

Kids go wild at Gluepot.....by Dr Rebecca Boulton

It's Saturday morning, the start of Labour Day long weekend and the South Australian school holidays. I'm camped out in the Babbler campground, at BirdLife Australia's mallee reserve Gluepot. The campground is starting to fill up with excited children and their families arriving for the first Cathemeral Kids Campout. I've never seen this many kids at Gluepot before, 13 families with a total of 24 kids ranging in age from 5-14. Gluepot's spring weather is at its finest, a sunny and dry 23°. A stark contrast to the same time last year when a whopping 116 mm of rain fell on the Reserve over September closing the roads for much of the month and cancelling our first attempt at the kid's campout.



We were very grateful for a community grant from the SA Murray-Darling Basin NRM Board that enabled us to purchase Gluepot Reserve T-shirts for all the kids. The bright orange was the perfect colour for keeping an eye on dispersing children in the mallee, plus it had the added bonus of concealing the red mallee dirt after three days of wear.

The families were split into two groups, the Babblers and Whistlers. After lunch the groups were ready to set off on their first activities. The Babblers hopped on the aptly named 'Gluepot fun bus' and joined me walking out to a recently used malleefowl mound where the kids learnt all about this curious bird's breeding antics. The group was extremely lucky to flush a small number of Little Button-quail while tramping back to the bus. One bird remained still, hoping we hadn't spied her, and everyone was able to get a great view especially of the large, almost parrot-like bill. This species is a rare visitor to Gluepot and is likely visiting due to good conditions with the current spinifex and spear-grass seeding.



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Kids go wild at Gluepot...cont'd from page 1

The Whistlers headed up to convene with the SA Herpetology Group and Field Naturalists' Society who were also up at Gluepot sampling fauna around two

dam sites. closed The children helped Peter Matejcic and friends check the pitfall lines and Elliott traps for a range of mallee reptiles. Learning the allimportant lesson on how to tell scorpion dens from dragon holes; I had this around the wrong way all this time!





After a BBQ at the Education Centre the children listened as Chris Grant told them all about bats, specifically the microbats found at Gluepot. The night was topped off by a visit to the nearby dam to see the mist nets and harp trap in action. Here we were treated to a special light show as Chris attached small glow sticks to the bats fur, a chorus of ooohs and ahhhs went up as we watched them zipping around our heads and across the dam foraging for insects.

Sleep was not a problem that night!

At 7:30 am the kids were up and at their next activities, learning how to setup mist nets for birds and checking the pitfalls for nocturnal creatures. Once the day warmed up, we all met back at the Education Centre where Annette Vincent taught the children all about ants, including why Myrmicinae hurt more than Formicinae when they bite!

The kids scattered through the mallee collecting their own ants to look at through the microscope. The night's activity involved UV torches and scorpions. Why had I never done this before? Awesome! I think all the children ended up wanting a UV torch for Christmas after the impressive display of glowing green/blue scorpions throughout the camp.



Monday started at 7:30 am with the kids up and at it again, with the groups swapping activities throughout the day. At the end of the day very few wanted to go home. The campout was a huge success in part to the generosity of the expert ecologists who volunteered their time to share their passion for Australia's unique wildlife and the participants themselves, an amazing group of enthusiastic and inquisitive young naturalists. Our future conservation ecologists in the making!



Registrations are now open for the 2018 campout – daniellepacker@live.com.au

Pictures taken by Rebecca Boulton, Shellie Drysdale & Mel Prowse

Campout comments:

I'm sure this event will create memories that will last a lifetime; loved our first visit to Gluepot - Maeve and Robyn.

Thank you for all the work you have put into making this camp amazing – **Mitchell**

I liked everything at Gluepot and I want to come again! – Georgina

Awesome! - Riley

This is an amazing place – Shellie

Big thanks to the volunteers and experts who generously gave their time to the kid's campout – **Patrick**

Editor's thoughts

'G'day Curly-tail....nice morning. Have you seen Bent-tail around today?', I said to a recently acquired Bearded Dragon mate, early one January morning. A couple of Mulga Parrots landed in the mallee tree above, hoping for a drink from the nearby birdbath. In the background to the north, a family of Apostlebirds could be heard squawking away, whilst to the south the now regular calls of a small flock of Major Mitchell's Cockatoos indicated they were in the black-oaks around the Visitor Centre.



I met Curly-tail in early December during the first month of a two-month roster as volunteer Ranger at Gluepot. I named him due to his tail often curling around towards his back forming a part circle. Bent-tail, a larger dominant male, sometimes turned up nearby, prompting Curly-tail to 'head for the bush', interrupting our conversations on several occasions.

Curly-tail and Bent-tail were one of many species of fauna that I observed during my stay. Endearing and amazing were just several of many emotions felt whilst making wildlife observations over the two months.

Just over twenty years ago Gluepot Station was going to be burnt in parts to increase grazing fodder, in a pocket of landscape that largely had escaped fire for many years. Of course, agriculture and grazing are very important in order to feed us, but there needed to be a balance. At stake were six threatened species of birds.

