Victorian Malleefowl Recovery Group Inc.

C/- 25 Belfast St
Newtown 3220
annos@iprimus.com.au

Newsletter March 2006

Coming VMRG 2006 events

March 24	-Survey return date
April 8	-Reporting back meeting at Wedderburn Motel
June	-Committee meeting
June	-Newsletter
August	-Committee meeting
September	-Newsletter
October 14, 15	-Training weekend, AGM
October onward	-Nest monitoring

See www.malleefowlvictoria.org.au

Survey of Data Collection and Equipment used in Monitoring

Monitors, please return your survey to Peter Stokie by March 24, by mail or email.

News from the February Committee meeting

- NHT Malleefowl Project updates will be included on our web site.
- All sites were successfully monitored, despite rain at times.
- VMRG made objections to Nowingi LTCF and requested to appear before the panel. We will contribute $50 towards the publication of an explanatory pamphlet by the Environment Alliance.
- Ann and Peter presented a training program in the use of palm and GPS for the Indigenous Community at Warburton (see photo opposite), and VMRG were involved in a two-day workshop in Northam for the WA Malleefowl Network.
- Portable display board will be purchased for VRMG
- Roles for Committee Members were discussed and allocated (see later)
- National Recovery Team representative be appointed from the committee for a three-year period, reviewed annually.
- Internet communication systems will be further investigated for Committee use.
- A way of recognising outstanding service is being formulated.
- A National Forum is proposed for WA in 2007, and VMRG is discussing how fundraising may help members attend. This may include volunteers assisting with our program of re-searching monitoring sites, possibly in May.
- We are working out ways to archive historical materials.
- Dara Foundation Grant has been used by RMIT students (Dattuck), Hopetoun Bikerider group (Torpeys) to re-search monitoring sites.
- Use of private land and vegetation clearing surrounding Wandown/Menzies is of concern especially for Malleefowl and Regent Parrots.
- Use of oats in rabbit baiting in Malleefowl areas is being discussed with DPI, DSE
- VMRG will attend a Mildura Fire Plan Meeting to discuss proposed burn areas.

Ann in Warburton (WA) training with palm and GPS – photo Peter

Are you in a group who needs funds? Re-searching monitoring sites can earn your group $1000. Contact Peter 5229 8648

Behaviour of two young Malleefowl

adapted from Megapode Newsletter V 19 #1, written by Jessica van der Waag, WA.

Despite a number of studies of young Malleefowl very little is known of their behaviour, dispersal and habitat requirements between two weeks of age and recruitment into the adult population. Malleefowl are thought to achieve maturity at three to four years of age. We also know very little about recruitment, pair formation or the start of breeding.

This study, in a mallee remnant near the townsite of Ongerup, Western Australia, involves intensive radio-tracking of chicks and young Malleefowl. In the 2004/05 breeding season, eggs were collected from mounds, incubated and ten day old chicks and ten young birds (one to two months of age) were released. Two of the young birds continue to survive and have just reached 12 months of age. With regular contact and treatment, the birds have become used to the researchers, allowing close observation. Intensive, long-term radio-tracking makes it possible to observe aspects of behaviour not previously recorded.

The young birds were raised solitarily and released at different points in the study site. The birds used vocalisation particularly in response to aerial predators, and in visual display. After one month living solitarily, the two birds bonded, foraging and resting within metres of each other. Initially, the birds used a visual display extensively, identical to the fear/aggression display used by adult birds; erecting the body and wing feathers and crests with the head held erect. Adults use a mild form of the display to greet the other member of the pair on the mound when they come in each morning to work. The adult males use a high intensity form of the display when there is an intruder on the mound.

The older female (by two weeks) was dominant and a reply display would cause the male to withdraw. On two occasions during the first two weeks of bonding by the birds, they were observed fighting. Following intense displays, the birds would jump forward, striking out with their feet. Fights lasted a few seconds, with the dominant female returning to feed and the young male remaining one to two metres away.

Over following months, the birds alternated between living together for a few weeks, and then apart. As the two birds grew, the male became dominant and visual displays were observed less frequently. The two birds used a 'location' vocalisation extensively when moving through the bush.

On two occasions during August, a third, slightly larger bird was also observed with the two. The birds appear to have separated in late September, and have not since been observed together.

