

NEWSLETTER OF THE NATIONAL MALLEEFOWL RECOVERY TEAM SPRING 2015 EDITION EIGHT

NATIONAL MALLEEFOWL RECOVERY TEAM

BY JOE BENSHEMESH, NMRT MEMBER



It's early October and 35deg outside. In Victoria and South Australia it's apparently the hottest it's been this early in October since records began. Scores of wildfires are already breaking out in the dry conditions and the 'Godzilla El Nino' we were warned about seems to be settling in. And we're not even half way through spring! The forecast for the rest of spring and summer is hot and dry and at times extreme.

It's all a bit foreboding, and the outlook for Malleefowl is bad. For them the prognosis is food shortage, dangerous temperatures, and increased fire. It probably also means increased predation and death for young and old. In the east at least, it seems likely that Malleefowl will take a hard knock this season.

We can't do much in the short term about the weather, but we can at least gain a better understanding of how populations respond to such dire conditions, and gain some idea of their resilience. This is important because the climate is changing and the extreme conditions we are currently experiencing are predicted to become more usual than unusual. We really need to know how best to

help Malleefowl under such circumstances.

Thankfully, hundreds of fabulous people across the continent monitor Malleefowl breeding numbers each and every year, and by doing so, are enabling us to evaluate the resilience of Malleefowl to these conditions. Indeed, as our national coordinator Tim Burnard reports in this edition (pg 2), the monitoring system is growing rapidly as more people become interested in monitoring; Tim's Tour has included all four states where he has helped local coordinators organise lots of training days and galvanise interest.

Graeme Tonkin, Peter Stokie, myself and others have joined Tim (and Donna) for various legs of the tour, and it's been inspiring: different groups across the country are of course at different stages, but the data coming in is excellent and just what we need to measure the response of Malleefowl populations to the challenges that face them.

Understanding how we can best help Malleefowl is what the Adaptive Management (AM) program is all about, and Cindy Hauser of the AM team (pg 3) outlines the progress they have made in obtaining collaboration with land management agencies across the country in their ambitious experiment that seeks to understand the importance of reducing foxes and cats for Malleefowl conservation. As Michelle Drew and Ashley Millar point out (pg 4), cats are especially worrisome because they are hard to control, but new baits and federal funding provide great hope.

Continued on page 2

ON OUR TRAVELS

BY MADELON LANE & TREVOR PRESTON



We have been lucky to see Malleefowl at Peebinga and Karte Conservation Parks in SA in September 2015. At Peebinga a pair is busy with an active nest and it was fascinating to document the change in the nest: before, immediately after rain, and another two days later. A lot of sand gets shifted!

I am priveleged in that my first sighting of a Malleefowl was having it fly past me, with its soft dusky calls. Then we found that as long as we kept a respectful distance they were not fussed by us following them for a bit. The colours and patterns are magic. It is scary to see foxes around them. I hope the authorities take fox control seriously and have baiting planned very soon for Peebinga.

We were very disappointed to see evidence of a Malleefowl killed by a fox in Murray Sunset National Park, Victoria, with Malleefowl feathers scattered around a nest. These birds were up against it, with over a dozen goats camped on their dune, and numerous fox scats and prints about.



MONITOR TRAINING ACROSS AUSTRALIA

BY TIM BURNARD, NATIONAL MALLEEFOWL COORDINATOR



THE GROUP IN KALGOORLIE. THE MOUND WE WERE ON IS 10.2M DIAM AND 1.2M HIGH AND MOSTLY GRAVEL AND ROCKS PHOTO - TIM BURNARD

I'm sitting in Norseman (WA) Caravan Park as I write this. Joe Benshemesh is in the cabin next door. We have just finished a weekend in Kalgoorlie which was just the first of eleven Malleefowl monitor training sessions happening across Australia this September and October.

