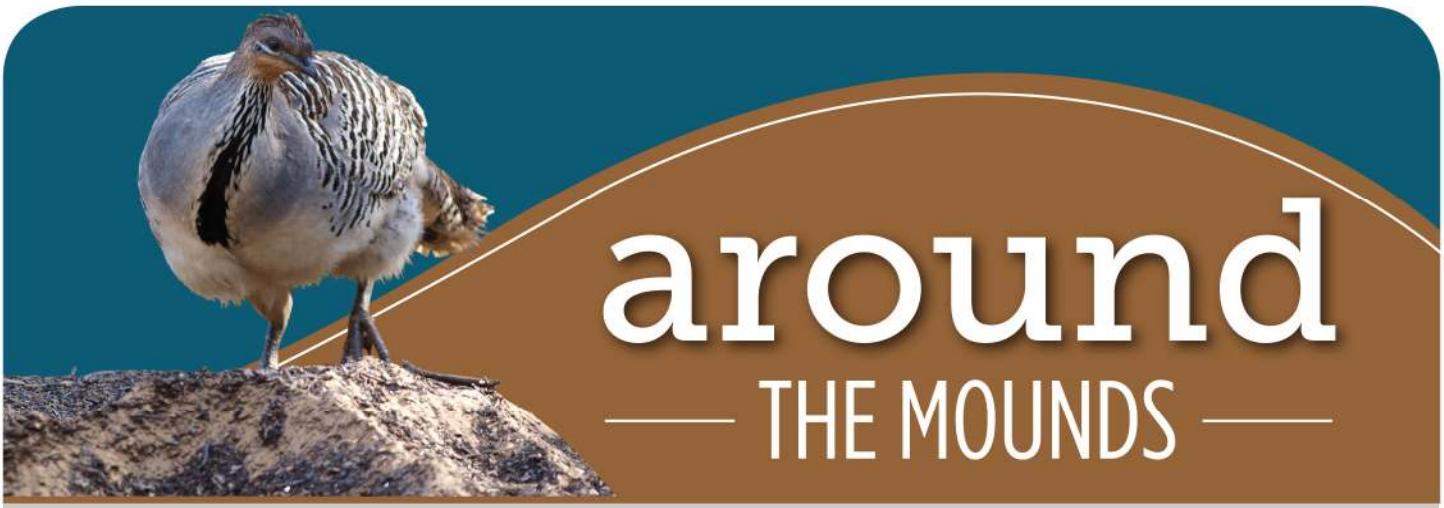

around THE MOUNDS

NEWSLETTER OF THE NATIONAL MALLEEFOWL RECOVERY TEAM AUTUMN 2019 EDITION FIFTEEN

NATIONAL MALLEEFOWL RECOVERY TEAM

BY DAVID KELLETT, NMRT CHAIRPERSON

PETER STOKIE, PAUL BURTON & DAVID KELLETT AT THE RECENT MOUND MONITORS TRAINING IN WEST WYALONG

Hello everyone and welcome to Edition number 15. The end of another breeding season that has been affected by above-average temperatures and well below-average rainfall.

Malleefowl Monitoring Training has once again been run in WA in November last year and in NSW in February 2019 and great to see lots of volunteers attend these very important training sessions. By the time this edition has been printed, two Adaptive Management Predator Control meetings have taken place. The first meeting in Perth on April 5 and second in Mildura on April 12. Graeme Tonkin ran Coordinator training in Adelaide on May 17 for those interested in brushing up their skills.

Tim Burnard has been travelling around the country with 'The Amazing Malleefowl Roadshow' showcasing the life and antics of this special and unusual bird, with unique video footage and informative presentation.

Tim has also announced he will be retiring at the end of April. I would just like to thank Tim on behalf of the NMRT for all the hard work and long hours over six years since joining the team and we wish Tim and his wife Donna all the best for the future! We will have further tributes for Tim in the next edition of this newsletter.

We also say a sad goodbye to a very long-term member of NMRT, Stephen Davies (photo below), who had his wife dial into the last Recovery Team's teleconference to inform us that he would no longer be able to be part of the Team. I haven't had the opportunity to meet Stephen in person, however I believe he is a wonderful man and has been assisting Malleefowl conservation for many many years. We also wish Stephen all the best! See thanks from Blair Parsons and Sharon Gillam on page 3.

We had a recent Malleefowl mortality on our roads near West Wyalong within a newly signposted area and I just thought I would remind everyone to report any new sightings and even mortalities to the Recovery Team. If possible please include GPS coordinates so the team can properly document your sighting.

NEWLY ERECTED SIGNS IN THE BLAND SHIRE

IN THIS ISSUE:

NATIONAL MALLEEFOWL RECOVERY TEAM COORDINATOR UPDATE

BY TIM BURNARD

After six years as National Coordinator, it's time for me to move on… OK, so I'm not actually moving on to anything but retirement, some gardening, getting the farm into working order and perhaps even some art work.

But before talking about retirement, I need to give a final update covering the past six months. Mostly, it's been a hectic round of trying to tie up our funding with 16 NRM agencies under the new National Landcare Program. In the short term we were very fortunate to receive funding to keep the team afloat for this financial year from the Australian Government via the SA Murray Darling Basin NRM.

Apart from just chasing money (a really frustrating part of our work) we have also achieved a lot of our main goals to help Malleefowl; we engaged Paul Burton to ground-truth about 300 mounds in the West Wyalong region, put out 20 new cameras in Annuello and Wandown and 30 new cameras on Eyre Peninsula as part of the Adaptive Management Predator Experiment (AMPE). Plus, there's going to be about 10 new sites searched (by LiDAR) added to the database as well as a re-search of perhaps 10 existing sites.

We were very fortunate to receive a grant of $10,000 from Goldfields Environment Management Group (based in Kalgoorlie) and Graeme Tonkin has just secured another contract with Mt Gibson to monitor sites associated with the mine site there (which he has managed for the past three years).

One of the more exciting activities has been the production of a short film (17 minutes) about the 'Amazing Malleefowl'. Graeme and I just trialled the film as an awareness raiser on Yorke and Eyre Peninsulas (SA) and received glowing praise for it. We made 10 presentations to nearly 500 people (many school kids) and added another 80 names to our mailing list. The goal is to attract more volunteer monitors to our band of citizen scientists as well as people to go through images we gather from the AMPE cameras. We will be making the film available in the near future.