Birdlife Australia (then named Birds Australia) cared. As did many others, including the local Riverland community, as well as people all over Australia. It took a lot of leadership, donations from many caring people and a huge amount of work, but those who cared succeeded. Gluepot soon became an established and successful wildlife reserve, managed and operated by volunteers.

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Now 20 years later, the Reserve's volunteers and researchers work hard to conserve the flora and fauna. But challenges remain – feral animal control, infrastructure maintenance and improvement, weed control, re-vegetation and more.....

Gluepot's wonderful Rebecca Boulton, ecologist, researcher, Management Committee member, kids campout organiser and volunteer post-scripts her emails with a quote from The Lorax by Dr Seuss:

'UNLESS someone like you cares a whole awful lot, nothing is going to get better. It's not.'

I always find this motivational.

Curly-tail, Bent-tail.....all of our wildlife needs us to care an awful lot. The next 20 years are just as important as those years behind us.



Wild wishes, Ian Williams

Chairman's Comments

It is the time of year when emails start 'flooding' into the Reserve, with requests from 2nd year overseas students to come to Gluepot for their university internships. We have been accepting these students (who stay from 2 -9 months) for 17 years and they come from France (4 universities), Netherlands, Spain and Germany.

Three years ago, Gluepot was certified by the Netherlands national organisation 'AEQUOR" as an exemplar Secondary Vocational Education Training Company.

The students are part of our Assistant Ranger program and most undertake research projects in conjunction with Gluepot 'Research & Monitoring Committee' members. Projects chosen benefit both the students research interests, and the long-term environmental goals of Gluepot. This year, a number of students (mainly French) will be working on a long-term 'Phenology and Vegetation Study on Gluepot Reserve' and ' Mallee Fire and Biodiversity Project' that looks at methods of aging mallee trees and extending the known fire history of Gluepot. It also helps to provide an understanding of how fire has influenced bird communities on the Reserve.

At the completion of their internships, students are required to present their project findings in a report or a thesis. On return to their universities, students may undergo an oral examination of their work.

Some students visit Gluepot with a requirement that they improve their English and undergo an international English examination on their return to their university.

When they are not working on their projects, students work with our Rangers on a diverse range of tasks.



French University student, and A/Ranger, Andoni, assisting with controlled burning at Gluepot

These include assisting scientists in the field, maintenance of campgrounds and bird-hides, building work, maintenance of the Library, computer database and data entry work, and assisting visitors at the Reserve.

Our Gluepot Reserve Environmental Education Courses are being conducted again this year, with information located on page 8 of the newsletter.



A benefit to those who are members of the SA Friends of Parks (FOP) and may want to attend a Gluepot course, is that the FOP is providing a \$50 subsidy to their members. Check this out on the FOP website at: <u>http://www.friendsofparkssa.org.au/home</u>

Gluepot recently underwent audits by Eco Tourism Australia for our Advanced Ecotourism and Climate Action Leader Certification - we passed with 'flying colours'.







Some of the comments by the on-site Auditor were:

- 'Attention to interpretation is at best practice standard, from the excellent Visitors Centre at the entry, to the Reserve, to the extensive library resource within the grounds.
- Gluepot Reserve is exceptionally impressive on many levels - it is a highly professional organisation with strict regimes for monitoring hazards and safety risks, pest control, field-work procedures, and dayto-day activities.
- Extensive biodiversity management/conservation is the reason the Reserve exists. Many initiatives have national and international outcomes.'

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Chairman's Comments cont'd

In keeping with our aim of using the latest technology (when practical) to improve our environmental knowledge and research and monitoring outcomes, Marilyn Wilkins (a member of our Management Committee and a Manager with DEWNR) has provided us with access to DEWNR's new SA Landcover images – satellite and aerial photography. This will provide a major benefit to our vegetation research, fire history and malleefowl monitoring projects.

Our use of drones to locate active Malleefowl mounds has proved extremely successful and all active mounds have two motion detection cameras on them for the duration of the breeding season. These record activity at each mound, including the breeding cycle and predator activity.



A malleefowl chick emerging and 'frightening' its parents (Remote-sensing camera: Tim Pascoe)

For a number of years now, Richard and Carolyn Donaghey (pictured below) have been visiting Gluepot over the spring and summer periods to study robins. Richard is a retired biological scientist and they live in Tasmania.



As a result of Richard's research, we have received his latest paper 'Parental care and breeding strategies of the Jacky Winter and its life-history traits compared with other Australasian robin, and northern temperate and tropical songbirds'. Further papers on Richard's Scrubrobin research are expected in the near future.

During 2017, Gluepot was the winner of the 'Fairfax Landcare Community Group Award' – our 42nd award!

2018 is promising to be a particularly busy year with a new shed/workshop being built for the grader and tractor; a number of new research projects commencing and monitoring projects continuing. Important, is the development of our 2019 – 2029 Management Plan that will include a 'Conservation Action Plan' (CAP) as an integral part of the content. As a major Land Partner in the Riverland Biosphere, Gluepot will also be involved in leading the 'Threatened Mallee Bird Project' and the preparation of a large regional CAP that will also encompass Gluepot.



