

Lowan Behold!

Newsletter of

Victorian Malleefowl Recovery Group Inc.

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July 2013

Coming VMRG 2013 events

- Training w/e Wyperfeld NP October 12-13

AGM at Wyperfeld weekend

- Monitoring October – January

- Summer newsletter

See www.malleefowlvictoria.org.au

or contact our Secretary Ross Macfarlane (see above)



Reporting Back Meeting, March, Ouyen

by Gil Hopkins

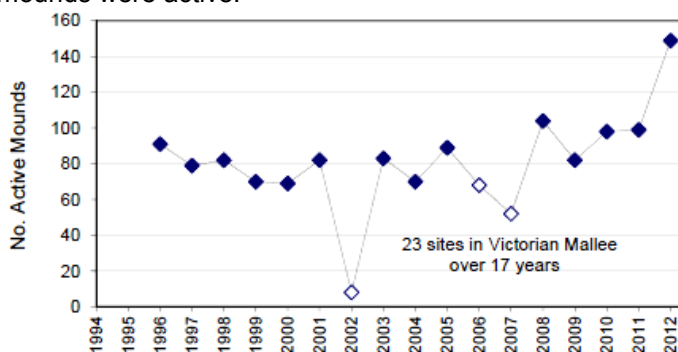
Signs The day started by unveiling a new Malleefowl interpretive sign at the rest-stop in the centre of Ouyen. Ralph Patford organised funding, design (together with ParksVic) and construction of ten signs and it was a great opportunity for the Ouyen sign to be unveiled by Peter Stokie and Ranger Kathryn Schneider (photo above by Maria Riedl).

Joe Benshemesh then discussed the importance of Malleefowl in the Ouyen area, their life-cycle and habitat, and the increased numbers of Malleefowl seen on roadsides nearby. Local people who attended the unveiling were invited for lunch and to attend the Reporting Back meeting afterward.



Local Ouyen people show hands at the start of the meeting!

Monitoring - Joe Benshemesh described the monitoring process for newcomers and handed out the Monitoring Report, which is now available on the VMRG website. Highlights include:- a marked increase in Malleefowl breeding and chicks this season (highest since monitoring of multiple sites); nearly 99% of site mounds monitored; one 5-year mound was active; 3 new sites established and 'Wathe Burnt' renamed 'Wisemans'; 3 'old' sites returned to annual monitoring due to finding active nests; 218 out of 1288 mounds were active.



Joe said "2012 proved to be an exceptional season for Malleefowl breeding numbers... There seems little doubt that the dry conditions from mid-1990s to 2009 suppressed breeding, and the above average rainfall since has benefitted Malleefowl. Most likely, breaking the extended drought led to a surge in the recruitment of chicks into the adult population and we are now seeing the results of this in the breeding population... Another factor may be that several sites that were burnt in 1980s and 1990s have recovered... Rainfall and fire appear to be the main drivers behind Malleefowl population trends."

Smart phones may be useful for future monitoring.

Lerp were more common, recorded at 8% of mounds

Fox scats – "there is a clear and increasing trend suggesting that fox numbers are on the rise". *Monitors are reminded to systematically search each mound for a full minute and collect all fox scats, as described in the manual and in training.*

Fire management - Joe said "Malleefowl have clearly demonstrated that they have the resilience to make a comeback when conditions are favourable... But we should not be complacent: the climate is known to be changing and fire management in the Mallee has become a controversial and political issue in which state-wide burn quotas are given priority over ecological requirements of species... We can and should object to the scant regard politicians are giving to the ecology of our natural habitats in the Mallee... Current burn quotas in the Mallee are politically driven, unsustainable and if implemented, would pose the greatest risk to Malleefowl conservation (and a large number of other species) since the clearing of the last century. Please discuss this issue with your local member".

Questions were asked about EPBC Act and the status of Malleefowl as vulnerable and so protected by the Act, which should include planned burning regimes; about whether increase in goats in Parks was affecting Malleefowl; and if VMRG monitors too early in the breeding season.

Monitoring process – Peter Stokie listed ‘What worked’ as Training and mentoring; excellent relationship between ParksVic and VMRG; the safety contact system; posting; and taking children along! ‘What didn’t work’ was one datalogger failed so we should always use cameras as well as MobileMappers for photographs, and its better to use a GPS rather than the MobileMapper to get to each mound as they correct direction more often.



