

Community and Conservation: Malleefowl Conservation in SA

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Introduction to the Threatened Species Network

The Threatened Species Network (TSN) is a community-based program of WWF Australia and the Australian Government's Natural Heritage Trust. The TSN operates at a national level with co-ordinators across each of the states and territories.

The Threatened Species Network works on threatened species conservation through:

- Providing support and funding opportunities for community organisations to undertake on-ground conservation work for threatened species;
- Empowering the community to participate in research, monitoring, management and education projects for the conservation of threatened species;
- Participating in recovery teams and recovery planning to direct, prioritise and oversee recovery activities; and,
- Working co-operatively with government agencies, scientists, educators, and community groups in achieving species and habitat protection

In SA the TSN is represented on a number of species recovery teams (currently some 20 teams), advisory panels, and other natural resource committees. Recovery teams involve both flora and fauna recovery, and may be either single or multi-species focussed. For example, the TSN works with the Mt Lofty Ranges Southern Emu-wren Recovery Program for conservation of the species and its habitat, both of which are listed at the national level. The TSN is currently represented on the such recovery teams as the Murray-Darling Basin threatened flora (9 species), Kangaroo Island threatened flora (15 species), Mt Lofty Ranges orchids, Arid Recovery project, and the Pygmy Blue-tongue.

Distribution of malleefowl: past & present

Past distribution

Historically, malleefowl were present from the SE corner of the state through the Murray Mallee to north of the Murray River, and westwards into the arid western region of the state. An approximation of the past and present distribution (Cutten 1998) is shown in the Appendix (Figure 1); the National Recovery Plan also provides a similar map (Benshemesh 2000).

Present distribution

While there appears to have been a general contraction in range, it is not the focus of this paper to speculate on this, nor draw conclusions; caution should be applied when making assessments about a species' range and possible population size. When factors such as the degree of monitoring, life history and cryptic nature of malleefowl are considered, it is difficult to determine accurately any changes in habitat area. With

this caveat in mind, regions where a contraction is thought to have occurred are the SE (with no recent records of malleefowl from south of Naracoorte), the Adelaide region, and on the Yorke Peninsula where recent records are confined to the lower region around Innes National Park. Further investigations are required to determine true population trends, and should be approached at a national scale.

Malleefowl are now known from locations across Eyre and Yorke Peninsulas, the South-East, the Murray-Darling Basin, with some records from the Aboriginal Lands and the Rangelands as shown in the Appendix (Figure 2).

Community and malleefowl conservation in South Australia

There are many individuals and/or groups active in malleefowl conservation, a few of which will be discussed. Groups involved include, but are not limited to: Adelaide Zoo, Aboriginal Lands Trust, Conservation Volunteers Australia, Department for Environment and Heritage, Birds Australia, Birds SA (formerly South Australian Ornithological Association), Threatened Species Network, Friends of Parks groups, University of South Australia, and Bookmark Biosphere.

A “snapshot” of malleefowl conservation activities in South Australia

With NRM reform underway in South Australia, there are currently 8 regions that operate within the state. As future funding is tied to each region, this brief overview of current malleefowl conservation activities is presented on a regional basis.

In the Aboriginal Lands, the receipt of funding through the TSN’s community grant scheme by the Anangu community on Pitjantjatjara Yankunytjatjara land will continue work aimed at protecting critical habitat for malleefowl populations and to develop appropriate adaptive management methodologies, and to collect ecological data on malleefowl in this area. This project will include monitoring of malleefowl breeding activity, abundance, threat mitigation, habitat use, seasonal activity and dispersal. Computerised mapping (GIS) will be used to assist with the recording, monitoring, evaluation and planning (DEH 2003).

