



SHOREBIRD CONSERVATION PROTECTING SHOREBIRDS FROM HUMAN DISTURBANCE: The NSW South Coast Shorebird Recovery Program.



Where

This project has the large task of monitoring and conserving shorebirds along the New South Wales coastline from Wollongong all the way to the Victorian border. Along this coast there are a number of important shorebird sites which are the focus of the project's activities. This coastline is extremely varied in terms of land tenure and usage ranging from busy coastal towns and recreational beaches to council reserves, crown land, national parks and wilderness areas.



Who

The South Coast Shorebird Recovery Program is coordinated by the NSW Parks and Wildlife Service (NPWS), a division of the Department of Environment and Conservation. This project began in 1999 to assist the recovery of threatened shorebirds which breed on the NSW south coast. Two Shorebird Recovery Coordinators are employed to coordinate and implement recovery actions during the breeding season. The program relies heavily on over 120 local volunteers who assist the Coordinators in carrying out on-ground works and monitoring. The project has also developed strong partnerships with a range of state and local government agencies including the Rural Lands Protection Board, Department of Infrastructure, Planning and Natural Resources and local councils.

Problems and challenges

In the past, major declines in the distribution and population numbers of locally breeding shorebird species have occurred on the south coast of NSW. These declines are caused by a wide range of human-induced and natural threats.

Human disturbance through the trampling of eggs and chicks poses a serious threat to the long-term viability of shorebird populations. Disturbance also occurs through the illegal and inappropriate use of off-road vehicles near breeding areas. Unrestrained dogs may impact on breeding shorebirds by preying on eggs and chicks as well as disturbing adult birds from nest incubation and guarding duties.

Human disturbance is usually borne out of a lack of awareness of shorebirds and their conservation. By informing coastal users of the presence and activities of these shorebirds and the threats they endure, the impacts of such disturbances can be alleviated.

The birds

The beaches, estuaries, rocky headlands and offshore islands of the south coast support a range of threatened resident and migratory shorebirds. These include the resident pied and sooty oystercatchers and the hooded plover, a species whose adult population numbers less than 50 individuals in NSW. The migratory Little Tern also utilises this section of coastline as breeding habitat. Small numbers of migratory shorebirds can be found within the south coast region on the various estuaries and sand spits.





Foxes, cats and other introduced predators can have negative impacts on ground-nesting shorebirds with heavy predation during the breeding season often resulting in the failure of birds to produce any young. Introduced predators are a serious problem as they can occur on remote and otherwise undisturbed beaches and severely compromise the conservation value of such areas.

Natural events such as storms, high tides and floods can also play a major role in nest failures. Furthermore, predation by native species such as gulls and ravens often has localised impacts especially when these species build up to high numbers as a result of human activities.

Solutions

A project of such magnitude would not be possible without the help of a large number of volunteers. The NPWS was able to recruit a substantial team of volunteers by building partnerships and sharing information with conservation organisations such as the Eurobodalla Natural History Society, The Friends of Durras, The Coastwatchers Association, Illawarra Bird Observers Club and the Far South Coast Birdwatchers.

The majority of volunteers involved with this project are locals. They often possess useful knowledge of the shorebird breeding areas, are able to attend many of the activities and raise public awareness by discussing their work with members of the broader community.

The NPWS provides much of the funding, logistical support, volunteer training and scientific expertise which guides the on-ground works. Other state agencies such as the Department of Lands, Department of Infrastructure, Planning and Natural Resources and the Rural Lands Protection Board are instrumental in providing advice, funding and helping with fox control. Another crucial element to this program's success is the good working relationship which has been developed with the three local councils of the NSW south coast. Regular communications with other researchers, both in Australia and overseas, have created channels for information exchange and helped in the development of novel ideas for shorebird conservation.

One of the greatest strengths of this project is the fact that it has clearly identified and understood the underlying causes of the threats facing shorebirds. This allows a concerted and focused approach to be taken in the conservation of these birds.

Rigorous and regular monitoring of bird numbers, nesting activity and survival of fledglings is conducted. Importantly, where nests are unsuccessful, attempts are made to find out why. In this way information is gained on which threats are still contributing to nest failure so that they can be targeted by future management actions.



A pair of Sooty oystercatchers on Five Islands Nature Reserve.



Pied oystercatcher at Lake Conjola.

Outcomes for the environment

- Public awareness has been raised by installing interpretive signs at key shorebird locations, the production of posters and brochures, newsletter and newspaper articles, public talks, conference presentations, radio and television interviews.
- Stationing volunteer wardens at key sites and installing temporary fencing has reduced human disturbance.
- Protection from native and introduced predators has been attempted by installing electric fences and predator exclusion cages around nests and controlling foxes.
- A comprehensive monitoring program has been established.
- Valuable information on the ecology of shorebirds and expertise in shorebird management has been gained.

Outcomes for participants

- The NPWS, with the help of volunteers, has achieved more for shorebird conservation than it could have on its own.

- Volunteers have gained a wide range of skills including field skills, construction and maintenance skills and planning, communication and negotiation skills by being involved with this project.
- A useful exchange of information and ideas has developed between volunteers, the NPWS and others involved in shorebird conservation both in Australia and overseas.

Measures of success

The regular monitoring of shorebird numbers and nesting success has enabled the project to evaluate its past management activities. Some of the key conservation outcomes of the project include;

- Increased numbers of eggs, chicks and fledglings of pied oystercatchers, hooded plovers, and little terns following management actions.
- Birds have successfully bred and fledged young on busy and heavily used beaches following careful management.
- Reasons for nest failure were able to be accurately determined in most cases.
- A number of scientific documents based on the findings of the project have been published, indicating the quality and importance of the data obtained.



Electric fence at Lake Wollumboola.



Hooded plover chick on Monument Beach, Bendalong.





Summary

Much of the success of this large-scale project can be attributed to the following factors;

Local volunteers and their knowledge were well utilised

A sound long term monitoring program has been developed

Innovation and adaptability has been demonstrated in the development of management actions

An integrated approach at targeting all known threats to shorebirds has been adopted

Project information and outcomes have been well publicised to a wide range of audiences through mainstream and specialised media

Future objectives for the project include;

Continued evolution of management actions and strategies as required

Continued expansion of the project and provision of adequate staffing and funding

Key Groups and Contacts

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Volunteer Patricia Latimer surveying for threatened shorebirds at Lake Wallaga.



Sign on fence protecting Little tern breeding area.

The shorebird case studies were developed by Birds Australia as part of the Shorebirds Conservation Project which is funded by the Natural Heritage Trust and managed by WWF Australia



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