

# Lowan Behold!

## Newsletter of

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## Winter 2011

### Coming VMRG 2011 events

- July 29+ National Forum, Renmark
- Training w/e, Wyperfeld NP October 8,9
- AGM at Wyperfeld, October 9
- Monitoring October – December
- Summer newsletter

See [www.malleefowlvictoria.org.au](http://www.malleefowlvictoria.org.au)  
or contact our Secretary Ann Stokie



### NATIONAL MALLEEFOWL FORUM

Renmark, South Australia  
29<sup>th</sup> July – 1<sup>st</sup> August 2011

The major themes of the Forum are:

- The role of community groups in Malleefowl conservation;
- Adaptive Management for arid zone ecosystem management;
- The role of genetics in Malleefowl conservation;
- The role of fire in Malleefowl conservation;
- Malleefowl and remnants; and
- Landscape-scale restoration projects

**See you there!**



*Listening to Dr Joe's report*

### Reporting Back meeting, April 30, Nhill

by Gil Hopkins

The full **2010/11 monitoring report** from Dr Joe Benshemesh is on our website but important points are

- Another extremely successful year of monitoring
- Astounding breeding with 150 active mounds
- Last 3 years breeding has been very good
- Areas of concern are Big Desert and Wyperfeld, Little Desert especially near Kiata
- Malleefowl numbers satisfactory given last twelve seasons, but climate change will increase risk
- Lerps are presently on the increase and will be important for survival of chicks
- We monitor active nests, not actual Malleefowl numbers, and nest activity varies more with changes in the weather

- The database is working well, with easier processes
- VMRG is now working on making the data collection process easier
- Monitors should check the information on the database against what they personally recorded and comment where necessary
- Monitors need to make appropriate notes at mounds

**Peter Stokie** (Equipment Officer) commented that MobileMappers only took 30sec to download all their information so were much less tedious, and that monitors could borrow Mappers for practice over winter

**Ralph Patford** (Website Coordinator) said that monitors could access the database through a link on the website

### Peter Sandell reported on the National Malleefowl Recovery Team

- The Team is unfunded, includes representatives from different States, works toward a National focus, and usually meets by telephone conference
- The main threats to Malleefowl include long-term changes and habitat loss
- NMRT support research and data collection to improve management, especially Adaptive Management
- People may have influence locally and on smaller reserves, but there is also need to protect large reserves from catastrophic events and detrimental practices as they are the core habitat of Malleefowl
- The increase in controlled burning targets in Victoria from 2% to 5% will have a major effect on Malleefowl through removal of habitat.  
*Representations to Govt need to be made*

**Ron Wiseman** and **Peter Stokie** told us that an agreement with Iluka and Govt agencies had been signed, and a committee formed (including VMRG), a charter is being finalised, giving \$100,000 per year for 7 years for conservation for endangered species (Iluka Fund). Funds so far allocated were \$30,000 for Adaptive Management research and application; \$15,000 to improve the National Malleefowl database; and \$21,000 for the National Malleefowl Forum.





### Habitat 141° Report from Ben Carr by Gil Hopkins

Ben described H141° as a 'landscape-scale project' to increase the amount of habitat and to improve the quality of the total habitat, from the "Outback to the Ocean", from Broken Hill area south through

Victoria and South Australia to Bass Strait, including public and private land. Ann Stokie said that Malleefowl were the only endangered species existing across the range of H141°, so it was important for VMRG to be involved.

Ben said had just started its final stages of formation with a Council, a Committee of Management, and membership, would work with present organisations that already involve landholders, and would seek funding for on-ground works. H141° is about helping and involving, about people working together on their local projects that together add up to landscape scale rehabilitation over the longer term. It is expected that carbon offsets will provide some of the funding.