Best wishes. Duncan MacKenzie Chairman

Gluepot has a diverse and interesting number of spider species. Commonly observed with a spotlight at night, the larger ones are not always welcome when they enter a volunteer's bedroom.



A large wolf-spider sitting on the edge of its burrow, waiting for a meal to crawl passed.

Glu-wild



John Donkin

Research news

Assessing long-term fox baiting data and canid pest ejector trial deployment by Mark Laws, The University of Adelaide

This is a follow up to my article in the July 2017 Newsletter, where I outlined my Honours research with the University of Adelaide, which I have since completed. The aims of my project were to determine if fox bait uptake is greater during periods of dispersal and peak energy gains in foxes, and in response to systematic variation associated with baiting methods. I also aimed to assess non-target species uptake and a trial deployment of the canid pest ejector (CPE), an alternate means of delivering 1080 to foxes.



Successful Honours student. Mark Laws setting a CPE device during research at Gluepot. Photo: Deidre Kerr

Using Gluepot's long-term fox baiting dataset, I analysed the influence of seasonal trends in temperature and rainfall, bait station location in different vegetation associations, and perturbations (e.g. fences) on fox bait uptake. I assessed non-target species uptake and CPE performance using sand plots and camera traps, respectively.

I found bait uptake was greater in areas closer to the reserve boundaries and preceding and following the period when foxes usually breed. I found no evidence of non-target species uptake. Although over 80 CPEs were activated during my study, a high proportion of CPE bait heads (kangaroo meat) were removed without the devices being activated.

The spatial patterns in bait uptake suggest foxes migrating into vacant territories following baiting were most susceptible to baiting and were more likely to encounter baits bordering the reserve. While the temporal patterns in increased uptake correspond with periods when peak energy gains in foxes have been observed. Foxes that pulled CPE bait heads laterally, and corvids that stripped bait heads, reduced the efficacy of the CPEs. In my recommendations to Gluepot, I emphasised that increasing neighbouring landholder awareness, and involvement in regional, coordinated fox baiting programs is critical to improve baiting efficacy. I suggested that, although spatial and temporal trends in bait uptake were observed, baiting extensively across space and time be continued. This is because spatial and temporal gaps in baiting programs reduces their efficacy, due to the rapid dispersal of foxes. Although I found no evidence of non-target species uptake, I suggested this, and the response of fox activity to baiting, be monitored using sand plots. This inexpensive practice, which requires little technical skill and resources, will ensure the baiting program is effective. To prevent bait heads being removed with CPE activation I recommended a collar modification be fitted and an alternate bait head be trialled. A collar is designed to orientate a foxes head vertically over the CPE, whereas a bait head, which consists of a section of hose rolled in outdoor PVA glue and then in ground-up meat products, cannot be removed easily.



A collar fitted to a CPE to orientate the foxes head over the bait to reduce bait removal without the ejector being activated.

During my study, I particularly enjoyed the time I spent at Gluepot, it is a special place and I look forward to coming back regularly. Finally, I would like to thank the amazing volunteers, I could not have completed my project without their help, and for that I am deeply grateful.

Environmental Education Courses & Kid's Campout in 2018

Nine interesting courses, plus a Kid's Campout are programmed during March to October 2018.

The two-day courses are conducted at Gluepot Reserve in the Education Centre (pictured below). The cost of each two-day course is \$99.

The Kid's nature-study campout is free, with participants camping at Babbler campsite.



Although accommodation is available at Waikerie, it is 64km away (just over one-hour travel), so we suggest that course participants camp at the Reserve. Camping information can be found on <u>page 20</u>.

Course Title	2018 Dates	Facilitator
Getting to Know Reptiles	10-11 March	Dr Mark Hutchinson
The Bats of Gluepot Reserve	17-18 March	Terry Reardon
An Introduction to Scientific Botanical Illustration	14-15 April	Bronwyn Bean
GPS & GIS Workshop	25-26 August	Craig Oliver & Monty Luke
Painting Nature	8-9 September	Wendy Jennings
Introduction to Birds & Birdwatching	22-23 September	John Gitsham
Cathemeral Kids Campout (Free Family Nature Campout)	29 Sept – 1 Oct	Dr Rebecca Boulton
An Introduction to Bird Banding	13-14 October	Luke Ireland
An Introduction to Nature Photography	20-21 October	Dean Lines
A Beginner's Guide to Mallee Vegetation at Gluepot	3 -4 November	Chris Lill

For further information:

Visit the Gluepot Reserve website, <u>www.gluepot.org</u>. Bookings can be made from this site. Or, for a hard copy of course brochure and registration please contact:

Danielle Packer Email: daniellepacker@live.com.au Mobile: 0417 853 373, or

New back-up generator installed



Over 98% of Gluepot's power is generated from solar energy, but occasionally continuous, heavy cloud cover occurs over a number of days. Under these weather conditions, especially if it is cold, back-up power generation may be required.

The new diesel-fuelled generator has a 60 litre fuel tank, and operates automatically when battery storage gets low.