Perhaps the most exciting observation of these birds came in November 2005. Earlier, the remains of an adult bird had been found near an active mound, which had been filled with litter and closed to begin fermentation for incubation. In mid November, the radio-tracked male was observed resting in scrub near the mound. As the mound was opened by the researcher, in order to mark eggs, the young bird came onto the mound and began filling it back in. There was one egg in the mound. The bird has since been observed closing the mound, working it in a method matching the established adult birds. His partner, a wild bird, has not been observed.

To determine the ability of a one year-old Malleefowl to breed, it is planned to use DNA material collected from the chicks. This may allow us to determine the paternity of the chicks from the mound this season, to see if the bird killed near the mound is the same male that used the mound last season, and to find if it is the same female laying in the mound as in the previous season.

During the breeding season, the male birds appear to spend most of the day near the mound, whereas the females spend the morning at the mound to assist with tending and for egg laying, and again in the late afternoon to assist with the final neatening of the mound.

Young male threat display – Photo Jessica van der Waag

SHENANIGANS IN THE BUSH.

Another observation of malleefowl behaviour submitted by Ralph Patford

Let me set the scene. It was a balmy, November, Sunday evening at a bush camp in Wathe Flora and Fauna Reserve. Four of us, Ann and Peter Stokie and Wendy and Ralph Patford, were sitting around enjoying a cold refresher or two before our evening meal. Our four other companions had left us earlier in the afternoon after the eight of us had spent the last two days monitoring the malleefowl mounds in the nearby grid.

We were camped on the edge of quite a large clearing in the scrub and were being entertained, as we had on the previous four evenings, by a malleefowl (which we now know to be female) who was busy pecking morsels from the ground foliage not more than ten metres in front of us. Each evening she emerged from the bush to our left and slowly wended her way towards our camp, pecking and feeding as she came. Whilst not prepared to allow us to get too close she did not appear too intimidated by our presence. Each evening she hung around for about an hour before heading back whence she came at dusk to roost for the evening, an act verified by one our party who had patiently followed her on one occasion.

At the far end of the camping ground and at a much greater distance a malleefowl (which we now know to be male) also made his nightly appearance. He appeared to be more timid as he not only kept his distance but did not venture out into the clearing at all. That is, until the deed in question.

All four of us were busy watching the female who was busy pecking away in about ten metres in front of us. Out of the corner of his eye, one of us noticed the male scurrying across the clearing. Initially, we thought that he was just endeavouring to get to the bush on the other side of the clearing and was not too keen about being in the open for any longer than necessary. However, almost immediately it became obvious that he was making a beeline for the female and that his reproductive urges were such that his previous timid behaviour was very much a thing of the past, at least at this moment.

As he approached at a veritable gallop, she walked towards him until the last moment, when she turned, bent over slightly and spread the feathers on her nether regions. He mounted her like a flash and dismounted equally as rapidly, the entire act of copulation taking barely a second or two. She then merely shook herself slightly and went on with their browsing as if nothing had happened. After a triumphal display and a deep boom, he moved away almost as quickly as he came, and within 15-20 seconds had disappeared into the scrub without even a glance over his shoulder

Unfortunately, none of us had a camera at hand and even so we would have struggled to get a photo given the speed of the deed. Our best bet would have been a video camera rolling at the time, but alas …

To say we were ‘gob-smacked’ would be a fair description of out immediate reactions. In fact, it took some time for it all to sink in, us, that is, not Mr Malleefowl. To rapidly move from casual observers to unwitting voyeurs of nature’s most intimate act took a little while to appreciate. It was an entertaining, educational and memorable way to round off the monitoring of Wathe and added nicely to our report of eleven active mounds, one up on the previous year.

Having discussed the episode with a few other people, particularly those with greater expertise than we shared, we have formed the view that the birds in question may very well have been having a ‘bit on the side’ and that they both probably had more established partners for normal reproductive duties. On each evening the birds approached the campsite from opposite ends, did not appear to notice each other, and did not otherwise get within 70 or 80 metres of each other. We found an active mound off in the bush from where the male appeared and we were pretty certain that there was another from where the female came. ‘Adultery’ in the animal world is not unknown. Any other views?

