



SHOREBIRD CONSERVATION CONSERVING SHOREBIRD HABITAT: The Fivebough and Tuckerbil Swamp Wetland Restoration and Management Project.



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Trust

Where

Fivebough and Tuckerbil Swamps are located in the NSW Riverina near Leeton, approximately 100 km north west of Wagga Wagga. Fivebough and Tuckerbil Swamps are managed as ephemeral wetlands. Fivebough Swamp has permanent water in the south-west portion of the basin while Tuckerbil Swamp is a shallow seasonal brackish-saline wetland. Their conservation values have been recognised through listing under the Ramsar convention which identifies wetlands of international importance.



The birds

Despite being located a long way from the coast, these wetlands still attract a range of shorebirds including sharp-tailed sandpipers, marsh sandpipers, red-necked stints and common greenshank. Several threatened shorebird species such as the painted snipe and Latham's snipe have also been recorded. These wetlands are also of high conservation value to a range of other waterbirds such as the Australasian bittern and brolga.

Who

Initially, management of the wetlands was undertaken by the Murrumbidgee Field Naturalists (MFN) in conjunction with state agencies such as the Department of Land and Water Conservation. In 2000 the Fivebough and Tuckerbil Wetland Management Trust was formed and took over management of the wetlands. This is a community organisation and membership is open to anyone with an interest in the wetlands. The Trust still works in closely with the MFN as well as other stakeholders.

Problems and challenges

Fivebough and Tuckerbil Swamps are located in one of the most intensive agricultural regions of Australia. They have been subjected to a wide range of threats and disturbance processes over a long period of time. For example, the changes to natural flow regimes as a result of agriculture and irrigation have led to a rise in the water table and altered some of the vegetation communities.

Being located close to the township of Leeton, Fivebough Swamp also receives rainfall water runoff and treated sewage effluent. In the past, proposals were made to have part of the wetland developed into a recreational lake.

Other conservation issues faced by the wetlands include the presence of feral animals such as foxes and rabbits. Both wetland sites have been used as livestock grazing areas. It is still uncertain how to best manage livestock grazing to achieve the best outcomes for conservation. The provision and maintenance of Shorebird habitat requires a combination of grazing and water management along with an understanding of plant phenology.



Black-winged stilt.



Solutions

The long term involvement of the MFN and more recently the Fivebough and Tuckerbil Wetland Management Trust in this project has ensured that a small but dedicated team of enthusiastic locals has retained involvement in the conservation of their local environment. By utilising the knowledge of locals the project benefits from local perspectives and through the passive dissemination of information into the community through word of mouth.

A fundamental aspect of managing these wetlands has been the development of partnerships with several stakeholders. The Fivebough and Tuckerbil Wetlands Management Trust has engaged the urban community of Leeton, local landowners, indigenous community representatives, local government, state agencies, educational institutions and industry groups such as Murrumbidgee Irrigation.

Through its membership and wide network of partnerships, the Trust has access to a wide range of experts and professionals on which to draw for expertise and support. Because it is a not-for-profit community body, the Trust is eligible to apply for a number of community grants and to date has been successful in obtaining funds from a number of sources including the Australian Government's Natural Heritage Trust and the Wetland Action grants program.

Greater protection and recognition of the wetland's values was achieved through gaining Ramsar listing. WWF Australia provided financial assistance to gain Ramsar designation and assisted in the development of a management plan and consultation process.

A comprehensive wetland management plan has been prepared to address the current threats and to guide future management of the wetlands. This process has benefited from the involvement of stakeholders, such as Charles Sturt University, that have provided valuable scientific and practical inputs and know-how.

Outcomes for the environment

- The conservation values of these wetlands have been recognised through Ramsar listing in 2002 and proposals for inappropriate development have been shelved.

- A management plan has been compiled for Fivebough and Tuckerbil Swamps based on scientific and practical inputs.
- Over 10 000 trees and shrubs of local provenance have been planted.
- Weed management through spraying, chipping and mowing has been undertaken.
- Fivebough Swamp has been made more accessible to visitors with the construction of four kilometres of pathways, car parks and an interpretive centre.
- Fencing has been constructed to enable management of the vegetation through grazing.
- Water regulation infrastructure has been installed and repaired to enable the control of water flows to increase the ability of managing the wetland for waterbirds.
- Water regulation is based on conservation and environmental criteria rather than for agricultural and urban needs as was the case in the past.

