

THE BABBLER



News from Gluepot Reserve Summer 2023-2024

Christmas Celebrations

The Gluepot Christmas BBQ was held on Saturday the 11th November. This Annual event aims to get together all the volunteers who have contributed to the running of the Reserve over the last 12 months.

The event was well attended, and this year we were fortunate to welcome Kate Millar, the CEO of Birdlife Australia, and Sean Dooley, National Affairs Public Manager for Birdlife, to the dinner.

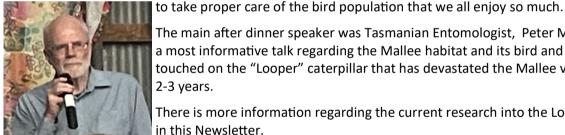
Our thanks must go to Margaret Falkenberg, Anne Morphett and their catering team for a sumptuous meal.

During the evening, Ian Falkenberg, the Chairman of the Management Committee, gave a summary of the projects both completed and still in progress, and thanked all the volunteers for their input and dedication. He introduced us to Kate Millar who outlined her role at Birdlife, and her previous work experiences. She comes very well qualified for the job.

Sean Dooley entertained us with anecdotes about his early birdwatching experiences. He stressed that although, in the past, birdwatchers would keep acquired observations to themselves, there is now the opportunity to share this knowledge. Indeed, it is very important that we do so if we hope



Kate Millar



Peter MacQuillan

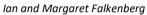
The main after dinner speaker was Tasmanian Entomologist, Peter MacQuillan. Peter gave a most informative talk regarding the Mallee habitat and its bird and insect life. He touched on the "Looper" caterpillar that has devastated the Mallee vegetation for the last 2-3 years.

There is more information regarding the current research into the Looper Caterpillar later in this Newsletter.



Gluepot in Pictures





with Sean Dooley



The Cooks



Inspecting the

Handiwork



Ngaire Boulton helping with Revegetation



The watering hole



Revegetation at Old Gluepot



Invertebrate collection housed in cabinet purchased with funds from an MRLB Grant



New toilet block by Visitors Centre nears completion. These facilities also cater for disabled visitors. Note the old adjacent toilet that has served Gluepot for nearly 25 years. This is soon to be removed.



Annual survey for the National Malleefowl Recovery Team



Cameras, purchased with funds from a Murraylands and Riverland Landscapes Grant, used to monitor watering troughs (L), fences (middle) and fox bait stations (R)



Looper Caterpillars at Gluepot

Background

In early 2017, defoliation of Mallee Eucalypt species by a caterpillar was identified on a property adjoining Gluepot. During the following wet winters this decimated leaf canopy showed signs of recovery in both epicormic and canopy growth of new leaves.

An extensive caterpillar infestation was first noticed at Gluepot during the summer of 2020 - 21, then during successive summers of 2021 - 22 and 2022 – 23. During each outbreak, millions of looper caterpillars have fed on Eucalypt leaves, leaving trees devoid of a canopy and resulting in epicormic growth sprouting on main branches.

In early 2022 a sample of mature caterpillars were collected but died during their pupa stage. A report by students from University of Adelaide during the summer of 2021 – 2022 is posted on the Gluepot website.

https://gluepot.org/looper-caterpillar-damage-to-gluepot-mallee/ .

The following year, in addition to samples being collected, an Emergence Trap tent-like structure was erected close to the Ranger Residence. With the effects of this extensive outbreak spreading to local towns, ABC Riverland reported on local concerns on possible long-term changes to the Mallee environment.

By late 2023, Eucalypt trees with limited epicormic and crown regrowth began to show alarming signs with drying of leaves and peeling of thicker bark. Ongoing observations will determine if these trees have died. There are large patches of Mallee where the majority of trees have no visible signs of greenery.

Current research and understandings

Dr Peter McQuillan, Research Associate from the University of Tasmania first visited Gluepot in February 2023 describing a

"landscape scale outbreak" with the stripped bare trees reminding him of a fire event. He returned in mid-November 2023 to continue his research and spoke to Management Committee members, volunteers and friends at the Christmas Barbeque. We thank Peter for permission to share aspects from this talk.

Following the collection of larvae from within the soil and emergent adult moths, the Mallee Looper has been identified as a member of the genus *Arhodia*, "and likely a new species yet to be formally named. *Arhodia* is one of several related genera which form a distinctive group within the subfamily Oenochrominae."

This species has a number of unique characteristics: most caterpillars of this subfamily species feed on Myrtaceae and Proteaceae, not Eucalypts, and secondly, high abundance of species in successive years is uncommon. Also of significant importance is that the larval stage is compressed into just a few weeks and to date, no member from the forementioned subfamily have been reported as a pest before.

Dr Toby Galligan from LandscapeSA oversaw the collection of emergent months in mid-December 2023 where over 2000 individuals were captured by a single light trap over a 10-day period. Laying of eggs has enabled a new cycle to begin with small caterpillars being observed in the first week of the new year.

Building an understanding of the impact and life cycle of the Mallee Looper is being assisted by -

<u>Dr Peter McQuillan</u> (Research Associate, University of Tasmania), plans to return in 2024 to continue his research.

<u>Dr Toby Galligan</u> (Murraylands and Riverland Landscape Board)who brings his knowledge on bird ecology and conservation. Toby collected adult specimens in December '23 determining gender numbers.