The purchase of new infrastructure, like the new generator, is only possible because of the generous donations by our supporters.

Environmental Education Course Report – A Beginner's Guide to Mallee Vegetation at Gluepot by Dr Suzi Bond

As a birder I've long been drawn to the beautiful mallee remnants in southern Australia for the special birds which inhabit them, but it wasn't until I became more seriously interested in butterflies and their larval food plants that I realised just how much more attention I would need to pay to plants. And so the introductory mallee vegetation course presented a great opportunity to address this, with the added attraction of being conducted in the middle of Gluepot reserve.

The environmental education course was run from the 4th to the 5th of November 2017 at Gluepot, led by the wonderfully knowledgeable and enthusiastic Chris Lill. Our class of 5 participants studied the structure and terminology of flowering plants, and were introduced to the range of plants typically found in mallee habitat. We then got the chance to build upon this newfound knowledge with the field component of the weekend, venturing several times into the lovely mallee landscape around the Gluepot Education Centre to test our identification skills and obtain samples for further examination back in the classroom.

I particularly enjoyed the experience of learning how to identify the likes of *Atriplex* (the saltbushes), *Maireana* (the bluebushes) and *Zygophyllum* (the twinleafs) by their fruiting bodies and the subtle differences a keen eye needs to observe in these tiny fruiting bodies to confidently sort one species from another. It was also fantastic to learn from Chris of the relationships these tough plants have with the rest of their mallee ecosystem, and as a result of this course I will definitely be seeking out *Grammosolen dixonii* plants should any Scarlet-chested Parrots be in the area!



Wooly Ray-flower (Grammosolen dixonii)

I also took the opportunity this weekend to record incidental butterfly records, with most records from or near to the Ranger homestead at the lunch break on Sunday. We saw a total of 8 species, with 5 of those new for the Gluepot species list of butterflies. This was a pretty good tally given that for most of the weekend the weather was cool and overcast, and there were no targeted searches conducted for butterflies. New to the Gluepot list were the Cabbage White (*Pieris rapae*), Australian Painted Lady (*Vanessa kershawi*), Satin Azure (*Ogyris amaryllis*), Rayed Blue (*Candalides heathi*) and Two-spotted Line-blue (*Nacaduba biocellata*). Species seen during the weekend already on the list were the Small Grass-yellow (*Eurema smilax*), Meadow Argus (*Junonia villida*) and Saltbush Blue (*Theclinesthes serpentatus*).



Chris Lill teaching at Gluepot

Many thanks to Chris and to the other course participants for making this a most interesting and enjoyable weekend.



20th Anniversary Celebration

About fifty Gluepot volunteers, friends and family members attended the traditional end of year and festive season BBQ held at the Education Centre in November 2017. There was added celebration, as 2017 marked the 20th anniversary of Gluepot Reserve.

Reserve Chairman Duncan MacKenzie gave a speech, in particular speaking about the Gluepot 'family' and the attendees as individuals, outlining their role and contribution to the Reserve. Deputy Chairman, Ian Falkenberg followed up with a speech highlighting the role that Duncan has played and how his exceptionally strong leadership throughout the 20 years has been critical to the success of the Reserve.

The images below show some of the participants enjoying themselves on the night.





















Gluepot Newsletter Ju

July 2017

Twenty years of Bird Banding at Gluepot by Dr Greg Johnston

Bird banding is a long-established method for marking individual birds to gain information of their movements and longevity. At Gluepot birds are captured using finemeshed 'mist nets' strung between poles. Once captured, birds are identified, measured and weighed, and a metal band is placed on its leg. Each band has an individual number and the address of the central banding co-ordinating authority in Australia, The Australian Bird and Bat Banding Scheme (ABBBS), in Canberra. The ABBBS, through its corps of professional and volunteer banders, has collected information on over 2 million birds since 1953.

Some birds had been banded on Gluepot, prior to it becoming a reserve. However a concerted effort to band birds there was begun on 28 October 1997, in the same year that Gluepot was established as a conservation reserve. For the first 15 years the banding program was co-ordinated by Wally Klau (pictured below). Wally and his wife, Betty, travelled from their home in Wilmington to spend a week out of every month banding on the Reserve.



Wally was awarded the Order of Australia Meal in 2010 for his services to Ornithology as a bird bander, and has held his banding licence since 1983. He has been a member of the Gluepot Management Committee since 2001, and for over 10 years

facilitiated the Reserve's 'Introduction to Bird Banding' course. Luke Ireland, who obtained his 'A' class banding licence under Wally's tutelage, now conducts the banding course.

Wally stood down as leader of the banding program in 2011. Keith Bellchambers (pictured right) who had previously banded with Wally, then took over as banding co-ordinator until 2017. Alistair Bestow is now our banding co-ordinator. Alistair takes on the role as an experienced bander mainly having banded in the eastern



states, but having also banded at Gluepot for two years.

The banding program has required real dedication. Banders must rise early to set mist nets, before birds commence their morning activities, and nets must be constantly checked to remove, measure and release captured birds as quickly as possible. Then records must be collated and incorporated into the Gluepot and ABBBS databases.