Ralph Patford

RMIT Conservation and Land Management Biological Survey Fieldwork

Dattuck Malleefowl Grid Activity, Wyperfeld National Park October 2005

A report by Tim Connell

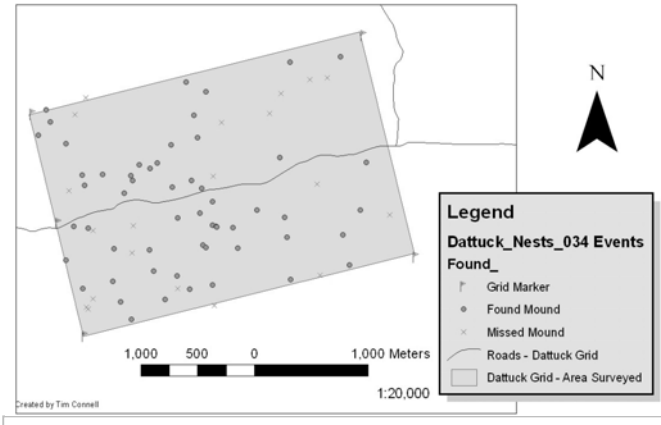
Every year volunteers from the Victorian Malleefowl Recovery Group (VMRG) monitor known nest sites, or mounds, of the malleefowl (*Leipoa ocellata*) in some 30 survey grids throughout Victoria's northwest. This species is listed as 'vulnerable' on the Department of Environment and Heritage's Environmental Protection and Biodiversity and Conservation Act of 1999 and as such the VMRG implement recovery actions monitoring bird numbers and trends. They collect information about the status of the nest; in particular if the mound is 'active', ie, the nest site is being actively used by a pair of malleefowl to breed. This information assists in monitoring population numbers and gives a framework for assessing longer-term conservation status of the species. Information on mound profile, surrounding vegetation, scats and animal prints is also collected with the aim of data analysis that will assist in ongoing land management and conservation.

After ten years of this data collection, since the establishment of most of the grid sites, a re-searching activity was identified by the VMRG as a priority to validate the current database and identify any new nest sites in the monitoring grids. This activity requires many pairs of eyes and feet on the ground, so the VMRG engaged groups such as Greencorps, local community groups and students.

The Dattuck malleefowl survey grid site was visited by RMIT Conservation and Land Management Students in October 2005. This site is approximately 600 hectares and is located along the Dattuck Track less than ten kilometres east of the Wonga Campground in Wyperfeld NP. The Dattuck grid, according to the Department of Sustainability and Environment, has four distinct vegetation types, predominantly the Loamy Sands Mallee. Much of the area could be described as medium to dense mallee scrub, made up of mallee trees less than six metres with a mixed species of understorey plants. In parts this undergrowth is difficult to traverse due to density or the plant type being quite prickly, such as hakea species and cypress pine.

Although the area was difficult for student groups to walk through while surveying, the area appears to have a good diversity of flora, including many known food plants eaten by malleefowl. Data collected by the VMRG from 1994 to 2003 shows that there have been a total of nine breeding events or active malleefowl nests found, some years only a single nest, in others three, and during drought years none. From this we can see that up to six birds are using the survey area as breeding habitat and therefore the opportunities present themselves to learn more about this mysterious bird's patterns of behaviour. The birds in the Dattuck grid appear to have used old nest sites, revisiting some nests to breed between four and six years apart. Much of the eastern portion of the survey grid appears to have experienced a fire in the not-so-distant past, evident through the young small scrub and regrowth, less than ten years old. There have been no active nests recorded in these younger regrowth areas.

Appendix 3 - Nest Sites Sought and Found



A map of all mounds recorded, showing those found, and those missed. Extract from student reports, November 2005.

In total there were 78 known nest sites sought by the group, aided with compasses and GPS units for navigation.

RMIT students familiarise themselves with essential field equipment

Fifty-six of the known sites were found along with a further 4 new or previously unfound nest sites. Students worked in two groups walking through the mallee scrub along grid lines predetermined by GPS coordinates at intervals of 10-15 metres visually identifying any malleefowl mounds. At 75 % success rate this meant that the group surveying the area were reasonably successful and efficient in their field efforts.