**Summary**

Habitat 141 is a big and long term project

- Look out for opportunities to get involved
- <http://www.habitat141.org.au/>



Summary with website and camouflaged Malleefowl



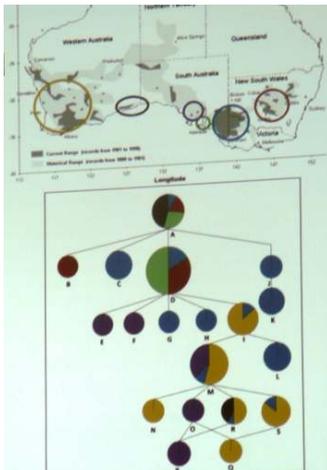
### Malleefowl Conservation Genetics from Taneal Cope by Gil Hopkins

Taneal has been examining cell material of Malleefowl samples from across Australia, including recent and museum specimens. She has analysed mitochondrial DNA from these

cell samples and matched different samples to conclude that are/have been about 17 different genetic types of Malleefowl (types A→Q), but these types don't vary much from each other, and types A→J share one

mutation.

Malleefowl originate millions of years ago in the Pleistocene period, only found in Australia, and over the history of changes in our continent developed into 2 main clusters – one in Western Australia and one in the south-east. These clusters share some genes and are probably not distinct groups. Maybe they developed from a small population that survived the last



Gene zones and relationships

glaciation and spread from there with the Mallee, possibly from Western Australia (though Victorians probably think they came from Victorian Mallee, maybe Wathe!).

So there is only one species, and not really subspecies or subpopulations of that species. So far the research shows there is no detectable population differentiation across Australia. Within populations there are local adaptations so birds from different populations shouldn't be mixed, especially from highly separated regions.

Taneal's next steps (which we will hear about in Renmark!) are to check the mating systems (matriarchal or patriarchal) by testing the DNA from feathers and chicks/egg remnants found at each nest; and also try to understand the landscape genetics – is there any evidence of genetic mix (gene flow) along 'corridors' between populations and bush fragments?

Again Taneal thanked all the volunteers who have been helping her gather the data and specimens in the field.

*Taneal was invited to submit a Poster Presentation at the 2011 Student Conference on Conservation Science at Cambridge University England in July, and she won First Prize in the Student Poster Section. Check out [www.sccs-cam.org/previous/prizewinners.htm](http://www.sccs-cam.org/previous/prizewinners.htm) and you see she was mobbed by participants who wanted to know more and more about Malleefowl.*

**VMRG Membership** - Information about renewals and new memberships by *Ralph Pattford, Treasurer* The VMRG Membership Year runs from November 1 to October 31.

The Annual Training Weekend (2<sup>nd</sup> weekend October at Wyperfeld) provides an opportunity for new members to join and existing members to renew. At other times members wishing to renew or new members should download a membership form from the VMRG website, complete this and forward it with payment to: Treasurer, VMRG, 5 Selma St., Corio. 3214.

The Annual Fee is currently set at:-

- \$20.00 for INDIVIDUAL membership
- \$30.00 for HOUSEHOLD membership

The preferred method for distribution of 'Lowan Behold', the VMRG Newsletter, is by email. In all likelihood, a fee of approx. \$10-\$15 will be charged for those wishing to receive a hardcopy in the mail – commencing after this year's AGM.

If you are unable to download a copy of the membership form from the website, forward payment and basic details to the above address and I will forward a receipt, together with a membership form for completion and return. New members will also receive a Membership Kit.

Please note that members who have not renewed by January 1st will receive one reminder notice only.

The VMRG website [www.malleefowlvictoria.org.au](http://www.malleefowlvictoria.org.au) is full of information on the work of the VMRG. The Constitution, which includes our Aims, can also be accessed.

Do you have any pictures of unusual Malleefowl mounds? Or stories about Malleefowl? Or stories about 'Malleefowl people'? Send them to Gil at [giliz@laharum.vic.au](mailto:giliz@laharum.vic.au)

## What happens to all those fox scats we collect? by Peter Sandell (Parks Victoria/VMRG)



Collection of fox scats from Malleefowl mounds by VMRG volunteers commenced in 1996/97 immediately following the arrival of RHD virus (calicivirus) in Mallee rabbit populations. It was feared at the time that a decline in rabbit abundance would make rabbits less available to foxes and hence cause them to prey more

heavily upon native fauna, including Malleefowl (so-called 'prey switching').