National Malleefowl Database – Joe Benshemesh encouraged all monitors to use the database, which includes all photos. He described how the data is checked, updated and analysed annually, and went through the process. You can access the database from the websites

database.malleefowlvictoria.org.au/Start.aspx or www.malleefowlvictoria.org.au and if you have forgotten your password use the system provided there.

Motion camera at Wathe Reserve – Ron Wiseman showed photographs from the cameras including birds working, foxes visiting and taking eggs with Malleefowl present, and chicks ‘hatching’ from the mounds (also see February 2013 edition accessible from VMRG website – Ed.).

Adaptive Management Research project

– Cindy Hauser discussed the workshop held in October 2012 to identify all the factors affecting Malleefowl numbers and the relationships between these factors. This results in a matrix or cobweb of links with positive or negative effects that all then have to be mathematically modelled and trialled (using the data and knowledge collected over many years and possibly extra experiments) in order to develop Adaptive Management recommendations, both general and also specific for different situations and conditions. (More information is included in Autumn 2013 edition of Around the Mounds available on VMRG website on the National Database page).



Malleefowl Habitat Mapping – Jose Lahoz-Monfort from the Adaptive Management Research team described how he has been mapping habitat suitable for Malleefowl to fulfil Action A12.1 of the Malleefowl Recovery Plan. The mapping process combined habitat characteristics with presence/absence records for Malleefowl.

Some of the questions that arose for Jose and Cindy were about the meaning of adaptive management; proposed use of adaptive management; effects of humans on landscape including landuse change, chemical use, fencing regulations, claying of sandy soils, harbour destruction, burning, and bait-laying using oats.

Malleefowl signs – Ralph Patford reported on the 10 signs that have been completed and erected across the Mallee, as shown on page 1 being unveiled. Another successful project!

Sensor cameras at Wandown – Joe Benshemesh described how cameras would be set up away from mounds to observe any Malleefowl movement (including young) and activity by any other creature. This project will increase our knowledge of normal behaviour and relationships for adaptive management programs; test the technology available for long-term records (one year of data/photos); provide initial data to set up a way of analysing the data/photos; and hopefully lead to system where cameras are used at many more monitoring sites.



Fire Operations Plans – Ross Macfarlane told us about the burns planned for areas with Malleefowl monitoring sites and VMRG responses to these plans (including the ability to meet on-site before burning). Our main concern is that old-growth Mallee is essential for Malleefowl breeding, and that Government targets of 5% burnt per year means all bush will be burnt within 20 years, especially as the target does not include wildfire.



Fortunately we have good relationships with DEPI/PV officers who are concerned to improve the amount of ‘long-unburnt’ Mallee while complying with their ‘orders’. (Peter Sandell reported last year that the percentage of ‘old’ bush in Mallee parks is actually increasing, even with the prescribed burning – Editor’s note). So we hope for the best while saying what we think!

Searching monitoring sites – Peter Stokie told us about Conservation Volunteers Australia achieving funds from the Iluka Malleefowl Offset Fund to search new monitoring sites (as described later in Peter Stokie’s ‘Tooan’ story).

Ouyen District Historical and Genealogical Centre –

Merle Pole told us about articles and slide photos in the Centre from Harold Buckingham who studied Malleefowl closely at Timbaroo (near Patchewollock) between 1965 and 1970. This is a great find, thanks to Merle.



Ron Wiseman has digitised the slides for VMRG archives, and the two Sunraysia Naturalists Research Trust reports (1969, 1970) are now on the VMRG website under ‘Early Literature’. A condensed version of ‘The Smallest Lowan’ with Harold’s relevant photos is on page 5.

Afterward – After the meeting some of us travelled out along the Ouyen-Patchewollock Rd to see if we could find any of the numerous Malleefowl that had been reported. Perhaps we were a bit early in the evening as we saw about 15 birds (unfortunately one recent road-kill). Another group that went out later saw about 30 birds. As reported in the February ‘Lowan Behold’ and the autumn ‘Around the Mounds’, these were probably young birds feeding from canola grain spilt from passing trucks on their way to silos.



Now you see it

Now you don't!

Reporting Back meeting Excursion

On Sunday we travelled out to the Iluka Offset block just south of the Annuello Flora and Fauna Reserve, northeast of Ouyen. Here Tony and Bev Bingley have been revegetating their property and since have built up a seed collection, supply and revegetation business. For offsets required due to clearing for mineral-sand mining, Iluka have revegetated an area and leased another revegetated area, all to be covenanted then managed for at least 10 years.