The large park areas on the Eyre Peninsula provide habitat for a number of threatened species including the malleefowl. There has been strong community support for malleefowl through involvement in captive breeding programs. There is monitoring across five grids – Munyaroo, Pinkawillinie and Hincks Conservation Parks, and on Heritage Agreements at Cowell and Lock. These grids were surveyed in 1998, and some resurveyed in 2003, and again in 2004. The Cowell heritage agreement land has been surveyed consistently for nine years (A. Freeman *pers. comm.*).

Monitoring on Yorke Peninsula is restricted to the SE of the Peninsula around Innes National Park.

There is widespread effort in the SA Murray-Darling Basin, with monitoring ongoing in areas such as Danggali, Billiat, and Ngarkat Conservation Parks, and Gluepot Reserve. Community and organisation effort is high in these areas and includes

monitoring by the University of South Australia in Danggali CP, the to-be-formed Friends of Gluepot Reserve and Birds Australia in Gluepot Reserve, and the Nature Conservation Society of South Australia. Previous TSN community grants have assisted such groups as the Lower Mallee Land Management Group to undertake monitoring and feral animal control in keeping with the aim of the objectives in the Local Action Plan for the Murray Mallee region. Since 1999 some 20,000ha has been baited regularly, and monitoring of a Heritage Agreement has been ongoing since 2001. Additional biodiversity benefits are likely as other mallee species benefit from such control programs. It is also likely that some monitoring and activities in other reserves are undertaken by private landholders.

The South-East appears to be experiencing a contraction in range. There have been some opportunistic sightings. Community concern is high, and strong support for malleefowl conservation is evident, for example through the Karoonda Area School adopting the malleefowl as part of its emblem (Appendix - Figure 3). Activities by the Mantung-Magea Land Management Group have included rabbit and fox control, and fencing off of remnant vegetation as habitat. There appears to have been a reduction in fox and rabbit numbers, which has obvious benefits to both landholders, malleefowl and other associated species. Much of the work is undertaken voluntarily.

In the Mt Lofty Ranges there has been little community-driven activity and sightings of malleefowl are occasional and opportunistic. Records from the Rangelands Integrated Natural Resource Management (INRM) region are few. There are no malleefowl on Kangaroo Island.

Benefits, obstacles, and opportunities for malleefowl conservation in SA

Discussion between the TSN and various individuals and groups involved in malleefowl conservation in SA, and a review of recent correspondence identified a range of issues. The list is indicative of concerns that exist; note that some regions will identify more with some issues than others will, or will have other issues not identified here.

Conservation vs protection - alleviating landholder concerns

There is little doubt that malleefowl are a recognised or "flagship" species. At its most basic level, this recognition is an advantage in promoting awareness not only of malleefowl, but also of the other environmental and species' considerations. In a recent interview with a local media representative, community support was identified as one of the keys to species conservation, and best achieved through ongoing promotion of the particular species or issue. "Ten years ago, no one in SA knew what a bilby was. Now, through promoting bilby conservation and the issues surrounding it (such as impact of feral species on habitat), the bilby is a well-recognised native species" (C.Warren, pers. comm.). This applies as equally to the malleefowl as to any other native species.

Additionally, interest in malleefowl has led to further interest in the environment in which it lives. While mallee habitats and ecosystems are already of interest to many people, the malleefowl has been influential in increasing appreciation not just of these ecosystems, but of the diversity of species both floral and faunal that such systems support as well.

have a great respect and affinity for malleefowl, particularly in the rural areas of Australia where the difficulties faced in working the land are perceived to be similar to those faced by malleefowl - both are dependent upon rain and both prosper when it arrives. This affinity and a resulting protectiveness of the birds, is reflected in discussions and landholder

surveys in which farmers express a reluctance to divulge bird and nest locations (Cutten 1998), with anecdotal reports of nests being raided once locations were disclosed to individuals. Feedback from landholder surveys conducted in the SE (NCSSA) and on Eyre Peninsula & Yorke Peninsula (Greencorps) support these concerns. Concerns include people disturbing birds and nests, fear of losing land through compulsory purchases, and fear of de-valuing of land should areas be conserved through fencing, or a heritage agreement or other covenant.