<u>Dr Rebecca Boulton</u> (Management Committee, Gluepot), from University of Adelaide, supervised students who have surveyed the impact on crown coverage in Mallee species throughout Gluepot.

<u>Dave Georg</u> (Management Committee, Gluepot), is supporting Rebecca, Toby and Peter in collecting and collating observational evidence and specimens.

Margaret Evans and Andrew Humpage (Friends of Gluepot Reserve) are artificially rearing larvae from eggs collected in 2023





Changes following rain.

Alistair Bestow was Ranger at Gluepot during November 2023 and shared these photographs and observations.



The total rainfall at Gluepot Homestead for November 2023 was 60mm with 58mm falling on two days: 41mm on Tuesday 28th and 17mm on Wednesday 29th.

Summer rain events often result in uneven distribution, with this event no different. The highest recording of 92mm was close to Picnic Dam (Track 7) with Old Gluepot receiving 51mm for the whole month. Consequently, run-off into Old Gluepot Dam was relatively light while Kangaroo Dam (Track 2) was significantly greater.

As run-off began filling the Homestead dams, frogs started calling with their number and

intensity increasing to produce an ever-present deafening noisy backdrop.

In the days prior to rain, flocks of Regent Parrots had been arriving just following sunrise to drink at Whistler Hide, but these sightings immediately ceased as small groups dispersed across an enormous area. Similarly, feral goats that had been moving through the mallee, also scattered and were then only seen in small family clusters.



The skill of Gluepot's volunteer road grader, Vic Breeding, was clearly

evident following these rains as no remedial work was required. Roadside puddles quickly disappeared and the track through the Black Oak become dusty, enabling the Reserve to reopen by the following Monday.

Fox Baiting Challenges.

Foxes and cats kill hundreds and hundreds of Gluepot's reptiles, birds & small mammals each year.

To minimize the damage caused by foxes, Gluepot has been conducting a fox baiting program for over 20 years. Up until nearly 6 years ago the control program involved using buried meat baits.

In 2018 a new technique using canid pest ejectors (CPEs) was introduced. Usually 6 rounds of baiting, involving 100 sites around the Reserve, are undertaken each year. Recently, a few of these sites have been monitored by remote sensing cameras.

Interestingly, the images show that ravens as well as foxes can activate CPEs. Conse-

quently, interpreting the number of activations as probable fox kills may be misleading. Additionally, video images confirm that the ravens have learnt to take the meat lure without activating the device, thus reducing the efficiency of the CPEs.



To further investigate the significance of this problem, additional monitoring is planned to see if we can discover how widespread the problem is. This would likely mean checking all stations at say 24hr, 48hr, and then 5 days after set-up.

To achieve this will require extra manpower. The task involves driving around the Reserve and checking the CPEs – several days work for each time interval. If anyone is interested in assisting with this monitoring study we would very much like to hear from you.



Walking Tracks



Gluepot has 13 walking tracks, all of which are continuously monitored and maintained. In recent times marker posts have all been painted bright orange, have had arrows added where missing or have been replaced when rusted out or too short. There have also been over 150 additional posts added, and in places tracks re-aligned to account for vegetation growth etc.

Being mallee country we also have an ongoing clearance program to keep the tracks clear of fallen trees and large branches, and to cut back undergrowth encroaching on the tracks. Many of the seats have also been replaced as they have deteriorated over time. Feedback from visitors has been very valuable to help zero in on any action needed.



Linda Lee

Brochures, their mud maps and distances have also been checked and tweaked as needed. All the walks are now included on the

Openstreetmap website maps which can be downloaded for a GPS.

Graham & Linda Lee

Graham Lee

Future Happenings.

2024 Working Bee

This event will be held from Friday 19th to Monday 22nd April. A program of the planned activities will be available closer to the date. Participants often arrive on the Thursday night to be ready for the official welcome and the start on Friday morning. Meals are provided and there is a charge to cover the cost of the food. Camping fees are waived for participants.

We usually undertake biodiversity studies during the Working Bee, some of which require help to set up. If you are able to arrive on the Wednesday night (17th April), and would be prepared to lend a hand, this would be much appreciated.

20th Birthday for Friends of Gluepot Reserve

Friends of Gluepot was formed in February 2004. A special dinner during the Working Bee will celebrate this milestone.

Education Courses 2024

Dates for the Courses for this year have not yet been finalized. As soon as they are available, this information will be posted on the Gluepot Website.

Merchandise

A range of Gluepot T-shirts, polo Tees, jackets, caps and beanies can be purchased online via our website, or at our visitor centre—where you will also find an interesting range of books, including the new Cookbook with it's beautiful bird photos.

GLUEPOT RESERVE

Gluepot Reserve is a Reserve of Birdlife Australia. ABN: 75 149 124 774 Email: gluepot@gluepot.org Telephone: (08) 88928600 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 requests 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:-Chairman: Ian Falkenberg. Email: hawknest2@bigpond.com Phone: 0428842973 This Gluepot Newsletter is produced as an e-newsletter and is not available as a printed version. Contributions, comments and feedback may be forwarded to the editors – Sue Nettlefold (jdsmnett@gmail.com) or Bronwyn Mart (gibbart@bigpond.com)