This is a very encouraging development from just two sessions in 2013, and four in 2014. The sessions will be taking place in Kalgoorlie, Norseman, Merredin, Dalwallinu (WA); Wyperfeld (Vic); Scotia, West Wyalong, Dubbo (NSW); Murray Bridge, Lock and Secret Rocks/Eyre Peninsula (SA).

The sessions are initially aimed at ensuring that we all do monitoring in the same way no matter which state we live in. But there's another reason for these sessions too: to satisfy the need for more people to help us monitor new sites generated by the Adaptive Management (AM) project. We currently monitor about 120 sites across all states. The AM project might result in about 30 more sites. That's a significant increase in mounds to be monitored each year (say about an extra 1000 mounds).

It is likely that some of these sites will not be able to use the new technologies for locating mounds so ground searches will be needed. That's another big effort that is often undertaken by Malleefowl lovers.

Clearly there's a need to attract more people to the Malleefowl family and train them in the National Monitoring methods. So that means it's time to hit the road!

Kalgoorlie was a very good example are good. of the AM project in progress. Cliffs Resources have an operation at

Mount Jackson (WA) where they monitor about 200 mounds on land they manage. Cliffs have agreed to take part in the AM project and will report on both Malleefowl activity and predator activity. What we needed was a nearby site of more than 10,000 ha where no fox control was being done. Fortunately the Kalgoorlie DPaW office has just such a site at the nearby Mount Manning Conservation Park.

Just having the site isn't enough though. First the new site needs to be searched to identify all of the existing mounds. DPaW used the new technology, 'photogrammetry' to find 83 suspected mounds. Next step is to check these to make sure they really are Malleefowl mounds and then start the annual monitoring process. This task has fallen largely on DPaW Officer Jennifer Jackson...a big ask indeed!

The Kalgoorlie training weekend looks to have solved the problem for Jennifer. There were 15 people, mostly from the Kalgoorlie Field Nat's Club, learning how to monitor Malleefowl mounds. I was particularly taken by the huge mound we monitored...over 10 m diameter, apparently not unusual in this region. By Sunday afternoon there were plenty of people volunteering to help Jennifer to ground-truth the 83 mounds and be involved in the monitoring.

There are still a lot more sites involved in the AM Project that will need more volunteer support but if the experience we had at Kalgoorlie is anything to go by, the prospects

Contnued from page 1 NMRT by Joe Benshemesh

On page 5, we hear from David Kellett about Malleefowl in a small remnant of private land near West Wyalong (NSW), and the enthusiasm of landholders to keep the populations viable. While some may argue that small and isolated populations are doomed and not worth bothering about, I don't think this is the position of many on the recovery team. Many of us consider these fragmented populations to be important, and as Malleefowl have been shown to be remarkably tough survivors in these situations, it makes sense to do what we can to maintain them wherever they occur (economic constraints notwithstanding).

Elsewhere in this edition we have reports from Nanya (NSW; pg 7), the Yongernow Malleefowl Centre (WA; pg 8), an intriguing account of a juvenile Malleefowl hobnobbing with adults (pg 5; attracted to the adults or mound?), and some wonderful cross-cultural awareness-raising among kids at Lock (SA; pg 6) that's sure to bring a smile. Lastly in this edition, David Roshier, a relatively new member on the recovery team, tells us a bit about himself; with over a million hectares under his management and many and varied research interests it's a wonder that he is able to keep his head above water (but he clearly does).

In the past six months there have been some changes to the recovery team: Sally Cail has retired and David Kellett has joined. Sally has been a Malleefowl stalwart for over two decades and we are sure she will continue to make her contribution in retirement. We wish her the very best and thank her for her efforts on the recovery team. And we welcome David, who also provided the article on page 8.

Finally, it was with great sadness we learnt of the passing of Alan Dennings, Susanne's husband and Malleefowl stalwart to be sure. Alan and Susanne were the heart, brains and soul of the MPG (now Nest Egg Foundation) and won over a huge number of people through their tireless efforts in raising awareness and organising surveys, monitoring, baiting, and revegetation. Alan was a great supporter of science and collective effort, and I hope he was very proud of how the movement he helped start has grown.