Concerns are valid, the value of landholder information (sightings, breeding success, habitat types etc) is important in presenting as complete a picture as possible of malleefowl, where they live (or are absent) and what factors may affect their survival. For example, a patch of a scrub - such as a park - shared by both agency and a landholder with a strong population of malleefowl would be ideal choice to protect from large-scale events such as fire. While the affinity that farmers have with malleefowl is admirable, this protectiveness may present difficulties in assessing malleefowl distribution and numbers accurately. Developing strong relationships between the rural community and individuals in government (whether local or state) or other agencies is essential to securing reliable information and protecting the privacy of both landholder and malleefowl while gathering accurate information about the species' distribution on private land. This information might relate to seasonal resources such as an abundance of lerp, information on the presence of foxes or rabbits, or an opportunity to record other species (such as the Black-eared Miner).

Communicating information

A report by the Land & Water Resources Research and Development Corporation into remnant vegetation in the rural landscape (Lambert 1993) identified some key recommendations in relation to data accessibility and co-ordination, which apply equally in relation to malleefowl conservation. Briefly, these recommendations and their relationship to malleefowl are:

- *The results of scientific research and development into remnant vegetation need to be communicated more effectively to end-users.* Information on the value of remnant vegetation, not just for malleefowl, but for ecosystem benefits such as soil stabilisation, wind-breaks, microclimate creation, a seed source for revegetation, groundwater table maintenance, or simply the inherent value of the system's plants and animals to exist, needs to be communicated.
- *Lack of accessibility to data, need for greater communication - face to face, rather than production of leaflets, brochures and other written information, a central repository for information on scientists carrying out research.* Often, more productive discussions are achieved face-to-face with individuals who are passionate about their subject and can convey that verbally, rather than relying on "yet another brochure" to convey a message. Information needs to be exchanged in an appropriate form and at a level targeted to the audience.
- *Social research into factors influencing landholder attitudes, including the role of incentives and regulations.* Some landholders express an interest in undertaking conservation works on their property but may be limited by external factors such as whether the recent season was good or poor. Funding sources and incentives may not be known, may be poorly understood, or it may be a matter of pride for some individuals that assistance is not needed. There has also been a significant shift in our understanding of ecosystems. For example of the value of remnant vegetation as opposed to policies in the past that advocated the clearing of "scrub" to "improve" the landscape, or the planting of local native vegetation rather than species from other regions or states.
- *Incentives are under-utilised or incorrectly utilised including tax incentives.* There are very real concerns by landholders that their properties may be devalued as a result of obtaining Heritage Agreements or other conservation covenants. There are also concerns that by placing land under conservation covenant it is somehow "lost" to them. Adequate, accurate information to landholders on this and other conservation covenants is necessary to reassure landholders.

Creating and expanding networks, and sharing information

National, state and/or regional networks are valuable on a number of levels. For malleefowl conservation it allows for strategic direction of activities at a landscape level, updates on progress towards the species recovery, progress on activities in relation to the National Recovery Plan, and a forum in which information, successes and failures can be discussed. Consistency also needs consideration at the state and regional level - a national co-ordinating body, a national repository of data (though regions, states or groups could still maintain their own databases), and the ability to seek funding across a broader region, would all present national co-

ordinated recovery actions.

The formation of personal networks is important in contributing to the long-term value that a community may place on a particular species or ecosystem. The social benefits from developing and strengthening these networks cannot be underestimated. Invitations and opportunities to visit other groups in other regions are extended and seized upon, forums can be launched at which similar issues can be discussed and information can be exchanged.