Travel was in 4WD due to deep sands. Along the firebreak we saw plenty of Malleefowl tracks and a couple of Malleefowl, as well as the remnants of a ‘mallee roller’ responsible for most of the clearing of the area. Clive Crouch showed us tracks of Hopping Mouse and Ningau (small marsupial carnivore) and a Jacky Lizard hiding in the Spinifex.



In the sun and sand on the edge of Annuello FFR



Cleared and uncleared Mallee



Tony Bingley amongst the healthy revegetation with VMRG members

Tony and Bev are to be congratulated on all the successful revegetation they have completed, especially given the long dry spell they started with. A Malleefowl monitoring grid will be established in the larger Iluka Offset block where there are old Malleefowl mounds, and also to see how soon Malleefowl re-establish in an area.

Ann Stokie – at the Reporting Back weekend we remembered Ann and her extremely important voluntary efforts for VMRG and Malleefowl, as described in the previous ‘Lowan Behold’ and ‘Around the Mounds’ newsletters.

Toon State Park reveals its Malleefowl

by Peter Stokie

Approximately three years ago the Victorian Malleefowl Recovery Group (VMRG) wrote to the Mt Arapiles-Toon State Park Advisory Committee seeking their advice and approval to establish a Malleefowl monitoring site in Toon State Park and add the data collected to the National Malleefowl Monitoring Database (NMMD) as part of national records held by the National Malleefowl Recovery Team.

The NMMD is a mechanism to record data about the breeding success of Malleefowl across Australia in established sites in all known Malleefowl habitat in WA, SA, Vic and NSW as part of a longitudinal study of Malleefowl as directed by the National Malleefowl Recovery Plan. It has been decided that bird sightings is not the best way to keep track of Malleefowl numbers but the preferred method is to count the number of active Malleefowl mounds in sites over a long period to assess variations in the breeding population. The National System of monitoring has a strict definition of an active mound as “a mound that in all likelihood contains eggs”. Mounds with fresh prints or fresh litter are not considered active, but are classified as mounds that show Malleefowl presence, but not breeding.

It is pleasing to know that the known mounds in Toon have been monitored during the breeding season for the past two years with some surprising results, and the VMRG, in association with CVA (Horsham) and Greening Australia (Wimmera) are now systematically undertaking a thorough ground search of 400 hectares of scattered Malleefowl habitat to establish an effective monitoring site.

I thought it was now appropriate to “tell the story” of Malleefowl as we know it from our monitoring so far.

2011

As soon as the Advisory Committee agreed to include Toon SP in the National program the VMRG contacted PV Ranger Peter Hawker who provided us with the GPS locations of eight known mounds and Jess Gardner and Gil Hopkins set out to find these locations to determine whether these were indeed Malleefowl mounds and then to collect data for the mounds. At the same time the mounds were allocated a distinct number and a stake and tagged number were placed immediately to the north of the mound. As the Toon site is the thirty-eighth Victorian site, **v38 Toon** is recorded for all collected data.

Thanks to the accuracy of Peter Hawker’s records all eight locations were found, and all were determined to be Malleefowl mounds with the exception of one that may have been the very old workings of echidnas. Two of the mounds were recorded as active (see photos below). In addition to the eight recorded mounds Jess and Gil located an additional mound 38_009 which showed signs of recent Malleefowl activity, though not active by the national definition.

v38_009



Mound 9 in Toon SP

Do you have any pictures of unusual Malleefowl mounds? Stories about Malleefowl? Or stories about ‘Malleefowl people’? Send them to Gil at giliz@activ8.net.au

‘Around the Mounds’ the Newsletter of the National Malleefowl Recovery Team is available from the VMRG website along with the National database.

2012

Following on from the November 2011 monitoring, Jess and Louise Shepherd visited all 9 mounds in November 2012. This time only one of the mounds was active. However one mound was well worked over by Malleefowl and had a decent supply of fresh leaf litter. Depending on conditions later in the season the birds may have laid eggs in this mound but if so only very few eggs would have been laid. It is clear that two breeding pairs are still present (even though only one pair was using a mound as an incubator in 2012).

However there were a few signs at other mounds in 2011 and 2012 to indicate that there may be a few more birds in the Park (eg v38_009 photo above).

