

## 19. RE-SEARCHING MALLEEFOWL MONITORING SITES – A VICTORIAN MALLEEFOWL RECOVERY GROUP PERSPECTIVE

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### **Abstract**

The importance of searching monitoring sites periodically is essential for the continuation of scientifically valid data on Malleefowl breeding density. However it is probably the hardest thing to maintain due to the significant restraints of the time involved in conducting a systematic search and the difficulty of having sufficient personnel to conduct the search. This paper explores some of the methods the Victorian Malleefowl Recovery Group have employed in their searches, and an analysis of the relative successes and difficulties involved. The value of being well prepared, having well trained, motivated and supervised searchers, and using modern technologies to assist with searches increases the viability to conduct successful searches. The history of past searches and the strategies used for recent, much improved searches will be presented as a model for other groups to consider.

### **Introduction**

The importance of maintaining the scientific integrity of the Malleefowl monitoring sites cannot be stressed enough. The quality of data collected relies on the training and dedication of volunteers. The analysis of data gathered over the past twelve years by volunteers is of the highest standard. Volunteers visit every known Malleefowl mound within each site, the only variable being whether Malleefowl have started new mounds that are not known.

#### *Why re-searching monitoring sites is important*

- Malleefowl occasionally choose to build new mounds rather than renovate an old mound
- It is important to search the monitoring sites every few years to record these
- Mounds that are found during these repeat searches are added to the list of nests to check annually

In Victoria, there have been several attempts to maintain data integrity by re-searching existing sites using a variety of groups of volunteers, but due to the labor intense requirements to conduct a search it has been difficult to sustain the effort to meet the objective of re-searching every site every five years.

The initial approach to provide significant personnel for searches was to seek out organisations that provided assistance to environmental groups.

#### *Pre 2004 search history*

The Australian Conservation Volunteers and Greencorps were used in two major attempts to re-search the Victorian sites. Government contractors organised and supervised the searches.

- |   |        |                                    |          |
|---|--------|------------------------------------|----------|
| – | 1991/2 | Australian Conservation Volunteers | 4 sites  |
| – | 1997   | Greencorp                          | 16 sites |
| – |        |                                    |          |

In both instances the search teams were relatively young and inexperienced, especially in their knowledge of Malleefowl and working as a team in sometimes difficult terrain was a challenge.

Some of the key lessons learned from these efforts were:

- Leadership – the choice of an appropriate group leader was crucial
- Organisation – being well prepared with directions and maps and local knowledge of the area to be searched
- Keeping fun in the exercise

- Developing technology to assist data collection – the use of GPS and hand held computers were not available in these searches and keeping records on paper was time consuming and inefficient

*2004 – 2007 search history*

The Victorian Malleefowl Recovery Group had taken on the responsibility of Malleefowl monitoring in 1999 to collect data from Malleefowl sites previously collected by government staff and contractors. Initially the Victorian Malleefowl Recovery Group gave no thought to the need to re-search sites, concentrating on data collection only.

The 2004 Annual Report on monitoring was a wake up reminder to the group that re-searching was an important aspect of the work of monitoring Malleefowl.

*“Finally, I must reiterate that some of the declines we have witnessed may be more apparent than real because it has now been 8 years since most sites were searched for new nests.”*  
*J Benshemesh – Malleefowl monitoring in Victoria 2004/5*

The Victorian Malleefowl Recovery Group rose to the challenge of this statement from the 2004 report and in the three years to 2007 have organised 15 existing sites re-searches and established 7 new sites.

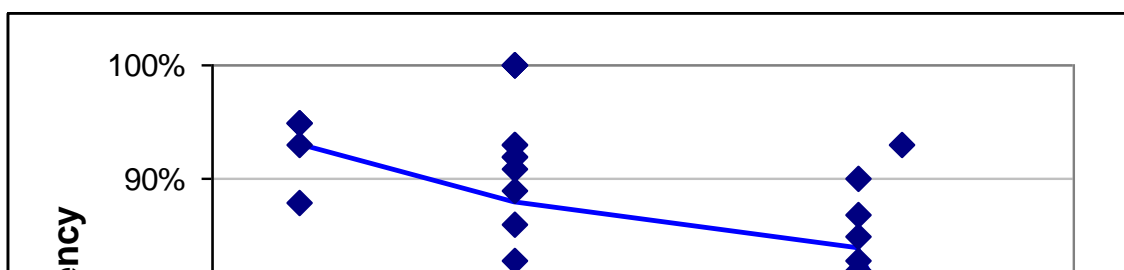
A single strategy of using one organisation was no longer possible so different groups were used:

- Greencorps
- Technical and Further Education Students
- Parks staff
- Victorian Malleefowl Recovery Group members
- Community

| Group                                    | Re-search | New |
|--|-----------|-----|
| Greencorps                               | 7         | 1   |
| Technical and Further Education Students | 5         |     |
| Parks staff                              |           | 1   |
| Victorian Malleefowl Recovery Group      | 2         | 1   |
| Community                                | 1         | 4   |

- The Greencorps group was a partnership comprising the Mallee Catchment Management Authority, Greening Australia and the Victorian Malleefowl Recovery Group and operated similarly to the 1997 re-search, with the Victorian Malleefowl Recovery Group providing technical advice and helping with some searches
- Technical and Further Education students and their teachers undertaking from Royal Melbourne Institute of Technology and Britafe Bendigo used the re-search exercise as a practical component of the course. Victorian Malleefowl Recovery Group provided an equipment and instructional material to each of these groups
- Parks staff were self sufficient
- Victorian Malleefowl Recovery Group members had not conducted re-searches previously, but their experience of tracking and familiarity with mallee country was highly beneficial
- Community groups were generally starting from a very low knowledge and experience base and needed detailed assistance
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*Search Efficiency*