We have also engaged a new person to the team. Jody Taberner is taking over a lot of my administration duties. Jody lives near Horsham (Vic) and has had an association with Malleefowl for some time, having led a CVA crew along with Peter Stokie to search for mounds at the Tooan sites near Mount Arapiles. Jody is a very organised person and ideal for the role she has taken with us.

Back to talk of retirement…Being the National Malleefowl Coordinator has been the most exhilarating employment I've had. The Malleefowl is amazing, the volunteer (citizen science) effort is amazing and the Recovery Project is amazing.

The Malleefowl monitoring effort is recognised as Australia's largest single species monitoring project and the AM project is considered the largest predator control experiment in Australia as well as one of the largest Adaptive Management projects in the world. This was reinforced this year with the fact that Malleefowl monitoring started in 1989 with just 6 sites. 30 years of monitoring! We now monitor over 130 sites each year with more being added each year. As Joe Benshemesh pointed out at last year's National Forum, the dataset is now over 2000 site years. The equivalent of monitoring just one site since the birth of Christ. Does this make it a project of almost biblical proportions?

Monitoring is now accepted as a crucial ingredient in species recovery. But for those who want hard, on ground action then there's the latest round of Australian Government Landcare funding, which saw $24.7 Million directed to Malleefowl conservation via NRM agencies for 2018-23. All actions are taken directly from the National Malleefowl Recovery Plan meaning much of the spending will be for actions like tree planting, habitat protection and predator control.

The people involved in Malleefowl include the cleverest scientists (citizen and professional) and the most dedicated workers (paid and unpaid) I have known. Passionate is one way to define you all. And by far the majority of the work is given free of charge!

I want to take this opportunity to remind everyone of the contribution from one of our greatest volunteers. That's Dr Joe Benshemesh.

Since I commenced back in April 2013, I have relied on Joe's advice. Almost daily, at times of peak activity. I quickly learnt that my main goal would be to listen to Joe's ideas and then endeavour to turn them into reality. His guidance was certainly not limited to matters of science.

For a while now, one of our mantras has been to try to make ourselves redundant. This is reflected at all levels. We train new citizen scientists and coordinators every year to make sure of ongoing monitoring. This is also the case at staffing levels. In the last six years we have engaged several new staffing positions. Graeme Tonkin is our National Monitoring and Database Manager, Liz Kington is managing all WA business and the bulk of the AMPE, Jody Taberner can best be described as an Office Manager. Please don't get the idea that these positions are all paid fulltime… all up, we don't actually pay the equivalent of one full time position (including mine). There's an awful lot of donated time among the 'paid' staff. Between them they are a formidable team of talent that are well suited to take Malleefowl conservation to a new level.

Then I started thinking about all the Malleefowl family I met along the last 6 years. When I say "I" it's more appropriate to say "we", because all along, Donna has travelled this road with me. It was 6 years ago we decided, that in order to do the job as we saw it, would require a commitment from us both for this '3 year' contract. We have travelled a lot and met the loveliest people. I started trying to identify the most influential people we met and it got silly. There's just so many that I could easily fill a page with names of worthy people. Please accept that we greatly value all your effort and dedication. Donna and I hope to spend the rest of our time idly farming and touring to visit all the people we have become friends with in the Malleefowl family.

We look forward to revisiting you all in the coming years.

DONNA AND TIM

TRIBUTES TO STEPHEN DAVIES, WA

BY BLAIR PARSONS

On behalf of the National Malleefowl Recovery Team, we thank Stephen Davies for his tireless efforts in pursuit of a better future for the species.

I first met Stephen in 2004 when studying Malleefowl at the well-known 'Foster Road' population near Ongerup in the southern WA Wheatbelt along with a fellow student colleague, Jessica van der Waag.

Stephen was instrumental in guiding not only the projects but both of us as young scientists, something that he has done for so many people in the biological field.

His contribution to Malleefowl (one of many fortunate biological beneficiaries of Stephen's focus) has been significant, spanning many years.

Stephen was a driving force in the early days of the WA Threatened Species Network and then with all that followed including setting up and ensuring success for the National Malleefowl Forum in Katanning in 2007.

He also led the survey, monitoring and research of Malleefowl at Eyre Bird Observatory for many years, sharing this with countless students and volunteers who accompanied him.

Stephen brought significant wisdom and experience to the Recovery Team from his time with CSIRO (reaching back as far as the 50s!), the Royal Australasian Ornithologists Union (now Birdlife Australia), Curtin University, Murdoch University and vast array of other relevant roles.

From one legendary birdo to another, Mike Bamford states "Stephen has done so much for bird conservation in Australia, including Malleefowl, it is hard to know where to begin!"

Finally, Sally Cail (yet another Malleefowl legend) has offered the following words: "on a personal note, his support to me over many years was very much appreciated as he guided me to achieve my best. No praise is too great for him and his knowledge of all things birds (and animals) was second to none.

All the best for a happy retirement!"

Heartfelt thanks from us all Stephen!

BY SHARON GILLAM

I'd like to extend a personal thankyou to Stephen for his tireless support to Malleefowl recovery and the Recovery Team, and myself, during my time as Chair, and for sharing his knowledge and passion for the conservation of biodiversity.

Stephen has made a significant contribution to the Recovery Team. As one of the longest serving members (close to 30 years I believe – extraordinary!), he offered his advice and viewpoint at Recovery Team meetings, always keeping the welfare of the bird a priority, rather than the often-dominating issues of politics and funding. His assistance and support with our National Forums must also be mentioned, whether it be suggesting topics and presenters, editing presenters' papers or chairing sessions, Stephen has always been forthcoming with ideas and encouraged a high standard.

Stephen has been and still is an inspiration to me, with a seemingly endless supply of energy, enthusiasm and dedication to the cause – together with a lovely nature and warm smile – I shall miss him on the Team and wish him all the best.

MONITORING VIDEOS BY JOHN OLSEN, AND GREG DAVIS, VMRG

Greg Davis had a bright idea last year and decided to do something about it.

He hit upon the idea of using short videos as training vehicles for new monitors and for experienced monitors to use as references when they were needed.

He had great support from Dr Joe as well as enthusiasm from Graeme Tonkin in Adelaide and Tim Burnard who could also see the potential of such videos. Indeed, Joe is the star of one of the videos where he explains the procedure for gathering data at the mound.

Greg contracted a video maker and trainer at Torquay to shoot and edit the pieces and his choice was spot on. The professiional approach taken by Mia at Flipswitch Media was just great and she was very easy to work with.

The videos came together very well and needed very little editing. Adding the sound took very little time and the finished works were ready to go. They were shown to an appreciative audience at last years VMRG Training Weekend where they were very well received.