Basic information exchange, such as what's worked/what hasn't is very valuable, and highlights that despite distances between groups some problems and solutions are the same. Training weekends, information exchange, and "hints & tips"-style factsheets are all viable ways in which to train volunteers up to standard methodologies while acknowledging that the engagement of volunteers in malleefowl conservation activities is extremely valuable. Working within the capabilities and "comfort zone" of volunteers is important; technological methods such as palm pilots can be daunting to people more familiar with paper methods. Groups can work in the knowledge that their method is the best for the situation, or at least work with an awareness of some of the issues and solutions which others may have worked through similarly.

A strong social network binds communities, all with the common aim - despite their backgrounds - of malleefowl conservation. Such networks can be the catalyst for continued conservation actions, and encourage involvement from within or between communities. This is evidenced by such active groups and networks that already exist, not just for malleefowl, but for other species also.

Landscape conservation through Heritage Agreements and private land purchases

The landscape changes resulting from agriculture and urban development means that malleefowl exist in a now-fragmented system. Each remnant is significant, and there is a need to augment the existing reserve system with additional reserves or protected areas, to safeguard against events such as fire, disease, etc. Conservation efforts by landholders need to be supported. Private land purchases such as the acquisition of Gluepot Reserve by Birds Australia provide opportunity for the conservation of both species and habitat.

There needs to be greater dissemination of incentives and funding opportunities, to alleviate concerns that exist in this area. Funding opportunities for landholders, individuals, agency and non-government agencies (NGO's) should be noted and distributed. The circulation of information such as avenues from which financial assistance for land management activities - such as fencing or feral animal / plant control which can be costly - can be sought could be distributed via a social or malleefowl network. Personal experiences by individuals, information from NGO's or agency staff, latest developments in conservation covenants etc are all examples that would benefit from distribution to a wider audience.

Landholders undertaking land conservation through Heritage Agreements (HA) or other similar private land conservation schemes are important in augmenting this protection of required habitats. While some landholders may be involved in private land conservation without undertaking a HA or other covenant, there are financial incentives to participate in such schemes. There are also examples of landholders working with agency staff to enable off-site conservation on land that adjoins existing reserves, thus managing the area as a continuous habitat; such co-ordinated strategic efforts are extremely valuable. Fencing of remnant vegetation is primarily used to prevent stock access into remnant vegetation but may also be used to limit vehicular or pedestrian access to important areas.

Concluding remarks in the context of malleefowl conservation in SA

Malleefowl are a well recognised species that people wish to see remain

Simply, people like malleefowl, and it is well recognised as a "flagship" or "iconic" species. Regardless of the use of such catchwords, there can be little doubt that malleefowl - for a portion of the community - represent mallee habitats, working

within environmental conditions, “battlers” through harsh conditions. These are all images with which people can identify in some way. This identification or empathy is a good stepping stone from which greater interest can grow.

There is a need to harness and maintain interest of “the community”

Committed and very active groups involved in malleefowl conservation exist – whether they be landholders, specific malleefowl-oriented groups, broader focus groups like birding organisations, government and non-government organisations. Maintaining the interest of those is important, as is generating interest amongst people who perhaps had not given much thought to malleefowl before. Feedback, support, sharing of information, social activities such as monitoring – all help to maintain that enthusiasm for malleefowl conservation.

There is a need for a co-ordinated scientific approach

While each group, region or state may be involved in malleefowl conservation works, this does not necessarily mean each are at the same level. To address what is a national species, a national co-ordinated scientific approach is required. Scientific research or an approach to management is required; it will be sought by decision-makers, particularly with funding organisations, and it is essential in determining species’ survival and recovery.

Community, however defined, can be a strong driving force in malleefowl conservation. Only through community support can conservation, monitoring, and research programs succeed. Only if malleefowl are seen as a national priority can we ensure and personnel required exist to achieve this across a region, state, and country.