ADAPTIVE MANAGEMENT WORKSHOPS

CINDY HAUSER, UNIVERSITY OF MELBOURNE



PERTH WORKSHOP PARTICIPANTS

The Malleefowl adaptive management team is embarking on an ambitious landscape-scale experiment to help understand the role of foxes and cats in Malleefowl conservation. While we know that they take Malleefowl eggs, juveniles and occasionally even adult birds, is this predation a key threat to Malleefowl persistence? And furthermore, is baiting an effective tool for mitigating any impacts that predators may have on Malleefowl?

Our approach is to speak to land managers across Australia who are monitoring Malleefowl populations. In Western Australia, they include mining companies, the Department of Parks and Wildlife, an Indigenous Protected Area and NGOs like Bush Heritage Australia and the Australian Wildlife Conservancy (see map below).

We're finding out who is baiting, who isn't, and what sites are sufficiently similar to be compared. José Lahoz-Monfort's initial analysis of historical Malleefowl data suggests that we'd need at least ten site-pairs monitored over at least 5 years to pick up a plausible difference in Malleefowl

breeding between baited and unbaited locations. A workshop setting allowed us to get to know the specific sites, their management contexts and their Malleefowl populations better; working out what kind of monitoring is feasible and potential barriers for inclusion.

A week after our Perth workshop, we moved on to Mildura to meet land managers spanning New South Wales, Victoria and South Australia and representing NSW's Office of Environment and Heritage, ParksNSW, the Western Local Land Services, ParksVictoria, SA's Department of Environment, Water and Natural Resources, Federation University, the Australian Wildlife Conservancy, the Victorian Malleefowl Recovery Group and private properties. There were many more people and sites to get to know. We also had some important conversations about predator monitoring - how can we develop reliable indicators of fox and cat density, activity or predation? Rosanna van Hespen's research project will offer important new insights into the capacity of motiontriggered cameras for detecting differences in fox activity across sites, with potential to transfer her approach to cats as well.

Armed with all this new information, we can also refine José's original power analysis to reflect the unique characteristics of each monitored Malleefowl site. We'll be working on ways to analyse data as they come in over the years, and new modules for the National Malleefowl Database to share what we learn with the Malleefowl conservation community. We're grateful that so many of its members are sharing their knowledge with us and entertaining the possibilities offered by this major collaborative project.



POTENTIAL WA SITES

MILDURA WORKSHOP PARTICIPANTS



MANAGING FERAL CATS IN WA

BY MICHELLE DREW AND ASHLEY MILLAR



The European red fox (Vulpes vulpes) and the feral cat (Felis catus) have been implicated in the extinction of at least 22 mammal species native to Australia. These predators have also been considered partially responsible for declines in numerous native bird species including the Malleefowl. Predation of native fauna by feral cats and foxes is now listed as a Threatening Process under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 (DEWHA 2008) and reducing their impact on native fauna is considered essential to fauna conservation in Australia.

The Western Australian Department of Parks and Wildlife's Western Shield program has been baiting foxes since 1996. To date the program has had significant success in the control of foxes and the program now covers over 3.8 million hectares of Western Australia's native forests and bushland extending from Esperance to Karratha. The program's success relies heavily on the tolerance of many of Western Australia's native fauna to the naturally occurring poison 1080, a characteristic largely unique to Western Australia's fauna. This poison is naturally found in native plant species belonging to the Gastrolobium genus. As much of our native fauna naturally eat these plants, or animals that consume these plants, Western Australia's native fauna have developed a high tolerance to the toxin and can consume baits containing the toxin with no side effects. In contrast foxes and feral cats have little or no tolerance to 1080. Most foxes will readily take dried meat baits containing the poison, enabling the control of fox numbers in large areas of the state. However cats in general tend to be fussy and will rarely take the baits currently used for fox control.