I encourage anyone who has a need for this kind of training aid to go to YouTube and investigate them.

As well I want to acknowledge the efforts of Greg in producing these videos and thank him for his efforts.

The VMRG has created a series of videos for use in the training of monitors. The videos show the correct use of the technology - the Etrex10 GPS and the Samsung Android phones.

There is also a very good video starring Joe Benshemesh that shows what to do at the Malleefowl mound.

Feedback on these videos has been very good and most people have learnt something. The videos were developed as a training tool, both for new monitors and for reinforcing good practices for experienced monitors.

These videos are available to everyone on YouTube.

Links to the videos exist on the National Malleefowl Recovery Team website home page, and the Malleefowl Victoria Facebook site.

The links to the videos on YouTube are:

How to use the Etrex 10:
https://youtu.be/f5n5i_v2l6c

Android Instructional Video:
https://youtu.be/FlqssLKQdMI

How to Enter Data and Take Photos with the Android phone:
https://youtu.be/H30yL8hbjRw

Malleefowl Monitoring at the mound-Practical:
https://youtu.be/rmiDhPWvqWM

You may have to copy and paste these into your search engine, or just do a search on Youtube.

NATIONAL Malleefowl RECOVERY TEAM

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Submissions for Edition 16 of Around the Mounds Newsletter close on **Monday 16/9/19**.
For editing, articles are best sent by **email** to David and/or Gil **as attached documents, with photos also as attachments.**

This Newsletter is available in colour at www.nationalmalleefowl.com.au along with the National Malleefowl Database and Monitoring videos. There is also a lot of information, photos and other links on this website.

LIDAR IN THE RIVERINA OF NSW BY PAUL BURTON

During January 2019 I had my first experiences ground-truthing LIDAR (Light Detection and Ranging) data-points to see if they were Malleefowl nesting mounds. The project was instigated and sponsored by Riverina Local Land Services (LLS) in NSW and was on predominantly privately-owned freehold agricultural properties. My history has included supervising ground-based search teams such as volunteers and sponsored projects such as Greencorps on government reserves, so this new dimension had me curious.

Three areas in the LIDAR project were close to West Wyalong and were of a mixture of Mallee, brush, pine and some ridge-dominated ironbark vegetation communities. The soils in the flatter areas were poor and comprised soft, shale-stone substrates, whereas the ridges were mainly of stone. Large areas of the Mallee and brush were harvested throughout - the Mallee for eucalyptus oil distillation and the brush for fencing and landscaping.

The fourth area was near Rankins Springs and was dominated by a high ridge covered in low pine with some kurrajongs and local gums. Creeks with water-holes ran off the ridge, fire trails and access tracks threaded through parts and some fences were present. The edges of the pine were used for grazing and some grain production, leading to the flats which were totally cleared and heavily utilised for agriculture.

Over 300 LIDAR points were visited and the in-depth results are included in a report written for Riverina LLS. These points had been selected from a pool of over 30,000. Now I hear you say how did they limit that to about 1%? The answer is in applying rules that give the points a higher or lower confidence rating about whether they are possibly a Malleefowl mound. Visiting 30,000 points would take some-time and be very expensive.

The 'higher-confidence' points were often Malleefowl mounds and the 'lower-confidence' points sometimes Malleefowl mounds. From the project 150 new Malleefowl mounds were confirmed and monitored and will be included on the National Database. A terrific result!

The project taught me a few good lessons for my next LIDAR truthing project. Some are: -

1. LIDAR is a very useful tool to discover Malleefowl mounds and many will be found in the future using this technology,
2. LIDAR is not perfect. In one location nests were roughly mapped from previous studies and yet some of these were not identified even though very well established and classically shaped 'volcanoes'. Careful evolving refinement of the algorithm design used to interpret the LIDAR data is essential,
3. Local knowledge must be sought and valued. Those on the land know their land and they do know Malleefowl sites. From the first stages through to truthing this is priceless information and a great way of involving all parties. New mounds were located using this information. An example would be a completely undiscovered mound or one that the property owner knew of but LIDAR had it showing as a 'low-confidence' point, which may not have been in the data pool to be even visited,
4. Often along disturbed areas like fence-lines, vehicle tracks, water storages such as dams or ground-tanks or edges of cropping paddocks there are lots of structures that look a lot like Malleefowl mounds to the laser beam. Often, they are in a series or obviously follow a pattern on the map. This should be considered when planning the truthing of points while remembering some may be mounds,
5. Ground searches may be required as a follow up. Certain areas where mounds were known or birds had been sighted, yet had no mounds that LIDAR had identified come to mind,
6. You can walk 3 kilometres up into the middle of a high ridge covered in dense pine forest, that has low dead branches that scratch you, and your sweat painfully pours into, and come across a pile of rocks that was classed as a 'high-confidence' LIDAR point. Its outline resembling a #4 profile,
7. Or you can walk 30 metres off a vehicle track through mild vegetation to a beautiful #1 profile mound that was classed as a 'low-confidence' LIDAR point, and
8. You can marvel at the pin-point accuracy of LIDAR points no matter how they have been identified.

The people I met and worked with were a definite highlight throughout the project. Even deriving a living on an intensive agriculture dominated property does not exclude you from membership of the Malleefowl Admiration Club. I thank them for their friendliness, respect, knowledge and hospitality.

Yet the highlight for me was the fourth research area comprising the pine ridge near Rankins Springs. Staying in a shearers-quarters on-site I got to know the owners well. The passion for our beloved *Leipoa ocellata* was obvious. In all of my Malleefowl work across Australia I have never seen them living in a more fascinating situation. Four mounds were found in total even though the ridge covered hundreds of hectares and was listed with many 'high-confidence' points where mounds could have been. Each identified mound had Malleefowl activity of some kind, with one confirmed as active earlier in the season. The other three may have been but had been recently excavated so extensively I have never seen deeper #1 profiles. All four were in soil in clearings in the forest. No ancient or historic mounds were present anywhere else that I could find. The understorey was almost non-existent due to the pine needles present or the solid rock underneath. So, while absolutely fascinating, it is highly probable that some birds have been forced to move to a much less desirable habitat as the best is long gone.

In conclusion I am happy to report that in my opinion LIDAR is a very useful tool and has shown me its value in the field-based truthing of Malleefowl mounds. Its continuing refinement will mean even greater value in the future. Coupled with local knowledge and ground-based methodologies it is a great first step setting up monitoring zones for future research into our beloved species.