Over 7000 birds have been banded at Gluepot since 1997. This gargantuan effort has provided useful information on the birds on the Reserve. For example a Black-eared Miner banded in October 1996 on Gluepot was recaptured in November 2005 on Gluepot. It had moved 2 km and was at least 9 years and 1 month old. This is the oldest recorded Black-eared Miner, and demonstrates the species is long-lived and quite sedentary. Indeed, the furthest a banded Black-eared Miner is known to have moved is 8 km, from Taylorville Station in January 1997 to Gluepot in October 1998.

The bird banding program at Gluepot is a great example of how volunteer 'citizen scientists' have worked together to collect valuable information about the birds on Gluepot. All banding on Gluepot complies with strict scientific, conservation and animal welfare guidelines and is shared as part of the national Australian Bird and Bat Banding Scheme. The information gathered is used to learn about birds and provide information for conservation management.

We welcome Alistair Bestow as the most recent bird banding co-ordinator, and look forward to the discoveries that will come from the ongoing bird banding at Gluepot.



Alistair Bestow, new bird banding co-ordinator at Gluepot

The ABBS website address is: www.environment.gov.au/science/bird-and-batbanding

Wildlife at Gluepot

Can you identify the wildlife in the images below, all taken on Gluepot. Answers below.



Photo: Graham Lee



Photo: Ian Williams



Photo: John Donkin



Photo: Graham Lee



Photo: Ian Williams

Answers:

- 1. Redthroat
- 3. Varied Sitella
- 5. Desert Skink (Liopholis inornata)



Photo: John Donkin

- 2. Coral Snake (Brachyurophis australis)
- 4. White-fronted Honeyeater
- 6. Spotted Nightjar

Betty Klau – A life of dedication by Duncan MacKenzie

On the 31st December 2017, Betty Klau lost her battle with cancer. All members of the 'Gluepot family' will miss her, as she and husband Wally have been coming to Gluepot for 20 years.

Wally is a member of the Reserve's Management Committee, and up until recently, our Bird Banding Manager. For a number of years, he and Betty tried to visit the Reserve a week per month, to undertake bird banding projects.



Betty and Wally were like 'two peas in a pod' – apart from work commitments, never separated since they married in September 1962 at the Laura Lutheran Church, in the mid-north of S.A.

With five children, 13 grandchildren and nine great grandchildren, Betty was always busy with her crafts, especially sewing children's clothing and patchwork blankets. Betty's other passion was her garden and about the only time she didn't accompany Wally to Gluepot was when her garden needed close care over the summer period.

But most of all, Betty cared about people. She volunteered at schools, church, the Wilmington Lodge and craft shop, Boolerroo Center Hospital and, of course, Gluepot Reserve. While at Gluepot, if she wasn't out helping Wally, she was sewing and



crocheting blankets for Lutheran Community Care, and making clothes that would be sent to missions.

Over the years, Betty suffered from a number of health problems but she was a 'fighter' – determined that she wouldn't give in. Wally was always there for her, every step of the way – a strong enduring love on both sides!

Betty's funeral was held in the small but beautiful Lutheran Church of St John, near Wilmington. There were a large number of people attending and Betty's hand crafted blankets were draped over each pew in the church. The reason Gluepot is recognised internationally is because of people like Betty – caring and dedicated people who give so much of themselves to the Reserve. Betty not only helped Gluepot directly, but was Wally's 'right hand woman' in everything he did. They were inseparable.

Betty was one of the most beloved members of the 'Gluepot family', and she will never be forgotten.



One of the five bird hides at Gluepot has been named 'The Wally & Betty Klau Bird Hide' in honour of the years of work undertaken by Betty and Wally.

White-winged Choughs

Bird watchers often use the red eyes as one of the major identifying characters when distinguishing choughs from other black birds of similar size and shape.



The visible eyeball consists of a pupil, iris and conjunctiva. In choughs, we know that the iris changes colour from a dark brown to a lighter brown to orange as the bird matures up to about 4-5 years of age.

But what of the red conjunctiva that are often observed, reportedly a display in excited birds. Are the conjunctiva always red, but less visible? Do they become engorged with blood when the bird is excited, or does the eye open wider revealing more of the constantly red conjunctiva when the bird is excited. Please email the editor if you know.

From the drone

Gluepot uses a drone, mostly to locate new malleefowl mounds. It is also used to take images of other aspects of Gluepot. Tim Pascoe, who manages the Reserve's remote-sensing cameras and co-ordinates the bird atlassing program, is also our drone pilot. Tim took the two aerial images featured below in 2017, showing the homestead area infrastructure. Much of this infrastrucure has been built by volunteers, especially the RAG team and Friends of Gluepot, the latter having also planted many of the trees and shrubs that have re-vegetated the homestead area.