Over the subsequent 15 seasons approximately 6,500 fox scats (deposits) have been collected. To date, the contents of 4,500 of these scats have been analysed by Barb Triggs. Funding has recently been secured from the Iluka fund to have the contents of the remaining 2,000 scats analysed at a cost of \$19,000. Content analysis involves identification of mammal remains to species level by hair analysis. Other dietary items such as reptile, insect, plant material, egg shell, or feather are also recorded. The data are held in a Parks Victoria database and some interpretation has been completed in partnership with Joe Benshemesh.

The results of the scat contents analysis provide evidence of changes over time in the relative consumption of each dietary item by foxes, and evidence of geographic variation in fox diet. These changes may not equate to changes in the absolute consumption of prey items because fox abundance is likely to have also changed over time. The information gleaned from scat analysis can be complemented by other information such as relative fox abundance as measured by the frequency of occurrence of scats or prints on mounds.

### Lessons to date:

- The scat analyses suggest that foxes in remote areas are less dependent on rabbit as a food source than they are in areas close to farmland. Whilst the representation of rabbit in the diet of foxes close to farmland has increased since 1999/2000, it has declined in remote areas to the point where in 2004/05 no rabbit remains were detected in the 47 fox scats collected at remote grids.
- The presence of eggshell in fox scats was recorded from 1997/98 onwards. Joe analysed eggshell samples and determined that approx 90% were Malleefowl in origin. A separate study by Joe Benshemesh and Paul Burton found a high level of egg predation by foxes in the 3 years following the arrival of RHD virus. The evidence from scat contents analysis indicates that eggs were a relatively common dietary item for foxes post RHDV but have since declined in importance.
- The incidence of small mammal remains within fox scats has also declined, particularly after 2002/03. Since we don't have any data on the relative abundance of native small mammals for the collection areas, it is difficult to speculate on the reasons for this change in representation within fox scats.
- The evidence from fox scat analysis indicates that insects, carrion, reptiles, and even plant material (eg fruits) are all important components of fox diet in the Mallee. Reptiles are a more important dietary item in

remote areas, whereas carrion and plant material are better represented in scats collected close to farmland.

Once the contents of the scats collected in the past 4 years have been analysed, further interpretation of this important information will be undertaken by Joe and me. This data is also likely to be a key input for the adaptive management framework proposed for development by University of Melbourne. The VMRG volunteers have been instrumental in the collection of a valuable long-term dataset which can now start to inform our management.



*Into the desert – photo Bernie Fox*

## Little Desert Malleefowl Search Project

by Ralph Patford

Early in April fifty or so souls converged on the Kiata Camping Ground in the Little Desert National Park and set about completing the Malleefowl Search Project. It was 2 years after the first abortive attempt in April of 2009, and 19 months after a smaller group actually got a chance to begin the 'in-the-field' phase of the project.

As with our earlier attempts Mother Nature conspired against us. Two years ago the rain forced us to defer until the following September. And then, as was the case this year, it almost had the same effect. However, although the rain severely inhibited our ability to 'read' the tracks we continued on and, by and large, completed the project in a reasonably successful manner.

The search was all about getting a better handle on the distribution of the Malleefowl throughout this National Park. In that sense the project was a success, but more about that later. The search was also about piloting a different methodology, as the 'tried and true' line search so frequently used with great success was hardly likely to be practical on such a large scale – after all the Little Desert is 130,000 hectares!



*Instruction time – photo Ralph Patford*

So we adopted a sampling approach. With Joe Benshemesh's considerable input, we decided to try and drive almost all of the NP's 1,000 km of internal tracks and to closely scan 150 metres of each km for signs of Malleefowl. To maintain the scientific integrity of the data we paid particularly close attention to recording sightings, using a combination of photographs, GPS readings, electronic data recording and paper recording. Enough about the methodology in this article but should readers want to find out more a detailed report will be published, hopefully in the proceedings of the National Forum to be held in Renmark starting July 29.