'THE AMAZING MALLEEFOWL' VIDEO

https://www.youtube.com/watch?v=CCrw1rAqiDE&t=2s

Dr Joe Benshemesh has a longstanding interest in the habitat and ecology of the iconic Malleefowl and has been involved in research and conservation of this incredible bird for over 30 years. In this short video Joe gives an insight into the interesting life of this mound-building megapode and details the unusual method it uses to incubate its eggs.

ROAD-TESTING A MALLEEFOWL PRIORITISATION TOOL IN THE MIDWEST OF WA BY JESSICA STINGEMORE, BIODIVERSITY COORDINATOR NACC NRM

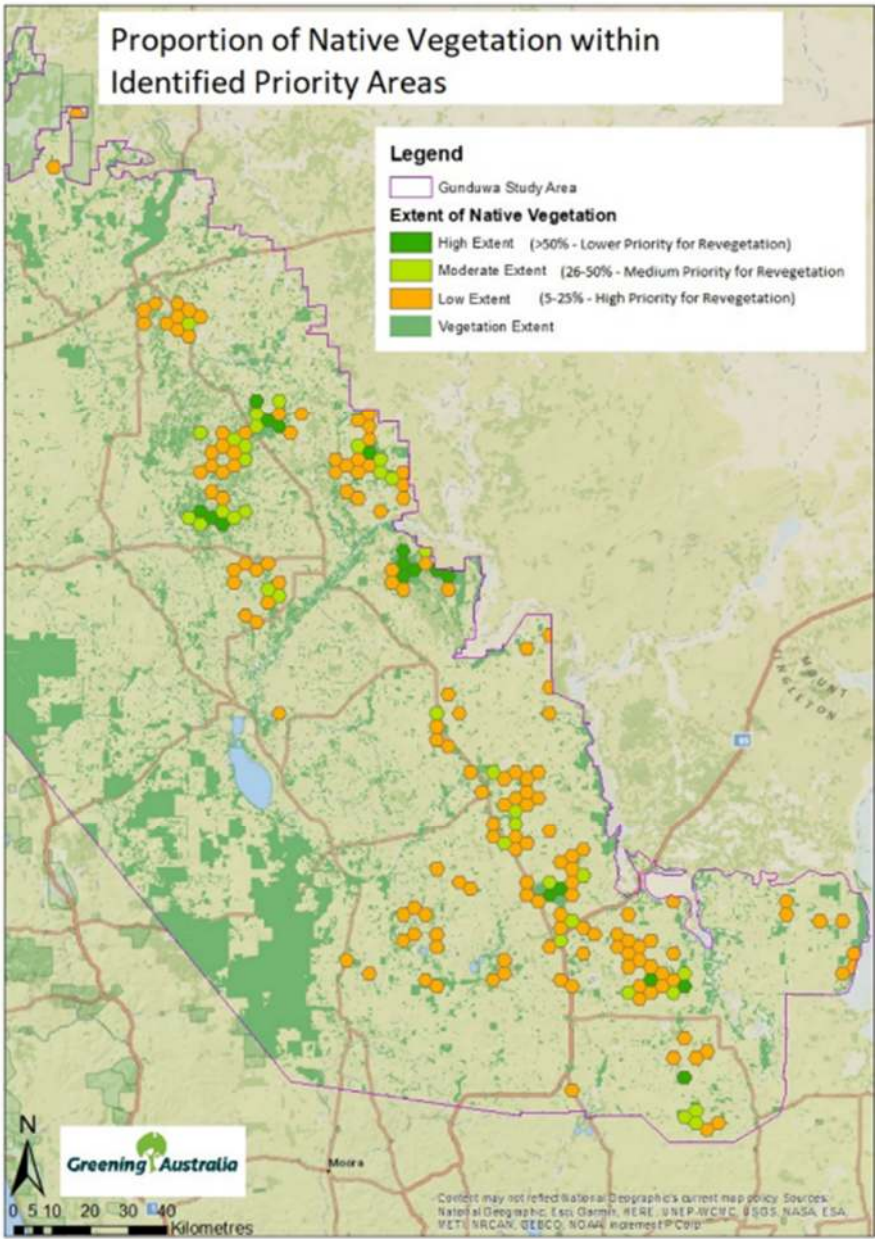
NACC NRM and Greening Australia recently teamed up to secure funding from the Gunduwa Regional Conservation Association for the development of a spatially explicit prioritisation tool to help guide habitat restoration and management for Malleefowl in the Midwest of WA.

The tool builds on Malleefowl population assessments by J. Short and B. Parsons in 2008 and used the most current data available to build a MARXAN-based GIS model which identifies where in the landscape revegetation and other management actions are likely to have the greatest benefits for Malleefowl conservation.

While considerable technical expertise was invested in the modelling component, the real excitement and strength is in the next phase where the model gets road-tested with landholders, Indigenous groups and local experts in Malleefowl conservation.

I am currently hitting the road for NACC and taking the map-based approach to landholders in high-priority areas to test whether undertaking restoration in these areas makes practical sense, whether landholders are supportive of this type of work, and whether there are genuine opportunities for action that will benefit Malleefowl populations.

If the model passes the 'pub-test' it will be an invaluable tool for underpinning the next 10 years of Malleefowl management action in the Midwest and could be rolled out across the country wherever Malleefowl populations are declining.



MORE YONGERGNOW CHICKS! BY HAYLEY DOY, AUSTRALIAN MALLEEFOWL CENTRE, WA

After the success of our 23 chicks surfacing from Maggie & Dre's mound last year and their subsequent release, we have had the pleasure of so far welcoming eight more chicks this year!

All are healthy and happy, with one chick appearing to take a keen interest in helping with the mound. While we didn't get as many chicks as last year and the typical hatching period is now over, the fact that our pair have continued to successfully breed without any encouragement or outside influence is a wonderful sight to see for the staff here at Yongergnow. For more information on our breeding history at Yongergnow, please visit the website; http://yongergnow.com.au/centre/index.php/raising-breeding-malleefowl-at-yongergnow/

MALLEEFOWL PARENTS MAGGIE & DRE, SURROUNDED BY SOME CHICKS

MY FAVOURITE MALLEEFOWL MOUND – NEST 54 AT BRONZEWING, VIC

BY ROSS MACFARLANE, VMRG

It's no secret I love monitoring Malleefowl mounds. Like the many people reading and those I've met in 20 years of training weekends, I just can't wait each year to get out into the bush again, to bash my way through the trees and bush, uphill and down, to find each mound and see which ones the birds are using this year. They're all special in some way, but if you're like me, there'll be a couple of favourites you can't wait to see again. Something about the nest, or the setting, or that determined bird who hangs around till you nick off and let him get back to work.