In response to increasing feral cat numbers and recent declines in some native species most likely as a consequence of cat predation, the Department of Parks and Wildlife (DPaW) have developed a cat-specific bait, Eradicat®. The bait is composed of kangaroo meat, chicken fat, flavour

enhancers and 1080, and unlike Probait®, Eradicat® is only partially dried, resulting in a bait that is far more palatable to cats. Preliminary field trials have revealed significant and sustained cat control success using Eradicat® at the landscape scale in arid environments (Algar, et al. Conservation Science Western Australia 8:367-381).

Further work is required to trial the efficacy of the bait in other regions, particularly the south west. The moist Eradicat® bait is far less stable compared to Probait® once in the field, Chairperson therefore the baits must be deployed Sharon Gillam during dry cool weather conditions and when bait uptake by cats is likely 08 8463 6927 to be optimum (i.e. when few alternative food sources are available). Coordinator Bait application must therefore be carefully timed to ensure optimum control.

The federal government recently announced that it will provide DPaW with \$1.7 million to expand the current Gil Hopkins feral cat abatement under Western Shield and to run trials to determine the most effective application of the bait in conjunction with usual fox baiting. Trial sites include Kalbarri NP, Dryandra, the Upper Warren, and south coast sites like Fitzgerald River NP. Malleefowl occur at a number of the trial sites and are anticipated to benefit from the expanded feral cat baiting. The funding will also be used to monitor the efficacy of the baiting program in different bioregions and to or from the National database at enable the translocation of some key fauna species to areas where they were formally found as well as boost existing wild populations. For more information contact Mr Ashley Millar (Coordinator) ashley.millar@dpaw.wa.gov.au or Dr Michelle Drew (Zoologist) michelle.drew@dpaw.wa.gov



CONTACT US National Malleefowl Recovery Team

sharon.gillam@sa.gov.au

Tim Burnard tim.burnard@birdlife.org.au 03 5581 2205

Editor

giliz@activ8.net.au 03 5383 8207

Submissions for Edition Nine of Around the Mounds close on Friday 18/3/16.

For editing, articles are best sent by email as attached documents with photos also as attachments.

This Newsletter is available in colour at www.nationalmalleefowl.com.au http://database.malleefowlvictoria.org.a u/Start.aspx (copy/paste this link),

Other important websites for news, information and photos include www.malleefowlvictoria.org.au www.malleefowl.com.au www.malleefowl.net.au



PHOTO - STEVE TOOLE FRADICAT® BAIT

WEST WYALONG MALLEEFOWL

BY DAVID KELLETT, RIVERINA LOCAL LAND SERVICES OFFICER



As I am a new member I thought I would write a report to inform the team of what has been happening in the West Wyalong area over the past twelve months or so and a brief description of past studies and works.

So where is West Wyalong? It is approximately 500km due west from Sydney, a small farming community with a population of around 3000 people.

Similar to most areas of Australia, the only remaining Malleefowl habitat that has been left is due to the soil being quite stony and not suitable for cropping, and is quite fragmented. In the late 80's and 90's there was a large study conducted 40km west of West Wyalong by Priddel and Wheeler which saw the breeding population drop from 32 breeding

adults to 14 and the population of Malleefowl in this area was predicted to become extinct by 2008.

In 2010 we saw some aerial surveys carried out in the area with three active mounds being identified and local landholders more than willing to assist in further research. Then in 2014 Riverina Local Land Services (RLLS) employed the expertise of Donato Environmental Services (DES) to set up monitoring cameras to gather data for the area and to produce a Management Plan to sustain/increase the local Malleefowl population. RLLS held free 1080 training and handed out approximately 1400 baits in attempt to slow down the fox population and an area close to 20,000ha is currently covered in the baiting program.

Over the past couple of months I have been notified by two separate landholders that they each had found new mounds being worked on their properties.





