

Surprisingly, given the nearly dry three months since January, the stream gauge pool, and the next a little pool further on were about ¾ full. The Seeps, normally a few salty cupfulls between rocks, was flowing and even had young bulrush (*Typha sp*) growing. Frogs had had a breeding event, and anywhere near water we walked through tiny frogs (*Litoria rubella*?) dispersing, even in midday sunlight over dry sand. In the past Spangled Perch (*Leiopotherapon unicolor*), opportune colonisers, have been found upstream after high stream flow, so we hoped to see some, but not this time.

Previously easy walking tracks were now blocked with fallen rotten Sheoaks (*Allocasuarina sp*). The easy travel on established tracks is becoming blocked by new growth, fallen dead trees, the odd pool and the propensity to get lost because of the altered 'look and feel'.

Wild Ass Waterhole was within 10cm of overflow and perfectly drinkable. Lush growth is starting to hide the carnage of dead sticks after the drought. Approaching Vandenberg Camp we found progress impeded by a jungle of shrubs and thick thigh high grass that grabbed at our feet and hid holes, fallen stick and water traps.

We camped near a waterhole, noting that Bronzewing pigeons, diamond doves, zebra finches and budgerigars did not seem to mind our presence.

The next day we visited SAMBOT waterhole, near full and made our way up to the Plateau pluviometer. Bushy regrowth is emerging from the base of Broombush (*Melaleuca uncinata*). Half dozen juvenile *Ctenophorus modestus* (Northern Tawny Dragon or Swift Dragon) were found within a kilometre of North Tusk summit, further allaying fears of local extinction in the drought.



Left: - Five years ago 'The Clay Patch' was bare ground surrounded by leafy trees. Now reversed.

A Codonocarpus pyramidalis festival.

Slender Bell-fruit trees (hereafter CP's). Michelle and I have walked up Arcoona Creek at least twice a year since 2007, with various side trips. There is a well bounded hectare of CP's one kilometre north of the Arcoona campsite, but other than that they have never seen any up Arcoona Creek or on the Plateau. We were very excited to

see a four metre high CP only a minute's walk from one of our usual camping spots. And then, only 2 metres from where I (Garry) had stood for a photo-point 6 months ago, another one, a metre high. In the next 250m were 9 more. Up and down the creek we have photographed, documented and described another 28, and only stopped for time. (A side issue here - I was forced to develop an observation protocol on-the-fly - GPS, photograph, describe, height, numbering, tree condition {browsing, insect damage}, flower or seed presence, and much more. My first pass was unacceptable, but a re-think overnight and a re-do next day worked well).

Their observations so far:-

- None have been eaten by vertebrates, despite a Euro having camped under one many times. Although I note no sign of goats.
- All are on alluvial creek flats, none on any bedrock.
- Generally in dead Callitris woodland.
- Only one had any flowers or fruit. On that tree, in contrast to the usual pattern of flowering only at the top the whole tree was covered.
- Young healthy CP's are almost unrecognisable compared to the battered older ones which tend to resemble a foxtail on a flagpole as a branch struggles to survive.

These observations are in contrast to some of 'the literature' and 'common knowledge', and so, along with Martin Caon's work in the east of the park, might prove fruitful for research.

Left: - a bright green *Codonocarpus pyramidalis* towers above Michelle's left. Note also drought damage and recovery.

Right: - A feral problem? Fresh ripe cherry tomatoes, courtesy of someone who eschews normal de-hyd packet meals & brings fresh food & next day heads off for a private moment, to produce a healthy seed bed. All photos – Garry Trethewey





Graeme Oats & Garry Trethewey

NEW PARK MAP

Last year the Friends committee decided to replace the map of the park on the south wall of the Park Office building as it had faded to such a degree that it was impossible to read.



The Friends purchased the South Australian Emergency Services Flinders Ranges Northern Region 1:50000 map. The Department paid for the mounting. Ranger Sian agreed that it be placed on the northern wall of the Office Building, out of the ravages of the wind and rain, more obvious and accessible to visitors. Members Phil Gaukroger, Glynn Bartel & Greg Kirby installed the map during the April visit. Photos: - Sian Johnson and Martin Caon



WORKING BEES – 2022

BALCANOONA RE-VEGETATION

Friday 17th to Friday 24th June

Friday 19th to Friday 26th August

OOCABOOLINA RESTORATION

Sunday 22nd to Saturday 28th May

Sunday 24th to Saturday 30th July

WEETOOTLA SPRINGS MONITORING

Friday 19th to Friday 26th August

The working bees in brown are combined groups.

Bird Report, Balcanoona, April 8-14 2022

I was expecting an increase in bird numbers in April, after the rains in February which transformed the landscape to green, but my expectations were well exceeded. We recorded 57 species altogether. Nineteen of them were recorded for the first time! I will confine my description to the sightings which were new to us.

Budgie numbers have been building up over the last few years, but this year they have exploded. Driving from Copley to Balcanoona with the windows down was like driving through an aviary! At Balcanoona the pond that Sian had dug out at the top of the water tank hill was full of budgies (and Zebra finches) in the early morning and at night. When we first started recording daily numbers of budgies the count was set at 100+ but that soon changed to 1000+!

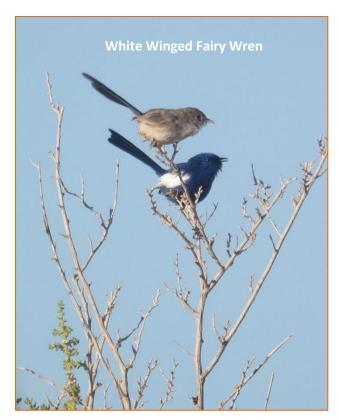


The biggest difference was the flocks, mostly of small birds. These were encountered flying across the roads and coming to rest in trees or on fences. Apart from budgies and finches, Crimson Chats and Yellow-rumped Thornbills were recorded by us for the first time. So many sightings were of juvenile birds which made identification tricky. In Gorges there were flocks Diamond Doves and Peaceful Doves. The day we went into Weetootla Gorge we were delighted to see a large flock of at least 100 Cockatiels high up in a dead tree above The Lovely Pool.

Along with the increase in flocks of little birds came the predators. A pair of Australian Hobbies flew across Balcanoona every morning and afternoon; they didn't have to work hard to pick up a budgie or finch from the flocks. Brown Falcons were spotted along the length of Arkaroola Road and Spotted Harriers were recorded by us for the first time. The most exciting raptor recording



Another new sighting included Whitefronted Honeyeaters which were busy extracting nectar in the E. gillii (Curly Mallee.) Red-capped Robin and Grey Fantails were also feeding in the Curly Mallee trees but they were after insects High up in the branches of dead trees in Balcanoona Creek we saw Red-backed Kingfishers. Walking away from the creek towards the gibber plain Chirruping Wedgebills were confirmed and



All photos in this article by Chris Kirby except the Diamond Dove by Georgia Darter. The Dove had been caught in a spider's web, but was able to be released successfully. photographed. Button Quail, Jacky Winter, Black-faced and White-backed Wood Swallows were also recorded in Weetootla and Nepowie Gorges. Mulga Parrots were more plentiful than in previous year but numbers of Elegant Parrots seemed to be down on previous years.

In the dunes at the edge of Lake Frome we found a large flock of White-backed Fairy Wrens and more Crimson chats.

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The photo below taken by Annette Vincent during a trip to Arkaroola in mid-May.