Over the years there've been a few favourites. My earliest memories are of nest #92 in Wandown, found and numbered in 1969 by the Mid-Murray Field Naturalists, decades before young Joe Benshemesh could dream of a PhD defence. It's still there on the porcupine grass-covered sandhill, a short, well-trodden walk west of the Meridian Road. And let the record show, it was active again in 2018, 50 years after the first recorded activity in the 1968 season.

Then there's nest #37 in Lowan grid, Wyperfeld National Park, in that pine thicket so impossibly deep we could never find it from the south side when navigating with the compass and reflector lines in the days before GPS. Dad and I tried two years in a row, but both times we lost the line even though the reflectors were only 25 metres apart, and the nest was just 50 metres off the line. We had to navigate for 350 metres from the other grid line, and both times were well pleased to find it – especially in 2000, when it was "going full bore", as my Dad would say. According to the records, nest #37 was last active in 2016.

There's been a few favourites in Bronzewing Flora and Fauna Reserve. Nest #9, which was active every year from 1997 to 2008, except for the drought year of 2002. Nest #22 has a magnificent setting in a depression atop the highest sandhill in the grid, where we'd cool off under the spreading Moonah while the lactic acid from the hill climb dispersed. But both of those, like 85% of the reserve, have been irrevocably changed by the 2014 fire.

The fire that reset the clock on Bronzewing's beautiful old-growth Mallee decimated the local breeding population. In a typical year, pre-fire, we'd have 16 to 18 active nests (from a list of 96). The record was 32 in 2012. Since the fire – well, we didn't expect anything in 2014, but there were two active then, and a couple more dug out and filled with litter. Two again in 2015; five in 2016 and 2017. Just two in the drier conditions last year – but for the first time post-fire, a nest filled with litter in the sandy eastern half of the grid.

The constant in the past 5 years is nest #54. A little patch of scrub that escaped the fire's worst ravages is home to 'the little nest that could'. In 2014 Dad and I watched the bird work the mound for a good 15 minutes on a sunny October afternoon, and the Weekly Times saw fit to publish two of my photos. Every year since he's been back, and 2018 was no exception. I came back on day two with Russell Fisk, just to be sure, and there he was again, grunting his annoyance, telling us in no uncertain terms to rack off, he had work to do.

Power to your feet little megapode. We'll be back again in 2019. Here's hoping, you will too.

So that's my favourite Malleefowl mound. What's yours? Send your information for the next newsletter!

BRONZEWING FFR NEST 54, OCTOBER 2014

REMAINS OF A GRID LINE REFLECTOR, OCTOBER 2014

VMRG MONITORING COORDINATORS BY JOHN FRASER

Some VMRG monitors may have wondered what goes on behind the scenes before they receive their monitoring kit for the forthcoming monitoring season.

No doubt a lot of planning takes place so the monitoring season can proceed smoothly and the collected data is copied to the National Malleefowl Monitoring Database (NMMD).

All this is the role of the monitoring coordinators, who assemble and distribute monitoring kits to the monitors and then upload the collected data to the NMMD after receiving it back from the monitors.

Once the monitors have given an indication of which grids they expect to monitor and the dates on which they intend to go out into the field, the grids can be allocated to the coordinators. Preparation of the kits is important. Before sending them out, each co-ordinator has to ensure last year's data on the Android is deleted, install the latest Cybertracker monitoring sequence and check that the battery is fully charged.

CONTINUED NEXT PAGE

VMRG MONITORING MONITORING COORDINATORS, CONTINUED

The Etrex GPS device needs to have any old mound coordinates removed and the new coordinates for each mound in the intended grid installed.

After checking that all programs and data are properly loaded into the devices, fresh batteries are installed in the Etrex and the portable power pack is fully charged.

The monitoring kit is put together with all the necessary devices and ancillary items that allow the monitor to conduct their work in the field, then posted to the monitor's address.

After the volunteer has collected the data out in the field, they post the kit back to the coordinator. The coordinator downloads the data collected on the 'phone' into their computer and prepares it for uploading to the NMMD. The images recorded for each mound need to be resized and renamed to a certain format demanded by the NMMD. Once the data has been prepared it is uploaded to the NMMD where it is later reviewed and verified.

VMRG MONITOR IN THE FIELD CHECKING THEIR KIT

REVIVING RIVERINA'S MALLEEFOWL BY DAVID KELLETT, RIVERINA LLS, NSW

What a busy start to 2019 here in the Riverina! Unfortunately, there was not a lot of Malleefowl breeding going on due to low rainfall and high temperatures, although we did see evidence of breeding activity at one of our sites and Mal Carnegie from the Lake Cowal Foundation managed to capture some footage of a chick emerging from a mound. There was a lot of on-ground works happening in the Riverina area starting in early January when Paul Burton spent a month ground-truthing Malleefowl mounds from our recent LiDAR survey. Previous to the LiDAR survey we knew of approximately 50 mounds and we now have 150 mounds tagged across four sites. Paul did a fantastic job locating these mounds with temperatures reaching the mid 40's for several weeks straight.

HISTORICAL PRIDDEL & WHEELER MOUND MARKER

NEW MOUND MARKER

Early February we conducted Malleefowl Mound Monitoring Training at West Wyalong where we trained 20 new volunteers, participants travelled from all over NSW and Canberra to attend the two-day training event. A big thank you to the trainers who travelled up from Victoria led by Peter Stokie and his team, Mick Webster and Tony Murnane (all VMRG members) as well as Paul Burton and Ross Macfarlane (VMRG & NMRT). Throughout the two-day event there was a lot of talk about creating a NSW Malleefowl Recovery Group and I am quite confident we will see this group formed in the coming months.

PETER STOKIE IN ACTION

VMRG CREW DEMONSTRATING MONITORING

During March we saw the completion of our Feral Animal Free site. This site is just under 60 hectares in size (we are hoping this will be part of a 650 hectare fenced area in the near future) and we hope to see Malleefowl reintroduced into the area in approximately 12 months. Pulletop Nature Reserve was used for intensive scientific research into the behaviour and ecology of the Malleefowl from 1951 when Dr H. J. Frith, Chief of the CSIRO Division of Wildlife Research, began a major research project on Malleefowl. The reserve was dedicated as Pulletop Faunal Reserve in 1963 and renamed Pulletop Nature Reserve in 1967.