DK SETTING UP A CAMERA AT A NEWLY LOCATED **ACTIVE MOUND NEAR ALLEENA**

As soon as the rain stopped and I had approval from the landholders I headed out to confirm the sightings. DES has kindly sent 15 monitoring cameras to continue gathering data. Unfortunately I haven't been able to deploy all cameras into the field due to some very good rainfall and landholders requesting not to enter their properties.

I currently have ten very eager landholders (and myself) awaiting Tim Burnard to conduct his training in October. I have also just finished drafting a Malleefowl Project Plan for the Riverina area that will be seeking landholders' expressions of interest in fencing off remnant vegetation, revegetating new areas, monitoring and fox baiting programs. The aim of the project is to identify possible new mound locations throughout the region that might require future onground works and funding.

INTERESTING PHOTO OF MALLEEFOWL IN SA MURRAY MALLEE BY CRAIG GILLESPIE (DEWNR)

One of the most important questions regarding megapode population studies is "When do chicks move from anti-social to pro-social behaviour?" (Jones 1999). Some social interaction among Australian Brushturkey chicks up to six months old has been documented (Göth 2001; Goth and Vogel 2002) but little is known about the dispersal and behaviour of young Malleefowl (van der Waag 2007). van der Waag's study reported interactions between juvenile birds released into remnant vegetation and radio-tracked but it is generally understood that there is no interaction between young birds and adults. This makes this photo from Henry Short quite a valuable and interesting one.

Henry has captured several images of chicks emerging from the mound on his property near Waikerie in the Riverland, SA, but this is the first one he has seen showing what appears to be a juvenile bird interacting with adults. Henry's cameras were provided by the Murray Mallee Local Action Planning Association with funding from the Australian Govt.

The list of references is available from the editor.



Stealth Cam 03-30-2015 08:57:02 060 F

> **EXPANDED SECTION FROM** PHOTO ABOVE





ORIGINAL SENSOR CAMERA PHOTO

YOUNG MALLEEFOWL HEROES IN LOCK

BY OLLANTA LIPCER, NRM OFFICER, SA

Students in the small Eyre Peninsula town of Lock have been working to monitor the endangered Malleefowl and learning some Pitjantjatjara language along the way.

Nestled among farming land and large tracts of intact Mallee bushland and with a population of just 300, Lock is home to a dedicated group of local volunteers and students who are working together to keep a close watch on their local Malleefowl populations.

Eyre Peninsula Natural Resources Officer Ollanta Lipcer said the students investigated the condition of the Malleefowl habitats by checking for the presence of predators and monitoring mound activity.

"Leading the students and Natural Resources Eyre Peninsula staff are local farmers and long-term volunteers Daryl Dolphin, Phil Ware, Mark Reynolds and Kane Reynolds," Ms Lipcer said.

"Their wealth of local knowledge and experience has helped maintain an ongoing monitoring program in this remote area."

"This year, to assist with their monitoring, the students borrowed the Anangu Oak Valley Land Management team's CyberTracker program in the Pitjantjatjara language. This program is used by the land management team to monitor the Malleefowl on their country, across the Great Victoria Desert."

"So, while tracking through their local Mallee country, the students also learned some Pitjantjatjara language and got a broader picture of all the types of people who help with the Malleefowl conservation effort in South Australia."

"The students and local volunteers are an inspiring force for Malleefowl conservation on the Eyre Peninsula. Their experience, knowledge, time and support are invaluable to the monitoring program."

"Malleefowl are the most interesting creatures I've ever seen. We helped the Malleefowl by checking their mounds," said student Darcy Goldfinch.

"I appreciate the work done by Ollanta and Liz to inform my students on the ways that they can help the Malleefowl of our district. The students have learnt so much about the habits of the birds and have a keen interest in spreading the word about how to help them survive" said Yr 4/5/6 teacher Alana Adams

"We helped the Malleefowl by tracking down mounds and looking for any sightings for foxes. Mounds are quite large and measured in really cool ways," said student Cody Siebert.