- 1. Volunteer Ranger's Homestead
- 2. Palmer Accomodation Block
- 3. Communal Kitchen/Recreation Area/3 Bedrooms
- 4. Workshop

- 5. Solar Panel Array
- 6. Battery Shed
- 7. Bill Santos Science Centre & Library
- 8. Storage Shed/Carport

The late afternoon image below shows the Visitor Centre, with a picnic area to the left



Ranger's diary by Oriana & Ian Williams

This diary is dedicated to the volunteer Rangers, who together with the other volunteers, donors and supporters are the heart and soul of Gluepot.

The Rangers are a part of a team who are rostered to live and work at Gluepot for periods ranging from one to nine months. They manage and perform the day-to-day activities occurring on the Reserve, supervise volunteer Assistant Rangers, provide support to researchers, and advice to campers and visitors. They live in the Homestead (HS).

This is a diary providing snippets of just some of the events that occurred, tasks performed and wildlife observed during our 2-month stay during December 2017 to end of January 2018.

Nov 29th: During preceding days packed car and trailer, and prepared our home for our two-month absence. Arrived at Gluepot in early afternoon and welcomed by outgoing Rangers, Ros & Jock, who are Gluepot 'legends', having been Rangers nearly every year since 2007. Warm first day, max temperature of 38°C.

Galahs around HS. Observed first Bearded Dragon, (*Pogona vitticeps*) basking outside the library.

During the afternoon, Ros and Jock provided a hand-over session informing us of past and future events and tasks. Thunderstorm at 1800hrs, then light rain until 2100, providing nearly 11mm rainfall.

Farewell/welcome dinner with Ros & Jock.

Nov 30th: Recorded weather observations for the Bureau of Meteorology. These 11 observations are made at 0900 every day and include maximum and minimum temperatures and rainfall.

Plenty of interesting storm cloud formations and thunderstorms to east and west of HS, but only a few drops of rain eventuated during the day.

Completed measuring water tank levels, and malleefowl research grid rain-gauges located around the Reserve.



Also recorded HS dam and rainwater tank levels. 44.4mm rainfall at HS during November.

Observed goanna foraging near HS, and a Bearded Dragon near workshop.

Went spotlighting for reptiles for an hour from 2100hrs and observed several Tree Dtellas and a Bynoe's Gecko.

Dec 1st: Cool change overnight; cloudy overcast day with thunderstorms in distance; 6.6mm rain overnight.

Spent part of day in the office, completing monthly weather and water statistics, and reviewing Ranger manuals and work procedures.

Tree Skinks (*Egernia striolata*) are very common at Gluepot, including around the HS. Found one trapped in the sink in the Education Centre, so placed a stick 'exit ramp' in sink. Goanna observed basking outside Education Centre.

Dec 2nd: 6.8mm rain overnight.

Installed a remote surveillance camera in a Malleefowl research grid, one of many installed in a number of parks and reserves in the mallee by NRM to study prevalence of malleefowl predators.



Checked fire extinguishers and cleaned Visitor Centre.

Dec 3rd: Fox baiting all day, burying over 90 baits at sites located throughout the Reserve. Along with cats, foxes are major predators of our birds and reptiles, devouring hundreds of them daily.

Dec 4th: Day trip to Waikerie, our nearest town, 60km to the south. Picked up a new Assistant Ranger, Ranjita, at the bus station, picked up mail from PO, and purchased

food and hardware. Conducted induction for Ranjita, who will be volunteering for 2 weeks.

Worked in the vegetable garden, with thanks to



previous Rangers for planting a variety of vegetables.

Dec 5th: In the south-west of the property, set up a 10 x 10 array of concrete roofing tiles to act as artificial refuges for reptiles, a study to determine the utility of the tiles for observing reptiles.

Gluepot has 5 bird hides; today spent 90 mins at Whistler Bird Hide late in day; not many birds observed being a cool day; Mulga Parrots and Common Bronzewings seen; observed a Desert Skink (*Liopholis inornata*) in spinifex nearby.

Dec 6th: Posted pictures on Gluepot Facebook site, a weekly task to provide information and pictures for our supporters.

RAG (Rough as Guts) volunteer team, also 'legends' at Gluepot (refer to earlier newsletters to learn about this special group of men), came out today to work on a 'cara-port' shelter for two caravans.



The Reserve has three public campgrounds; today serviced the campground at Babbler campsite and had a chat to the campers.

Checked smoke alarms around HS.

Bearded Dragon basking in HS driveway. Galahs and Apostlebirds around HS.

Dec 7th: Currently have a plague of *Leptocoris* bugs, that are coming into the lesser sealed buildings around the HS. Thousands of them in the Education and the Visitor Centres.

Rainbow Bee-eaters observed near dams.

Boxes of donated books assessed, sorted, some catalogued into the Library, others placed into HS and communal kitchen 'libraries'.

Dec 8th: 9.4 mm rain overnight.

Bird atlassers, Karen and John arrived for 2 days of bird observations at established photopoints.

Long-time volunteers Shirley and Tim arrived to stay for several days. Tim manages the Reserve's remote cameras and the drone used to locate malleefowl mounds.

Checked termite traps around HS.

Happy hour and home-made pizza dinner.



Dec 9th: Coolest overnight since our arrival (7.4°C min.). Beautiful day, mild and clear.