Surrounded by agricultural land, Pulletop Nature Reserve provides an island of natural habitat for many native animals within the region. A total of 123 Mallee and woodland bird species have been recorded in the Reserve, including fourteen threatened species.

Malleefowl were present in the Reserve until the 1980s but, together with a number of other species previously recorded, it is now considered to be locally extinct. The number of woodland and Mallee birds are declining rapidly due to habitat destruction and predation, and therefore the conservation of remaining areas of native vegetation such as Pulletop Nature Reserve is vital for their survival.

This is a wonderful story where two neighbouring landholders and their families have worked together to protect this area. There is still a lot of Mallee country being cleared here in NSW so it is so nice to see some areas being protected. There is sure to be a lot of press around this project in the near future.

MAP OF TOTAL FERAL FREE PROJECT AREA

Last but not least, 80 monitoring cameras have been set up throughout four sites so we can gain baseline data on feral animal, kangaroo, stock, Malleefowl and other native animal numbers so we can understand how to best manage these areas.

THE AMAZING MALLEEFOWL ROADSHOW, SA BY GRAEME TONKIN

The Amazing Malleefowl Roadshow to Yorke & Eyre Peninsulas in South Australia kicked off on Monday March 18 with a visit to the Warooka Primary School where Tim Burnard and I spoke and showed 'The Amazing Malleefowl' video for the very first time to a public audience, where it was very much enjoyed by all. The question, 'What do you know about Malleefowl' was asked prior to Tim's presentation and again afterwards. This became the recurring theme for each presentation, particularly the school groups.

This audience knew very little about Malleefowl prior to the presentation, other than it is a bird and lays eggs, but was full of enthusiasm and knowledge on the species at the completion of the presentation.

That evening it was off to Yorktown where there was a public NRM meeting on the 'Great Southern Ark; The Rewilding of Southern Yorke Peninsula', followed by our Amazing Malleefowl presentation.

The following day saw a visit to the Minlaton Area School. This school runs a 'Problem Based Learning' module in terms 2 & 3 and is looking at Malleefowl to provide a subject option. Another presentation was run that evening in the Minlaton Golf Club and we once again followed on from the 'Great Southern Ark; The Rewilding of Southern Yorke Peninsula', a few of whom came only for the Malleefowl presentation.

Wednesday was a travel day and we moved to Wudinna on Eyre Peninsula. On Thursday morning a presentation was delivered to students from the Lock Area School and bird enthusiasts. Eyre Peninsula people are 'in tune' with Malleefowl, probably due to the widespread populations of the bird in that area. The students from the Lock Area School have a very broad knowledge of Malleefowl and the species has been used within the learning environment at that school for some time.

From Wudinna it was off down to Cummins where a presentation was delivered in the School Community Library to a very enthusiastic audience of adults and children.

A visit with some keen members of the Friends of Southern Eyre Peninsula Parks was arranged for Friday morning and we visited an area of the Lincoln National Park where there have been recent Malleefowl sightings. We also made a visit to the cameras situated within the Park and explored ways to improve the chance of detecting more Malleefowl and subsequently active mounds. Camera use within the park is very restricted due to thick vegetation. Once back in town a presentation was given to the Friends members at the DEW office and discussions were held on the best way for them to proceed in establishing a monitoring site within the Park.

Friday night we presented to a group of adults at the Port Lincoln Golf Club, under the banner of 'Science in the Pub'. Science in the Pub arranges interesting guest speakers on a wide range of subjects and meetings are held in the casual environment of local pubs/clubs.

Early Saturday it was off to Munyaroo Conservation Park, monitoring site S16, where we installed an array of 10 cameras as part of the Adaptive Management Project 'Predator Control Experiment'.

We then travelled to Secret Rocks, a conservation property on northern Eyre Peninsula, home of monitoring site S75. On Sunday morning, with the assistance of the property owners, Dr. Katherine Moseby & Dr. John Read, we installed two camera arrays, one inside their herbivore ex-closure and the other outside, some 7km away.

Sunday night we travelled to Cowell for a Monday morning presentation to adults and students from the local school.

Then it was off to Whyalla for the final destination, where we delivered the Amazing Malleefowl Roadshow to our largest audience of 220 students and 22 adults at the Nicholson Avenue Primary School.

The Amazing Malleefowl Roadshow was presented at 10 locations to a total audience of nearly 500 people over six days. Considerable interest was expressed by attendees in becoming involved in future monitoring activities and as a follow up, training days will be arranged for later this year, prior to the 2019/20 monitoring season commencing.

The Amazing Malleefowl video received rave reviews by the many audiences and will be made available for wider distribution (see page 4).

This project is supported by South Australia Murray Darling Basin NRM, through funding from the Australian Government's National Landcare Program and the Eyre Peninsula NRM Board.

TIM PRESENTING TO ONE OF OUR MANY AUDIENCES

SA MURRAY DARLING BASIN MONITORING

BY ROWENA DANKS, MALLEEFOWL COORDINATOR SA MDB

THE ARMY RANGE MONITORING GROUP: ROWENA DANKS, BRIAN MATTHEWS, GRAEME TONKIN, VAUGHAN WILSON, TRUDI WHITTING, JOE DAFOE, (PHOTO: TYSON BRUNTON - DEPARTMENT OF DEFENCE)

BRENT DANKS – NEW VOLUNTEER THIS YEAR AT DANGGALI

ROY GILES, FIONA GILES (FIRST PEOPLES COORDINATOR- DEPARTMENT FOR ENVIRONMENT AND WATER), JENNY GILES, MARJORIE ROGERS

This new volunteer group is made of members of the Riverland and Mallee First Peoples Group: This photo was taken at the Chowilla Grid and was the first visit for this group to the Chowilla Grid. The group were trained on the day in the grid monitoring methods as it was their first experience at grid monitoring. Each member had a turn at the different roles, from navigating between mounds, to entering data into Cybertracker on the phones and also hand-written data entry.

It was wonderful to see such a keen new group of volunteers and hopefully we will see them back next year.

MALLEEFOWL MONITORING ON WESTERN EYRE PENINSULA, SA

BY LIBBY HUNT, NRM OFFICER, DEW, SA

A wild Malleefowl has been photographed via remote camera for the first time inside the predator exclusion area of Venus Bay Conservation Park on the Eyre Peninsulas' west coast. Shown in the photo here this Malleefowl has appeared foraging in the undergrowth on remote cameras in two different locations within the park recently.