More words from the year 4/5/6s

"We helped the Malleefowl by looking after their habitat. Thank you Malleefowl, for being an amazing species that I have enjoyed working on." **Aaron Siebert**

"We learnt that Malleefowl are amazing." **Jonte Durdin**

"The whole class now know a lot about Malleefowl. We helped the Malleefowl by monitoring their lovely mounds." **Nicholas Pearce**

"Malleefowl are two-legged, mound making birds. We learnt some Pitjantjatjara words when we were talking about Malleefowl, like tjina means feet." **Dusty Wheare**

"Mounds are Malleefowl homes for their eggs. When the Malleefowl baby comes up, the mum and dad are nowhere to be seen." **Jed Siebert**

"The Malleefowl is the biggest mound builder in Australia. Malleefowl are very interesting birds to study."

Jack Pitt

"I had great fun learning about Malleefowl and so did my class. Mounds were active and good to look at because of the little pieces of shell around it." **Sam**

"We learnt how to measure mounds. Malleefowl are digging birds."

Thomas Proctor

"We helped Malleefowl by saving them from predators. We learnt how Malleefowl survive." **Montana Kay**

"I love Malleefowl and hope they keep on breeding. We learnt some Pitjantjatjara language, like 'malu' means kangaroo."

Fletcher Kammermann

"Malleefowl are very interesting and hard to find. There were many predators around our area."

Caleb Hancock

"Mounds are measured upwards and across. We helped the Malleefowl by trying to keep them safe."

Jaidyn Beard



CHASING THE MALLEEFOWL AT NANYA STATION, NSW

BY RALH PATFORD, VMRG ORGANISER



Quoting from Federation University's own website

"Nanya Station is a magnificent 40,000 hectare property in far western New South Wales. Its unique system of natural salt lakes, old growth Mallee, and variety of intact ecosystems, makes Nanya a significant refuge for biological diversity.

The University has been the proud custodian of Nanya since 2004, and values Nanya as an important resource in our research, conservation and education programs. Our staff and students are committed to creating a research community to preserve and enrich the biodiversity of this important legacy of the University and the nation."

Earlier this year a number of members from the VMRG took part in an activity aimed, in part, at getting some idea of the Malleefowl population at Nanya. The activity was a joint activity with the VMLCG (Victorian Mobile Landcare Group), an organisation that the VMRG had worked successfully with on a number of previous occasions.

Nanya shares its western boundary with Scotia Sanctuary, an Australian Wildlife Conservancy property. The VMRG searched for Malleefowl at Scotia several years ago.

Initially, whilst the VMLCG went about doing some important maintenance work at the property, the VMRG concentrated on the Malleefowl population. Towards the end of the weeklong event, there was considerable working together and there was certainly a good deal of bonhomie in the evenings.

Armed with coordinates provided by the good Dr. Joe, a line search was conducted over a typical 2km x 2km patch of scrub land. The country was reasonably open and walking in line was relatively easy, despite an



GETTING READY FOR A LINE SEARCH

estimated 70% Triodia coverage. Unfortunately only two mounds were found, neither of them active, but showing signs of having been worked in the past few years.

With the wisdom of hindsight, line searches in other pockets of scrub may have produced better results. but, nonetheless, whatever the results, the data is always valuable.

After completing the line search the emphasis was on visiting a significant number of GPS spots which had been identified by the staff at Nanya as being potential mound sites. Whilst quite a few of these spots were identified as probably being waypoints for staff returning to vehicles, there were a number of mounds found thoughout the property.

The information gathered has certainly added greatly to the paucity of data available for mounds in this remote area of New South Wales and the intention is to add Nanya into the regular annual monitoring program, thus providing additional valuable data for the National Database.