Outcomes for participants

- Community groups and the project have benefited from scientific input.
- The MFN and the Fivebough and Tuckerbil Wetlands Management Trust have gained experience in successfully applying for funding.
- Group members have gained valuable skills in bird and vegetation identification, construction and maintenance as well as communication, planning and negotiation skills by networking with a range of groups and individuals skilled in these areas.
- The community at Leeton now value the wetlands for both natural and economic (high eco-tourism potential) values.



Fivebough Swamp

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Measures of success

The fact that a management plan has been prepared and monitoring of bird numbers has been occurring for some years coupled with the involvement of scientific organisations ensures that outcomes can be measured against set targets. To date, the following successful outcomes have been achieved;

- Through raised public awareness and increased protection the wetlands are no longer taken for granted nor threatened with inappropriate development.
- The site provides a demonstration of wise use of wetlands where activities such as flood mitigation, waste water treatment and grazing can be compatible with conservation.
- The site remains a significant wetland for threatened species such as the Australasian and little bittern, painted snipe and broilga.

While shorebird use of Tuckerbil Swamp has remained unchanged there is evidence that the diversity and numbers of shorebirds using Fivebough Swamp declined during the years 1998-2000. This has been attributed to the invasion of mudflats and other open areas by vegetation following an absence of grazing during this period.

Water entering Fivebough Swamp was greatly reduced from 1997 to 2001. This also caused a reduction and loss of habitat areas used by all waterbirds. The Trust acknowledges that there is still more work to be done in the years to come, including the management of the vegetation to ensure maximum conservation outcomes. Migratory shorebird presence has gradually increased over the last four years with the reintroduction of grazing and appropriate water regimes.

Future strategies and directions

- The Trust aims to address the threats and degradation facing the wetland, as outlined in the management plan, to maintain its ecological character.
- Development of a range of habitats for shorebirds to ensure that suitable areas are available throughout the wetlands.
- Continuation of cooperation with stakeholders, especially with NGO's, government agencies and tertiary institutions.
- Investigation of the potential to further develop the area as a focal point for environmental education and tourism.



Red-necked stint.

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Summary

Some of the factors that have contributed to the success of this project include;

Involving and drawing on the knowledge of local people.

Ability to achieve funding for the rehabilitation and management of the wetlands.

Engaging and cooperating with a wide range of stakeholders.

Seeking practical and scientific advice in relation to management actions.

Development of a clear management plan to guide future management of the site.

Important objectives for the future include;

Continuation of monitoring of management outcomes and adapting management strategies to achieve the greatest conservation benefits.

Fine-tuning of the vegetation and water management strategies to ensure that shorebird habitat is maintained.

Key Groups and contacts

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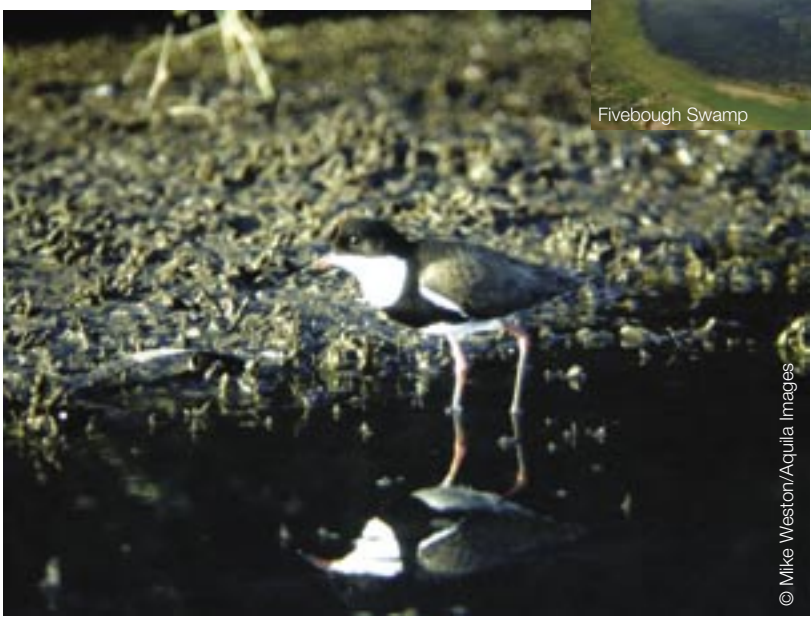
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Fivebough Swamp

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Red-kneed dotterel.

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