Finding a further four mounds also highlights the value of this exercise, and shows that in ten years of monitoring it is possible to miss target sites and vital data, especially in young dense mallee scrub. When a mound was discovered the student had to photograph the mound, take a GPS waypoint and record if the mound had a metal stake nearby, indicating it was a nest site already known to the VMRG. Unfortunately there was little sign overall of malleefowl activity at the majority of the nests visited, many quite clearly had not been used for several years. This reinforces the current thinking that the malleefowl are a species in decline and that the threats such as predators, wild fire and grazing competition are limiting the species ability to reproduce and re-establish populations similar to those of pre-settlement.

The survey work was only possible due to commitment to these programs by Parks Victoria (PV). As land manager of the VMRG's monitoring sites they provided logistical support and local contact support for survey activities and volunteer safety. During the week spent at the Dattuck grid, PV ranger Matt Wellington acted as a daily contact for scheduled call-ins, reporting on intentions of daily survey activities, and reporting safe return from the mallee areas in the evening.

Peter Sandell of the PV Mildura office assisted in developing a Job Safety Analysis document with RMIT staff to ensure that all aspects of the survey were well planned, and the well-being of RMIT students in the unfamiliar mallee country was considered at all times. This provided a great opportunity for students to develop skills in survey planning methods and coordinating field logistics. The opportunity to collect fauna survey information that ultimately assists in ongoing land management decisions was appreciated and enjoyed greatly by all students who participated.

As well as collecting malleefowl data the RMIT group enjoyed many chance encounters with other bird and reptile species, spent evenings spotlighting in and around campground areas, learnt many species of indigenous flora, took many photographs, and had the opportunity to meet and chat with local conservationists.

RMIT Student Maryann Weatherill inspects and collects data at nest 15, a previously recorded malleefowl mound

Many thanks to the assistance and guidance provided by members of the VMRG, and field assistance by Sarah Brown, of Melbourne University, commencing her PhD studies on the Mallee Emu-wren.

The project would not have been possible without with the support of the Wilderness Society and The Dara Foundation, who provided funds to facilitate these field activities and in doing so support an important ongoing study into the malleefowl, and the health of important and diverse Victorian ecological communities.

VMRG Committee Roles

The VMRG Committee has identified the following positions as important tasks for the future development of the group

Position	Person
President	Ron Wiseman
Vice-President	Neil Macfarlane
Treasurer	Ralph Patford
Secretary	Ann Stokie
Safety Officer	Ross Macfarlane
Equipment Officer	Peter Stokie
Newsletter Editor	Gil Hopkins
Grants, Fund Raising	Gil Hopkins
Publicity	Kirsty Malley
Education	Ann Stokie
Membership	Ralph Patford & Ann Stokie
Publications	Ralph Patford & Peter Stokie
Documents and Archives	Neil Macfarlane
Threats(official responses)	Kirsty Malley
Liaison with Government Organisations	Ron Wiseman & Ann Stokie
Liaison with Non-Government Organisations	Ron Wiseman & Ann Stokie
Future Planning	Peter Stokie & Kirsty Malley
Excursions & Events	David Thompson
National Recovery Team Representative	Peter Stokie (Ross Macfarlane deputy)
Web Page Co-ordinator	Ralph Patford
Technical Advisors	Joe Benshemesh & Paul Burton
Public Officer	Shelley Heron

Anything for the Newsletter?
Anything you would like to see included?
Contact Gil on giliz@netconnect.com.au

Michael Dickman finds a group of Emu eggs in typical mallee scrub.

NHT Multi- Regional National Malleefowl Project Launched

On Wednesday 14th February, the two year nationally funded Malleefowl monitoring, population assessment and conservation action project was launched by the Mallee CMA and the VMRG at a combined National Action Plan for Salinity and Water Quality and a National Heritage Trust Conference in Melbourne.

If you ever wondered how the data we collected was going to be used, then here is the answer. The project will analyse all existing monitoring data to interpret breeding density trends and investigate the impacts that land management and environmental variables has on malleefowl conservation

Intended outcomes of the project will be to implement a consistent national monitoring system, a national database, and a new volunteer manual for malleefowl monitoring.

It is expected that the monitoring system will be integrated into strategies for habitat conservation across landscapes in all malleefowl states, and involve targeted on-ground actions from the new National Malleefowl Recovery Plan (2006)