Natural Resources EP have previously had anecdotal verbal sightings with no hard evidence of Malleefowl from within the Park, and this is the first time an image has been taken behind the electrified predator-proof fence. In the near future Natural Resources EP staff plan to ground-truth the area and undertake a drone sweep to determine if there are any visible mounds in the surrounding area.

In 2018 grid monitoring results from Pinkawillinie and Lock sites on the western Eyre Peninsula were much in line with the remainder of the state, with dry conditions leading to low levels of Malleefowl activity. Unfortunately, no active mounds were recorded during the monitoring. However, there has been activity reported near Port Kenny and Tooligie, with locals and visitors calling in excitedly informing staff of roadside Malleefowl sightings. In response to members of the public contacting us about these new Malleefowl sightings we have now published a new online citizen science reporting portal www.epmalleefowl.com.au which is open to all members of the public.

Anyone who spots a Malleefowl on Eyre Peninsula can use this online portal, upload a photo of their sighting, and know that it will benefit our local understanding as well as contribute to the data within the Biological Databases of South Australia.

THE MALLEE POST
ATM HISTORICAL ARTICLE

by Alice Shannon, SA

I was recently motivated to send Dr John Reid an email outlining the role my late father (Laurence John Ellis) played in helping save the Mallee Fowl. He was reputed to have been the first person to ever breed the Mallee Fowl in captivity, and did so in the late 1940's and very early 1950's. It was suggested to me by a friend who works with TERN at the Waite Campus of the Adelaide University that I should contact your group also.

We lived in Tailem Bend, on the lower River Murray, where my father was a fitter and turner in the railways. His hobby was ornithology and he had quite an extensive collection of Australian birds' eggs, all arranged very methodically and with full records attached. I believe he was one of only a very few amateurs in Australia licenced to collect eggs at that time. After his premature death from cancer in 1954 (aged only 42 years), his collection was passed on to Harry Morton, also a licenced collector, and a close friend. After Harry's death, I've been led to believe the collection ended up at the Adelaide University but I haven't been able to verify this.

As the eldest child, I was my father's shadow and frequently accompanied him on his many trips out to the scrub to hunt for eggs. I have been known, in my very young days, to shimmy up trees and bring the eggs down in my mouth so that they wouldn't break! I used to love watching him blow the eggs and then meticulously record all the data concerning each clutch. He never took more than one clutch from each species of bird. Neville Cayley's *What bird is that?* was his Bible and I still have his copy in my home library – the 13th edition, published in 1948.

Farmers got into the habit of fore-warning my father that the scrub was soon to be rolled and cleared and that there were Mallee Fowl mounds in the area. My father, usually accompanied by me, and sometimes my younger brothers, would travel to the site in our old Amal car and he would take the temperature in each of the mounds in several places and record all his findings. Each mound was identified with a number. He did this daily until he was satisfied he knew what the ideal temperature was for hatching the eggs.

In the meantime, he had acquired a rather large incubator, and also a huge wooden chest. The electric incubator was set up in the laundry in readiness for the eggs which he hoped would hatch in it. The wooden chest was filled with wood shavings and other materials, possibly including bran and pollard, and it became the very successful breeding centre for mealy worms – an ideal food for the new chicks. He also readied our unused chook yard for its new occupants, with plenty of dead vegetation providing shelter and protection. Since the chook yard was fully enclosed, the chicks would be safe from free-ranging neighbourhood cats.

With everything in place, my father began to collect the eggs from the doomed mounds and place them in his incubator. The results were more than he could ever have hoped for – an almost 100% hatching. Immediately after hatching, the chicks were released into the converted chook yard, and quickly started their scratching for the mealy worms which had been thrown in for their tucker.

With the exception of 3, all the chicks were quite quickly distributed to various Australian zoos and wildlife sanctuaries. Of the 3 chicks we kept, 2 had a malformed leg each; the 3rd, as I remember, was perfectly formed. They were my chicks (named Happy, Grumble and Bumble), and if I sat very quietly in their yard, they would shyly take mealy worms from my outstretched hand and then quickly retreat. But their main feeding was from me strewing large quantities of the mealy worms around their yard and then leaving them in peace to forage. Sadly, as my father neared death, my 3 now fully-grown birds had to go – and they ended up in the Adelaide Zoo.

As you can imagine, I consequently have a keen interest in the preservation of the species, and in also preserving my father's role in helping to conserve the Mallee Fowl. It makes me very happy that these gorgeous little birds are continuing to flourish with the help of organisations such as yours. Well done!

Some of our family photos are included below:

The first is of Dad with Arrernte man Johnny, taken in the late 1940's on Macdonald Downs, NE of Alice Springs. They were on a bird-nesting excursion on the station. This pic is a family favourite because we think it says a lot about the sort of man Dad was.

The second is of Dad holding a lizard (Thorny Mountain Devil?) – same trip. Any photographs of me with my 3 pet Mallee Fowl have been long lost in the several shifts my mother and we 4 kids made in the years after my father's death.

ELLIS WITH JOHNNY, ARRERNTE MAN MD STATION LATE 40S

L J ELLIS, MACDONALD DOWNS STATION, NT, LATE 1940S

L J ELLIS 1953

2018-19 MALLEEFOWL MONITORING SE SA BY VICKI NATT, PROJECT OFFICER

Malleefowl monitoring for season 2018 commenced on October 8 at Mount Boothby, finishing at Gum Lagoon on October 28. Six sites were covered including (from north to south) Mount Boothby, Coorong, Coola Coola and Naen Naen in Gum Lagoon Conservation Park, Desert Camp near Padthaway and Mount Scott near Kingston South East.

From a possible 227 mounds 176 were visited across all sites, including 3 mounds outside the Coorong site. 30 mounds were found to be active, two more than last year overall. No active mounds were found off site this year though it was reported that mound 26 on the Coorong Loop road became active after monitoring was completed, A new mound was found at the Coola Coola site this season. Most mounds not visited were 5-year mounds which aren't required to be monitored again until 2020. Vegetation across all sites was in reasonable condition.

Monitoring of all south East sites took 415 hours in total, including preparation, training and travel time. (228 volunteer hours and 187 staff hours). Organisations represented included Coorong Tatiara Local Action Plan, Coorong & Limestone Coast Project, Aboriginal Cultural Rangers, DEW, Friends of Coorong, Friends of Butcher Gap and the National Malleefowl Recovery Team. A number of interested and enthusiastic volunteers also joined in again.