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Maps courtesy A Graham – South Australian Department for Environment and Heritage

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Acronyms

CVA	Conservation Volunteers Australia
DEH	Department of the Environment and Heritage (Australian Government Department)
HA	Heritage Agreement
INRM	Integrated Natural Resource Management
LAP	Local Action Plan
LWRRDC	Land and Water Resources Research and Development Corporation
NGO	Non-government organisation
NCSSA	Nature Conservation Society of South Australia
TSN	Threatened Species Network

Appendix

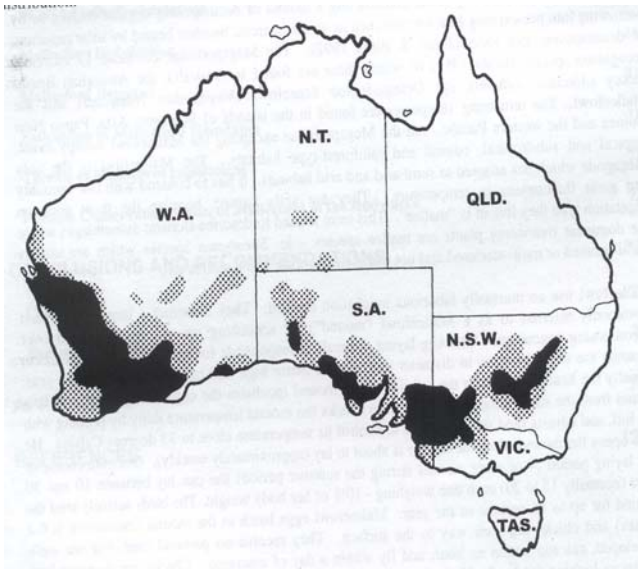


Figure 1. Past and present distribution (Cutten 1998 from Priddel 1989). The solid area represents present fragmented distribution, and the stippled area approximate former known distribution.

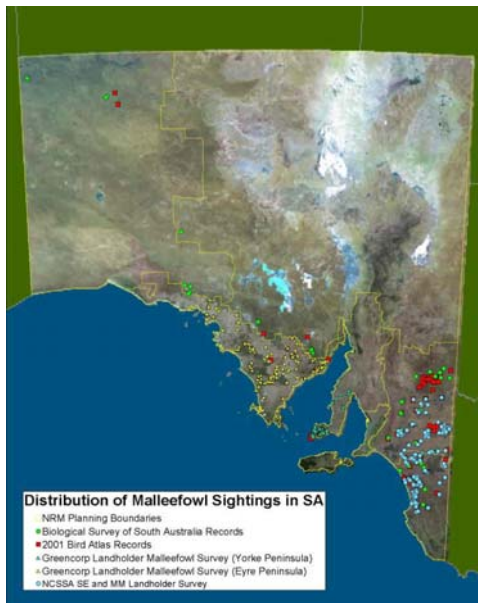


Figure 2. Distribution of Malleefowl sightings in SA. Image courtesy DEH.
Note: the records for landholder surveys on Eyre and Yorke Peninsula are indicative of properties on which sightings have occurred, not individual birds. Image courtesy of DEH.



Figure 3. The Karoonda Area School emblem. Image at www.karoondaas.sa.edu.au.

Excerpt from Land & Water Resources Research and Development Corporation report into remnant vegetation in the rural landscape (Lambert 1993)

It found that national co-ordination between government departments, research groups, conservation groups and landholders was virtually non-existent. It found little evidence of co-ordination at a state level, little between researchers, and almost negligible levels of landholders able to access research bodies though some contact with individual scientists was made.

In relation to funding for remnant vegetation research and development, it found that the levels for this, and ecological research, is low and consistently outranked by funding for research into the productive aspects of agriculture.

The report made several recommendations, which apply equally in relation to malleefowl conservation:

- *The results of scientific research and development into remnant vegetation need to be communicated more effectively to end-users.* The value of remnant vegetation, not just for malleefowl, but for values such as soil stabilisation, wind-breaks, microclimate creation, revegetation seed source, groundwater table maintenance, or simply the inherent value of the system's plants and animals to exist.
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