Of more interest is the collaboration between VMRG and VMLCG (Victorian Mobile Landcare Group), an offshoot of the broader 4WD movement but now an incorporated body in their own right. This in itself gives a clear indication to the environmental credentials of this fine community group and, from my point of view I hope further joint ventures will take place in the future. Their willingness to provide 4WD vehicles and to participate in the data-gathering bodes well. Additionally, I think we all enjoyed the social interaction that took place - I certainly did.



*Enjoying the interaction and learning – photo Bernie Fox*

VMLCG also brought along a group of friendly senior students from Lalor Secondary College who, as part of their studies catered for us all with great breakfasts and a tasty BBQ evening meal. For many of these students it was also an introduction into both 'the bush' and the Malleefowl.



*Catering – photo Ralph*

They all took place in the search out in the field and seemed to enjoy themselves. Who knows, we may have sown the seeds for further involvement in VMRG. Certainly they all went away with greater awareness of the Malleefowl and its environment.

From my point of view the results were a mixed bag. From a methodology point of view the exercise showed quite clearly that the approach could be a useful tool in making preliminary assessments of large areas of potential Malleefowl habitat. We learnt a lot about the Little Desert in that regard, ie which areas can be ignored in the future and which areas are worthy of more detailed examination. From a Malleefowl distribution point of view the results were disappointing. The incidence of signs of Malleefowl was quite low overall, although there were a few patches with

potential for further analysis. All in all, an interesting and useful exercise.

Thanks to Doug Parke, Dave MacKinnon and other members of VMLCG, students from Lalor SC, Alan Braithwaite from PV, Ron Wiseman, Peter Stokie, Joe Benshemesh and members of VMRG.



### **Vale Stan Douglas** by Ann & Peter Stokie

Stan Douglas, a VMRG member for the past two years, died suddenly in late May. Stan joined VMRG on the weekend of the Wyperfeld 100 year celebration, and was an enthusiastic monitor and fantastic supporter of the VMRG not only for the past two years as a member, but for several years before he actually joined. Stan was part of the team from the Friends of Wyperfeld that helped establish the original Dattuck site in the mid 1990's. He often spoke to us about how inspiring and enjoyable it was to contribute to the establishment of this site.

Stan fell in love with the Dennyning Channel over the past two years of monitoring, and established a wonderful rapport and firm friendship with one of the long time custodians of the Dennyning Channel, Graeme Hannig. Last year, Stan monitored the Dennyning Channel with his wife Judy, and we will always cherish the above photo of them both monitoring one of the mounds along the channel.

Stan was also keen to develop a relationship between the SES and VMRG in our search efforts, and supported the Nhill SES when we searched the area in the vicinity of Broughton's Waterhole in 2007. He had great plans to extend the association between the two groups.

He was a bloke we admired tremendously.

### **Check this out!** by Maaïke and Mark Johnston

We had a great Malleefowl experience a few months ago in Hattah Kulkynne NP doing Hattah Tracks. We encountered this Malleefowl on its mound and it wasn't going to move off it. I uploaded the video footage onto *youtube* and here's the link

<http://www.youtube.com/watch?v=0SCyNoBdO90>



### **And this!** from Sharon Gillam

Malleefowl in Innes National Park, York Peninsula, South Australia

## Malleefowl Mound Line Searches in Wychitella NCR by Wendy Murphy PV/WCNR

On Saturday May 21, fourteen sturdy souls participated in a Malleefowl mound line search through a section of the Wedderburn Block of the Wychitella NCR. The day was jointly coordinated between the Wedderburn Conservation Management Network and VMRG. Participants ranged from interested community members, WCMN and VMRG members, Parks Victoria staff and even a lady from New Zealand.