Despite the disappointment in not finding any active mounds or sighting

any birds, we were heartened by a report of two birds seen strolling in the vicinity of the homestead. These birds were seen by a couple of artists who were with a small group putting together a cultural presentation, and who were working at the property when our groups first arrived. The 'marriage' of the natural environment with artistic innovation, whilst not knew, is an interesting aspect to the activities at Nanya.

The visit to the property was enhanced by the opportunity to explore the wide diversity of ecosystems and the 'home' paddock, full of heritage farm buildings and old, rusting equipment, a relic of Nanya's earlier life as a pastoral lease. The area had a relatively short grazing history and, due to the presence of large areas of Mallee with a Triodia understorey and restricted water supplies, stocking rates were low. Consequently, the damage caused to the environment was relatively low.

All in all, a very enjoyable, interesting and productive activity, and a further opportunity to work with the multitalented and friendly members of the VMLCG.



HERITAGE RELICS

YONGERGNOW NEWS, WA

BY VICKY BILNEY

Yongergnow Australian Malleefowl

Centre in Ongerup is a community owned and operated centre for community, culture and conservation with special focus on conservation of the Mallee and its endangered flagship species, the magnificent Malleefowl.

Yongergnow is open Monday-Thursday 9am to 4pm, and Saturday and Sunday 10am to 4pm.

We're closed on Tuesdays and Fridays as well as on Christmas (24th-26th December) and New Year's Day (1st January).

Contact 08 9828 2325 or visitor@yongergnow.com.au

North Ongerup Malleefowl Corridor bird surveys

Yongergnow has taken on the North Ongerup Malleefowl Corridor bird surveys, which are held twice annually in spring and autumn. A 20 minute 2ha bird survey is conducted at every one of the eleven sites of the corridor.

The Corridor was established by the then Malleefowl Preservation Group in the late 1990s to enable Malleefowl chick dispersal from remnant island habitat sites between the Mindarabin Aboriginal Reserve and Lake Magenta Nature Reserve, spanning approximately 63km.

Surveys in the corridor have been conducted for over 16 years, and a special thank you must go to BirdLife WA volunteers Rod Smith and Joyce Hegney, who conducted most of these surveys. Rod also submitted the survey data to the Atlas of Australian Birds and compiled an impressive Access database of the survey results. This database is available for



scientific projects - please contact us on visitor@yongergnow.com.au.

Yongergnow is grateful to the volunteers who have so far helped with the surveys, namely Susanne Dennings, Geoff Lodge and Tracy Calvert (photo below) and to the South Coast NRM for their ongoing support.

News from Yongergnow's Malleefowl Our Malleefowl Rhea and Happy (above) are very busy working on their mound! They started building it last year, but Rhea didn't lay any eggs. This year, their effort looks much more professional, and we look forward to finding out if we will have any offspring this season!



NATIONAL MALLEEFOWL RECOVERY TEAM MEMBER



DAVID ROSHIER

I am regional ecologist for seven conservation reserves owned and managed by the Australian Wildlife Conservancy (Scotia, Kalamurina, Buckaringa, Yookamurra, Dakalanta, Newhaven and North Head

Sanctuaries). These sanctuaries cover 1.016.000 ha in the semi-arid woodlands and desert regions of southern and Central Australia. I manage all research and conservation undertaken in these sanctuaries. The main focus is control of key threatening processes such as feral predators, feral herbivores and wildfire, and the re-introduction of regionally extinct fauna. At Scotia and elsewhere AWC protect stable populations of Malleefowl, including inside the largest predator-free fenced Papua New Guinea. See area in Australia.

Previously I've worked in academia, agriculture and conservation in Australia, Africa and the Middle East.

My research interests are the movement ecology of birds, migratory connectivity in bird populations and the role of avian vectors in the transmission of zoonotic diseases. I'm primarily interested in spatial processes in populations and ecosystems, particularly patterns of distribution, movement and dispersal. This research has been conducted across diverse landscapes such as deserts of inland Australia and the floodplains of the tropical north and https://www.researchgate.net/profil e/David Roshier