Cultural Rangers and Department of Environment and Water staff turned up in force to help out at Mount Boothby. Volunteers Mathew and Karen Schmerl from a neighbouring property and Monica Balkan on her way home from work in Keith also joined in again with enthusiasm. Mathew Hartmann took on a team leadership role along with the Schmerls.

Gum Lagoon Coola Coola had enough people to field two teams on both days. Michael Trebilcock and Chris Parsons joined in after their learning experience at Mount Boothby along with newcomers Montana Wayman and Tania Rajic. Tania is the coordinator of Coorong & Limesone Coast Project. Janet Copping also volunteered her time again to help out and Chris Thompson was able to join in for one day. There were quite a few profile 3 mounds suggesting the breeding season may be slightly later this year.

Mount Scott was covered totally by volunteers again this season, all of whom had monitored there before. They included Janet Copping, Margi Emery, Chris Brien and Laura Schroder with her dad Graeme Schroder. Monitoring was completed in a day which was a good effort considering the mosquitoes and midges were bad. The spread of *Acacia paradoxa* especially near Malleefowl mounds remains a concern.

Monitoring only took place for a couple of hours on the first day at the Coorong site due to threatening thunderstorm conditions, rain and damaging winds forecast. Cultural Rangers took part along with Margi Emery and Chris Brien who joined in on their way home to Adelaide. However, it was completed in good time on the second day with the help of Working for Country Rangers and Sam Blight from Coorong Tatiara LAP. Mound 26 was not active for the first time for many years but the season possibly started later and there were reports that it later became active.

Nature Glenelg Trust were not able to monitor Desert Camp this season, so monitoring was carried out by volunteers Janet Copping, Russell Fisk from Mount Gambier, David Sando from Keith and me. Two teams were able to cover the mounds except 5-year mounds in good time. There is not much evidence of Malleefowl activity at all at this site and there is a lot of *Acacia paradoxa* throughout the area.

Tim Burnard along with partner Donna took on the Gum Lagoon Naen Naen site once again on October 27,28. They stayed at their favourite camping spot overnight, completing the monitoring in four hours overall. I suspect the bottle of wine (and hopefully Malleefowl) was a feature once again.

Remote cameras haven't progressed much so more planning will be done around this in future. Two cameras have been out in Mount Boothby as a learning trial. Lots of vegetation photos, along with kangaroos, emus and magpies have been the stars so far, along with some unidentified blobs.

I was lucky enough to be able to travel to Mildura for the Malleefowl Forum to learn the latest developments and view a different area. It was a chance to network with people who have been involved for many years and also some new faces.

No funding was available for monitoring again this season. However, some money may be available for Malleefowl as part of a bigger funding project next season.

Thanks to those who assisted me to get the word out, organise people and equipment to allow monitoring to take place. Thanks to Graeme Tonkin for his valuable support and assistance to process data and get it onto the National Database. A big job!

Last but not least, thanks to everyone who participated to get the monitoring done for the South East!

INTERESTING NEST BUILDING EFFORT AT GUM LAGOON, COOLA COOLA

MONITORING IN THE COORONG

MONITORING EASTERN EYRE PENINSULA BY COREY YEATES, DEW

Monitoring for the Eastern Eyre Peninsula Malleefowl grids began on November 15 at Munyeroo Conservation Park grid. Six dedicated and valued long-time and new volunteers revisited mounds across the Park with local Natural Resource Management staff; and finished on November 20 with monitoring of the Cowell grid. (photo below).

Eastern Eyre Peninsula has had a challenging 2 years with drought declared across the region with exceptionally dry starts to the year, then little to no rain through the winter months coupled with extremely strong and damaging winds, leading to unfavourable conditions for Malleefowl to breed.

Disappointingly; over 100 known mounds were visited and monitored with not one mound found to be active across the two grids. However, a Malleefowl was seen within the survey area. This is similar to the previous year where only 1 active mound was observed. This seems to be similar across the state, maybe due to the dry conditions.

Any other ideas???

Although we have observed low activity within the Munyeroo and Cowell Malleefowl grids, we have received several sightings from excited community members and our own observations that there is still Malleefowl activity present within other parts of the EEP district. Some of these sighting are from roadside observations, within farmer's paddocks and while undertaking other activities by NRM staff.

Unfortunately we tend to hear and see some Malleefowl deaths around harvest time with spilt grain bringing birds to the roadside to accidently become roadkill. More education and/or signage around Malleefowl hotspots might prevent this from occurring on a more regular basis.

LEARNING ABOUT THE AMAZING MALLEEFOWL BY COREY YEATES, DEW

To kick off the Malleefowl breeding season on Eastern Eyre Peninsula, Natural Resources staff host a series of community displays and children's education sessions all about 'The Amazing Mound-building Malleefowl'.

Most people have never seen a Malleefowl and we are fortunate enough to have taxidermy specimens of both an adult Malleefowl bird and Malleefowl chick to display, as well as their predator, the fox to complete the story.

As well as setting up static displays at community libraries to educate the wider community, we have been getting out to schools to teach kids all about Malleefowl and making learning fun through stories, games, and craft activities.

Children listen intently when we read the children's story book 'Malleefowl the Incubator Bird' by Pauline Reilly. Most kids are stunned to find out that once hatched, Malleefowl chicks receive no parental care and have to survive on their own evading foxes and feral cats.

LEARNING THROUGH PLAY

Children have fun playing 'the habitat game' an adaptation of musical chairs that demonstrates what happens when there is no habitat left for Malleefowl to live in. With only two in 100 chicks surviving to adulthood in the wild, the music track for the game is quite aptly 'Staying Alive' by the Bee Gees!

To conclude the education sessions, we get children to think about everything a Malleefowl needs to survive and breed, then guide them in a craft activity creating a Malleefowl habitat in glue-less collage so they have something they can take home to show their families and share what they have learnt.

It's been great to see the enthusiasm children have for learning about Malleefowl and now they know what they look like and how special they are, we hope one day they are lucky enough to spot a Malleefowl bird or discover one of their amazing mounds in the wild.

NEW MEMBER OF NMR TEAM

ROSS MACFARLANE, VMRG

Ross Macfarlane has a long history with Malleefowl going back to his childhood with the Mid-Murray Field Naturalists and living on a farm 10 kilometres south of Wandown Flora & Fauna Reserve.

He has been involved with the Victorian Malleefowl Recovery Group since its inception, attending every VMRG training weekend but one since 1999 (and still upset about missing that one!).

He is a long-time VMRG Committee member, including stints as Vice-President and Secretary, and has been VMRG Safety Officer since 2002.

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