*Heading out with Peter Stokie - photo Lynton Schreiber*



The day began with an induction session on the monitoring techniques and equipment used by the VMRG when conducting line searches and how data is collected and stored. Lunch was had at Doug's property before we all headed off to tackle the bush. The area chosen for the search had not been formally surveyed before so we were heading in to uncharted territories! Because it was the first time many of us had participated in a line search, it was taken at a slow and steady pace and frequent stops were made to ensure the line remained reasonably straight. Some of the bush encountered was very thick and difficult to move through, but we were able to locate two unmarked mounds in the search area. These will now become part of the VMRG monitoring program. We had to abandon the search mid walk as it was becoming dark and cold quite quickly. Most of the group were to be involved in another search on the Sunday, but due to thunderstorm activity, it was cancelled.

On Tuesday and Wednesday May 23 and 24, I was involved in searching an area of the Skinners Flat Block of the Wychitella NCR with 9 employees of the Ngurta Werkitya Program, a group of young indigenous people from Swan Hill and Mildura, Rod and Leota from VMRG and Suzie from Parks Victoria. This block contained two known mounds, which luckily we located (it would have been a bit embarrassing if we didn't!), and we located two unmarked mounds, which will become part of the VMRG monitoring program. It was a really successful few days.

WCMN is looking at conducting these searches annually with the assistance of VMRG and Parks Victoria and anyone who wants to take part.

For information about WCMN contact [wendy.murphy@dse.vic.gov.au](mailto:wendy.murphy@dse.vic.gov.au) or ph 5430 4567.

Wedderburn CMN are organising a **Malleefowl Festival** on Monday September 5 from 1-5pm at Jacka Park. Contact Wendy!



*Do we really have to go in there? - photo Iestyn Hosking*

## Searching southeast Little Desert NP, Nurcough FFR, May 28 & 29 by Gil Hopkins

Jess Gardner of Greening Australia and Peter Stokie VMRG organised a line search in the south-eastern end of the Little Desert National Park following the discovery of some Malleefowl prints in the April Tracks Search, and because private land near this area has been targeted for revegetation for wildlife 'corridors'. Most of this Coack area of LDNP has been burnt recently by wildfire and prescribed burns but there are some patches remaining.

We met in Natimuk - people from VMRG, GA, Natimuk Urban Landcare Group, and other interested volunteers, drove out to LDNP, lined up along a firebreak and started the search. Most were used to the bush and had been on searches before so we were able to cover the 1km out and back before lunch. Then we shifted east and completed another section. Unfortunately no sign of any nest mounds of any description, but Joe and Peter were pleased that we now know that it wasn't a recent (50years) breeding area.

We retired to the Nati pub for tea and there made important decisions for the future (as one does in pubs!) and decided that it would be good to record the personal and family local history by video, before the community 'lost' the information. Local oral history will help VMRG and others develop adaptive management plans for particular areas, as we will know more about what was there before, how it has been changed, and so what we may expect to be able to restore. So begins more work, but this will also help the local community take 'ownership' of management options that are developed through and with them.

Next day we met again in Nati but this time went to Nurcough Flora & Fauna Reserve where we have a monitoring site, but not completely surveyed. After Joe Benshemesh used some of the working mounds to describe the life and breeding of Malleefowl we managed two more line searches and found new mounds, one working, and also the known mounds in that area.



*One of the oldest active mounds*

Also check [www.habitat141.org.au](http://www.habitat141.org.au) for a report of this weekend by Jess Gardner from Greening Australia.

Then we travelled a short distance to a Greening Australia revegetation site 'connecting' Nurcough FFR toward the Little Desert NP for a late lunch, before leaving for home.



### Why Spring Burning? *by Alec Hawtin*

Why, oh why is the prescribed burning of our parks and sanctuaries, which are set aside for the protection of our wildlife, done in the spring breeding season? The spring burning puts more pressure on our dwindling natural resources.

Sharon, my sister Sadie Gowers and I toured through part of the Mount Hattah area this spring where the previous year a wildfire, which had escaped from a controlled burn, had decimated the bush. The flowers were brilliant. Dampieras, Stackhousias, Golden Pennants, Goodenias, Velvet bushes, Eremophilas, Clematis, Helichrysums, Olearias, Hibbertia, Acacias and Cassias were all flowering after early good rains.