Photographic Records

In 2011 and 2012 photos were taken of all mounds. The following photographs were taken of mounds #003 and #004 in 2011 and 2012.

v38_003_2011



Active and obvious Mf presence, with eggshell

v38_003_2012



Not active but really fresh litter. No egg laying occurring, but well on the way

v38_004_2011



Active and being dug out for egg laying

v38_004_2012



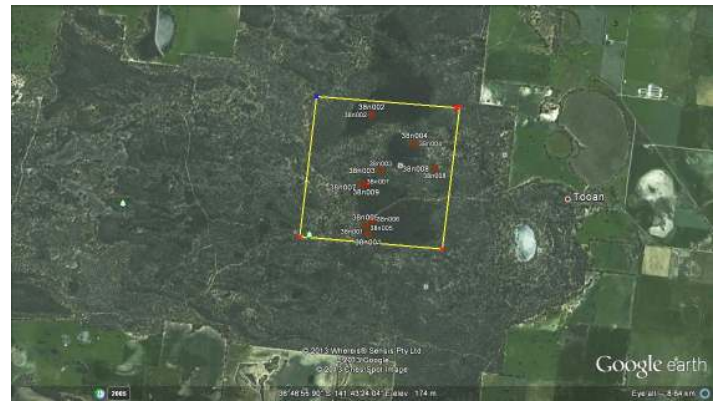
Active mound hilled up to contain heat for incubating eggs. Malleefowl scat, feathers and eggshell present

2013

Establishment of Full Site

The VMRG is keen to establish Toosan State Park as a regular monitoring site for several reasons. It is well documented that there has been a continuous presence of Malleefowl in Toosan for many, many years. There has been no systematic search to establish whether there are additional mounds in the area preferred by Malleefowl. Recent monitoring in other small reserves south of the Little Desert is providing a more detailed set of knowledge of Malleefowl in the Southern Wimmera, and Toosan is an important part of the bird's range.

Currently we have an incomplete set of data for Toosan whilst we visit the known randomly scattered mounds. The generally agreed size of a acceptable monitoring site for Malleefowl is 400 hectares. A site of 400 hectares, incorporating the existing mounds has been defined (see below), and the task now is to bring together search teams to walk the 400 hectares and record all new mounds for future monitoring.



Toosan State Park Map showing the search area and known mounds

On Monday 27th and Tuesday 28th May, Jess Gardner (GA), Peter Stokie (VMRG) and Jody Taberner (CVA) with CVA volunteers and two students from VCAL at Horsham College commenced the site search. The site is 2km x 2km situated either side of Mallee Hill Track and contains all 9 known mounds. The group started at the eastern edge of the track approximately one kilometre from the entrance to the park. We covered the first 300m of a 2km line and located two new mounds in this small space. One was very old, but the other was recently dug deeply in preparation for further nest development later in the season (see photo below).

This mound is a significant find as it is well away from existing known mounds. Hopefully the birds will continue on and our monitoring may reveal another breeding pair in Toosan.



Newly discovered mound south of Mallee Hill Track

The Future

Annual monitoring of known mounds will proceed for many years to come. The challenge is to complete the ground search of the site. Ground searches are very labour intensive but very good fun and rewarding if mounds are found. It may take one or two years to gather together enough search teams to finish the job but it will get finished.

The Mt Arapiles-Tooran SP Advisory Committee are discussing the possibility of a weekend search team. VMRG have some funds to cover some catering for a search team, so I hope this idea comes to fruition!

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The Smallest Lowans

by H. L. Buckingham, 1969

Compiled from Sunraysia Naturalist Research Trust report with Harold's photos by Gil Hopkins.



Harold observing a "Mallee Hen" at work on a mound

No matter how often seen, the emergence of a Lowan chick from the mound never fails to arouse the same recurrent sense of wonder. It springs not truly from the fascinating sight of a bird suddenly rising from beneath the quiet soil but from the awareness also that what one has just seen is not the beginning but the culmination of a "birth". The last act of an archaic drama, played out down below in the dark, sandy depths.

The mind follows its unseen progress; from the initial shattering of the deep-buried egg through the long and desperate struggle of the yet "unborn" fledgling as it fights its way upwards, hour after hour, to light and life. Surely the strangest and most ancient and mysterious way to become a bird! And particularly such a bird, a true creature of the sun, born from the buried warmth of its life-giving rays and destined to be its slave ever after in the secret, arid spaces of the sun-parched Mallee scrubs.

Perhaps the manner of their coming conditions the mood of the watcher. In the early morning sunlight the mound lies, a dome of lifeless sand in a small clear space. Except for the call of a distant bird the bush is still and silent; nothing stirs. Then, almost instantaneously, before the mind can quite comprehend it, one is looking into the wary eye of an alert little bird; up like a Jack-in-the-box from the red Mallee sand. Although there are other modes of emergence, this one is so common that it could be said to be the typical one.