Exciting news, Tim discovered new active Malleefowl mound using the drone.

Checked artificial tile refuges, a task undertaken regularly throughout our stay.

Checked voltages of electrified fences on the northern and western boundaries of the property; about 40 km need to be checked weekly for trapped animals, or other objects that reduce the efficiency of the fence.

Dec 10th: Helped Tim set up several remote sensing cameras at the active Malleefowl mound.



Dec 11th: Day trip to Waikerie to dispose of rubbish and recyclables, do the banking, pick up the mail, and purchase food and hardware.

Cleaned and filled four birdbaths around the HS, an essentially daily task.

Photographed a Beaded Gecko (*Lucasium damaeum*) in the evening.



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Dec 12th: Warming up; 38°C max today.

Checked level of Homestead Tank that supplies water for the three toilets at the HS. The tank is filled from water pumped from one of two dams located near the HS. Sprayed weeds around weather station.



During mid-afternoon, a family of Butcherbirds sitting under back verandah, beaks agape, trying to keep cool. Lots of Ravens around today.

Dec 13th: 43°C max today (our warmest December day). Birds heat-stressed with 10 species coming in to drink at HS bird baths, including Dusky, White-browed and Masked Woodswallows.

Dec 14th: Follow-up on fox baiting, 10 days after baits laid, to determine the take-up of baits.



Observed a goanna moving hurriedly into some bushes near the HS gate, followed immediately by the exit of a family of variegated fairy-wrens in an agitated state. Suspect the goanna is raiding their nest for eggs or young?

Ecologist Greg and son arrived for a 4-day visit.

Dec 16th: Small flock of Major Mitchell's Cockatoos being seen or heard calling nearly every day.

Last night of A/Ranger Ranjita's stay. Her parents visited and her mother cooked everyone a nice Indian meal.

Dec 17th: Dis-assembled and serviced 90 canid pest ejectors (described earlier in newsletter).

A Broad-banded Sand-swimmer (a moderate-sized skink), observed whilst spotlighting at night.

Dec 18th: Hot day, 42°C; birdbaths busy with thirsty birds. Cleaned Visitor Centre and Babbler campground.

In late afternoon, went to Whistler Bird-hide and observed 9 species, including 3 Regent Parrots.

A Coral Snake observed whilst spotlighting after dark.

Dec 19th: The bug plague continues, so needing to clean the lesser sealed buildings more often, as the bugs infest the buildings and then die in their hundreds.

Bird atlasser, Bronwyn, arrived in afternoon to stay for several days of birding.

Dec 20th: Often observe kangaroos around the HS; this morning a Western Grey mum with joey close to the accommodation block.

Cleaned Whistler Hide trough. Pumped water from dam to HS tank.



Dec 21st: Bronwyn observed a

large pool of water behind the Visitor Centre. Upon inspection found a small leak at the bottom of the large rainwater storage tank and an outlet valve partly opened. Kangaroo footprints all around, and we came to conclusion that thirsty kangaroos had detected the leaking water and whilst drinking had trod on, and partially opened outlet valve causing release of several thousand litres of water – every Ranger's worst fear as we work hard to conserve our precious rainwater supply.

Dec 23rd: Observed two Wedge-tailed Eagles in southeast of Reserve. During our stay, we got to observe about half dozen of these magnificent birds around the Reserve.

Another check of the fox baiting stations.

Needed a chainsaw to remove a tree blocking a track in the south-west.

Dec 25th: Just the two of us here on Christmas day; a much quieter celebration than we are normally used to on this day. Goanna observed



digging and foraging for spiders and insects near HS.

Dec 26th: Checked HS and vehicle first-aid kits, plus the RFDS emergency medical kit and ordered replacements for expiring items.

Worked in vegie garden, and undertook a few other repairs.

Dec 27th: 42°C max today; ground temperature in the sun 55°C. Goannas are tough animals, often wandering around on these hot days.

Performed checks and maintenance on the three work vehicles.

Dec 29th: Checked smoke alarms and fire extinguishers.

Dec 31st: New Year's Eve. Travelled around the Reserve reading rain-gauges, measuring tank and dam levels for the end of month and year statistics. Also checked electrified fence voltages as we travelled around.

Jan 1st 2018: Completed 2017 data collections and statistics and reports; prepared new spreadsheets, files, forms etc for use in 2018.

225 mm rain in 2017, below the long-term average of about 285mm.

Jan 3rd: Travelled to Waikerie for supplies and undertake other tasks.

Jan 5th: Hot day. 15 Regent Parrots and 10 other species observed at Whistler Hide from 0650-0830.

Jan 6th: 46°C today, the equal highest January max. temp experienced during our stay.

Large numbers of Mulga and Ringneck parrots at Emu Bird-hide, with 11 species recorded, including a Collared Sparrowhawk.



Having a chat with 'Curly-tail' Bearded Dragon, when he suddenly and rapidly took off into the bush. I suspected a fellow species and sure enough a larger dragon appeared – it had a scarred and bent tail, so assigned him the name 'Bent-tail'.