But most of the large hollow-bearing Mallees and other big trees had been burnt to the ground with nothing for hollow-dependent wildlife to use. So is this

what the sustainability in DSE stands for?

Malleefowl habitat also suffered from the controlled burn that escaped and scorched 23,000 hectares. The Malleefowl were forced onto other fowls' areas creating pressure on all concerned. When the understorey regenerates after rain, it becomes a haven for feral goats and kangaroos and is unsuitable for Malleefowl because of the absence of litter for nesting.

Why can't the old growth vegetation be spared? In the limited unburnt patches of small bushes we found two Spiney-cheeked Honeyeater's nests with three young in each. They were trying to repopulate the bush by laying three eggs instead of the usual two while the good conditions lasted, after having to struggle through the long years of drought when they probably didn't try to nest. What hope would their low-down nest and nestlings have in a fire?

Just imagine for a moment you were a family of Mallee Emu Wrens that live and nest in the flammable low-growing Trioda. They are weak flyers. With a fire bearing down on them there is nowhere to go. All that would be left would be ashes. So why is spring burning done at all?

Spring burning also destroys the new green seeds of plants that depend on their mature seeds surviving until they are activated by smoke from a fire, before sprouting when suitable rains come. So why, oh why is prescribed spring burning allowed to go on?

Old-growth hollow trees are like five-star accommodation to wildlife. I know of one particular large old tree in Hattah that was referred to by old time birders as the nursery tree because of the number of hollows it contained. Now these trees are few and far between. Can you guess why?

## Malleefowl Nest Monitoring 2010/11

**Season** *by Alec Hawtin*

Taking advantage of a cool day in November, Sharon, Owen Lloyd and I set off at 6.30am for the Pheeny's Track grid to check the 17 mounds that we couldn't do first trip. The day was pleasant to start with but warmed up later. We had difficulty with the Mobile Mapper last trip but hopefully we had sorted out our troubles. All went smoothly except for flat batteries.

The Mallee and understorey looked in good condition after earlier rains, but the bush birds were scarce with Jacky Winter, Gilbert's and Golden Whistler and Red-ored Whistler noted.

The third mound we visited was active with footprints and egg-shell pieces present. Pressing on after measuring and photographing the mound we visited three more nests but there was nothing happening. The next nest was an active No. 5 doughnut shape with egg-shell visible. We measured and photographed once again then moved on to another three nests before coming across an active No. 4 mound. It was fully heaped up for protection from the heat of the sun.

Birds seen were Grey Shrike-thrush, Crested Bellbird, White-browed Babbler, Shy Heathwren, White-eared and Yellow-plumed Honeyeaters, and a flock of 20 Regent Parrots flew over.

Further into the grid another No. 4 active mound was found with some fresh egg-shell. By this time Sharon had nearly had enough so she headed off with the GPS for the nest nearer the finish while Owen and I went to the farthest nest with the Mobile Mapper. That one was a No. 4 with some egg shell showing too. Trouble struck then. The batteries were flat! Owen changed the batteries and much to our relief it worked. Then we set a course to where Sharon was waiting for us.

I followed the compass, Owen followed the Mapper, and we ended up at the right mound. I think Sharon was pleased to see us and also that the nest was a No. 5, a working doughnut with shell. The last four nests monitored showed no activity.



Foxes had shown interest in most of the mounds and had marked each one with a scat or two which we collected in plastic bags for DNA analysis, along with any Malleefowl scats and feathers which we put in

paper envelopes (like in the photo above). On the way out to the track we flushed a Chestnut-breasted Quail-thrush from its nest with eggs, so I had to take a photo!

On reaching the track at 7pm we rang our safety officer in

Melbourne with the sat-phone, had a rest and cuppa (like in the photo), then a leisurely drive home. We saw bats and a Spotted Nightjar in the headlights.



In all there were 6 active nests which is the best result we have had in the twelve years I have monitored. And there were a total of 32 species of bird observed.