**Figure 1.** Search efficiency of individual re-searches.

Search efficiency has varied considerably in every attempt (Figure 1) and the essential elements to improve the effectiveness of a search are:

- Leadership
- Coordination
- Equipment knowledge and availability
  - Maps
  - GPS
  - Cybertracker
- Education
- Enthusiasm

The Victorian Malleefowl Recovery Group has been the beneficiary of several small grants to enable groups to complete the tasks associated with re-searching without incurring much personal expense. Grants have been received from Parks Victoria, The Wilderness Society and The Natural Heritage Trust Malleefowl Multi regional project for community groups to re-search sites and establish new sites. The grants have been used to cover camping and food expenses and to offset travel costs through limited fuel reimbursement. The average expenditure for a site re-search has been \$1000. This has been particularly helpful to Technical and Further Education students to keep the costs of a week out in the bush within their limited budgets, and a great help to attract community groups who otherwise may not have been able to afford the additional costs associated with this type of activity. In fact all community groups involved with the Victorian Malleefowl Recovery Group have used the opportunity to arrange the activity as a fundraiser for local organisations, and have donated their expenses in particular to local hospitals and kindergartens.

Community Groups that accepted the challenge of being involved in three or four days of site re-search activities include:

- Hopetoun (Vic) Bike Riders
- Hopetoun (Vic) Kindergarten parents
- Natimuk Urban Landcare
- State Emergency Service from Nhill District
- Nhill Lions Club
- Mid Murray Field Naturalists
- Wedderburn locals supporting the Wedderburn Conservation Management Network

**Lessons Learned from 2004 – 2007 re-searches**

### *The expected outcomes*

- A significant number of sites, (60% of total sites) were successfully searched generally by people who had no previous experience of finding Malleefowl mounds or working in team situations
- Search techniques were efficient with 85% of existing mounds found
- Some “new” mounds were found
- New mound information has been incorporated into the database for future monitoring programs beginning in 2007
- Meeting an objective of the National Malleefowl Recovery Plan to re-search sites and maintain the scientific integrity of the Victorian Malleefowl Recovery Group monitoring program
- Positive group experience through sharing information and friendship during searches and at barbecues and meal breaks. As a consequence enthusiasm was high and was maintained
- Above all the activities were fun, but challenging

### *The unexpected outcomes*

- New skills of using GPS, Palm Pilots and reading signs on mounds for Malleefowl activity, and other signs such as fox presence have been acquired by participants
- The broadening of knowledge of the scientific program of monitoring Malleefowl was greatly enhanced
- The broadening of knowledge of, and respect for, mallee vegetation and a broad scale understanding of mallee ecology was enhanced
- Significant numbers of people and different groups involved
- The take up rate from community groups was not as easily achieved as was indicated in surveys and discussions prior to funding applications being submitted
- Very high percentage of people new to Malleefowl (80% and mainly young people) and the Mallee in general (50%) was a pleasing and unexpected outcome
- Money allocated to local communities and educational institutions to offset costs was much appreciated
- Requests from Technical and Further Education Colleges to continue their involvement with the activities of the Victorian Malleefowl Recovery Group provided positive feedback
- Excellent local press coverage, articles in educational institution publications and word of mouth publicity generated much interest in the activities of the Victorian Malleefowl Recovery Group
- High interest in new membership of the Victorian Malleefowl Recovery Group

### *The conclusions*

- The task of re-searching sites is well received by community and students
- Great reservoir of enthusiastic people willing to be involved and learn more about the bush and its conservation
- Untapped resource of under-graduate students, and the value of enthusiastic and committed staff in tertiary institutions
- Community welcome fund-raising opportunities, and are willing to be involved if they can see some benefit for their community
- Inexperienced monitors will be successful with good training and quickly develop improved site searching techniques
- Essential to be well organised, and ensure plenty of time for preparatory planning and preparation

### *Future Plans*

- Develop an educational, instructional package for groups
- Encourage community and educational groups to include re-searching as an annual activity for groups

- Continue to support existing Technical and Further Education groups and investigate the involvement of other Tertiary Institutes and Community Groups
- Seek the appointment of a paid co-ordinator in Victoria to arrange projects of this type, or have a volunteer co-ordinator's expenses paid to cover costs of administration
- Seek more permanent sources of funding to expand the re-search activity

### **Concluding Remarks**

One of the questions addressed in the data analysis during the Malleefowl Multi-regional Project was the issue of how often it is necessary to re-search existing sites. The current National Malleefowl Recovery Plan indicates that every five years was an ideal time frame. The data from the twenty re-search activities during the 1990's and the fifteen re-searches from 2004 to 2007 have been analysed to check on new mounds discovered and the activity associated with these mounds. The following conclusions can be drawn from this investigation:

- Re-searching is important to locate new mounds
- Re-searching sites burnt in the period of the past 20-30 years is most important when Malleefowl are moving back into the area: 3-5 years desirable
- Re-searching sites where Malleefowl are increasing is important: 3-5 years desirable
- At other sites 5-10 years is a reasonable re-search sequence