Concerned about a German tourist camping out in the heat – but he was a tough man and did well.

Jan 9th: Sprayed weeds along a 3.6km section of electrified fence.

Jan 10th: Unable to start one of our vehicles; battery OK, suspect problem is a faulty starter motor. Few more campers visiting the Reserve.

Jan 11th: Bird trough at Froggy Bird-hide not filling with water; pump not working, despite only being replaced a few months ago; hopefully a warranty job; will have to fill trough by bucket until repairs done.

Jan 12th: Management Committee members start arriving for meeting tomorrow. Observed several goannas.

Jan 13th: Management Committee meeting all day.

Jan 14th: Cleaned Old Gluepot and Emu bird-hide troughs. Excitement on way back to HS when we observed a Malleefowl standing on side of track, before slowly walking off into the bush.



Jan 15th: Another round of fox baiting occupied most of the day. Whilst travelling around, observed Sleepy Lizards and Rainbow Bee-eaters.

Detected low voltage on one wire of electrified fence; found that a top wire had been hooked over the electrified wire, probably by an animal, shorting the circuit.

Jan 16th: RAG team volunteers came out today to work; towed faulty vehicle to Waikerie for repair of starter motor.

Jan 17th: 40°C plus max temp today; it's been a dry month thus far with only 0.4mm rain. Tracks becoming dusty and corrugated despite relatively small volume traffic.

Jan 18th: Went into Waikerie for supplies etc.

One of the Reserve's ecologists, Greg, has been visiting for several days and today completed Pastoral Board photo-point vegetation photography. These images are taken at same locations every few years to determine vegetation changes.

Jan 20th: 46°C max temp today. Plenty of birds at Whistler



bird-hide early in the morning; no Regent Parrots, but a Restless Flycatcher spent some time near the trough providing good viewing.

Jan 21st: Hot spell continued; 5th day over 40°. Various minor repairs undertaken gate and irrigation system.

Jan 22nd: Cooled down to mid-30's today, some relief. Cleaned bird-hide troughs today. Amongst other species, Pied Butcherbirds observed at Old Gluepot; Major Mitchell's at Froggy hide.



Jan 23rd: Fox baiting follow-up, six baits taken over last 10 days.

Removed tree blocking track in south-west of Reserve. Goannas and Wedge-tailed Eagle observed.

Feral animal control vital to maintain our native flora and fauna; only an occasional rabbit been observed during our stay; feral goats more common and continually need to be culled. Jan 24th: Beautiful morning, went for a run just after sunrise; a good time to observe fresh animal footprints or marks on the sandy tracks – seeing Emu, kangaroo, fox, goanna, dragon and snake prints.

Jan 25th: Went into town; new tyres fitted to one vehicle; the other vehicle with new starter motor picked up.

Jan 27th: Parrots - Galahs, Major Mitchell's, mulgas, and ringnecks - have been commonly observed throughout January, around HS, at bird-hides and whilst out walking. Apart from the Mistletoe being in flower, there are few other plants providing nectar to the nectar-feeding birds.

Jan 28th: 46.0°C today. Started preparing for our departure – cleaning etc.

Jan 29th: Dierdre and Ian, the incoming Rangers, arrived late in the day.

Jan 30th: Hand-over meeting with Dierdre and Ian, discussing what's happened and what needs to be done etc.

Packed up our gear.

Had a nice dinner with Dierdre and Ian. Plenty to talk about.

Jan 31st: Recorded end of month rainfall and water storage statistics.

Another enjoyable meal with Dierdre and Ian.

There is a great comradery amongst Gluepot's Rangers; we have a lot in common and conversation is easy and very enjoyable.

Feb 1st: Departed Gluepot – happy that we will be back soon.



Camping at Gluepot

Gluepot Reserve has three public campgrounds:

- Babbler
- Bellbird
- Sitella

A camping fee of \$10 per night per vehicle applies.

Visitor campgrounds have two toilets, except the more popular Babbler campsite that has three.

Each also has a small rainwater tank. The water is not assured to be safe for drinking, or the tanks may be empty, so campers should bring their own drinking water with them.

Camp-fires are not permitted on the Reserve.

The Reserve is open to day-visitors and campers on most days of the year, only being closed on:

- catastrophic and extreme fire rating days,
- after heavy rainfall making the tracks unsafe to travel on (usually >20mm in a day), or
- occasionally if feral animal control work is being undertaken.

To check if the Reserve is open, call the Rangers on (08) 88928600.



Gluepot Reserve is a Reserve of Birdlife Australia. ABN: 75 149 124 774 Email: gluepot@gluepot.org Telephone: (08) 8892 8600 Website: www.gluepot.org On Facebook Postal address: PO Box 345, Waikerie, SA 5330

Gluepot is a not-for-profit conservation reserve, managed and operated entirely by volunteers. It is funded through donations and bequests from its supporters, and by grants for capital works and projects. If you wish to support the Reserve by being a donor or providing a bequest, please contact the Chairman: Duncan MacKenzie Phone: (08) 8332 1204 Email: dmackenzie@iname.com

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