A newly hatched chick in the centre of the mound



Malleefowl and chick

The hardiness of a Lowan chick and its inherent ability to survive, or the power of Nature's unconquerable urge to live, was seen very recently. A chick - the last of the season - was due to arrive on Sunday the 9th of February. The last seven of its 19 predecessors had emerged with regularity every sixth day but this one failed to appear.

On the previous afternoon rain had begun to fall - to be described later as "unprecedented", over 4 inches being registered in 24 hours. It rained steadily all through the night before and on the morning following. An examination of the mound showed that it was successfully shedding the downpours. A surface "skin" of about three-quarters of an inch was wet; below that the sand was warm and dry.

On the following morning, the 7th day, the male bird dug out the mound - a common practice on the day following rain. The egg was not uncovered. The interior of the mound was dry, except for one small area above the egg. Probing the wet sand to feel if the egg was still there, something moved beneath my fingers. From the unseen thing beneath the surface came a harsh but muffled croaking sound. Then, rather shockingly, a swaying lump of wet sand detached itself from the mass, wavering uncertainly from side to side. Encased in the adhering lump was the head of the chick - invisible. I lifted it out and laid it on the dry sand at the bottom of the crater (see photo on following page).



Let the notes, written at the mound-side, tell the story:-

"It lies on its back, legs feebly twitching, its wings spread fan-wise where they have fallen. They look naked, the shafts of the quills bare and blue and bony like a many-fingered skeleton hand. The skin of its body shows up in bald patches through the scanty down. Its legs cease to twitch and for a long time it lies motionless, the only sign of life being the barely perceptible trembling of the body. It is very weak and I wait for it to die.

Now it rolls over and lies still, head twisted beneath it, half-buried in the dry sand, eyes still unopened. It is drying in the warm air; the quills begin to lose their bony appearance, the filaments folded tightly around the shafts begin to unfurl. It sits up on its haunches like a dog, trembling violently, head drooping, eyes closed. It has fallen on its back, wings helplessly spread, body barely pulsating. The calling of the adult birds comes closer, the male bellowing, the hen whining shrilly in answer. They have been absent for three hours. As I lean low into the mound over the chick a gust of sand sprays us. The male is on the mound, half-inclined to fill it in. Perhaps he thinks the egg is still there. He takes no notice of the chick.

When the sand hit the chick it struggled momentarily before again collapsing. Two hours pass. It still lives. I touch it and an eye opens, looking at me steadily with the familiar brown wary eye I know so well. Sand grains still adhere to the eye-ball.

Another hour passes. It is very still, its scanty feathers occasionally lift as the body inflates in a long sigh. Ants crawl over it. It is dying – "

At this point I took it home, to give it a chance to live if that were possible.

What happened to it was obvious. The mounds in this "desert country" efficiently shed rain but, being built entirely of fine, hour-glass sand with no absorbent loam, there are always one or two points where percolation will occur, the water following a fortuitous line of entry and creating a slim pillar or pipe of wet sand down through the dry interior. One of these "pipes" had formed directly above the egg. The chick instead of finding dry sand above it after leaving the egg, encountered a cohering mass of wet sand which could not be displaced from above to below the chick as it tried to work upwards. For a day and a half it had been entombed alive, fighting endlessly, desperately and hopelessly.

At home I placed it in a high-sided carton and left it in a quiet room. An inspection of the sealed eye showed that the lower lid was distended with sand. Bathing gradually removed this and the eye functioned normally.



For two days the chick crouched in a corner of the carton. On the morning of the third day the box was empty. The chick was in a corner of the room and ran quite strongly when disturbed. Its feathers were smooth and normally arranged, showing no sign of its ordeal.

I took it back to the mound and set it free. Its behaviour was that of any other chick. It scratched a comfortable little hollow in the sand and sat in it, head upright and alert. It was not noticeably hungry, once or twice it scratched in the litter and picked up something. Three hours later it wandered away.

I watched it go; an indomitable, indestructible, incredible little bird: one of the smallest Lowans.



The recovered chick resting in the bush

See www.malleefowlvictoria.org.au for lots of Malleefowl photos and life-cycle information, VMRG details and past Newsletters. For enquiries contact our Secretary at secretary@malleefowlvictoria.org.au