Threatened Species Recovery Programs

The Permanent Park Preserve is an important seabird breeding area. Threatened seabirds such as the Providence Petrel (Pterodroma solandri), Masked Booby (Sula dactylatra), Flesh-footed Shearwater (Puffinus carneipes), Red-tailed tropic bird (Phaethon rubricauda), White Tern (Gygis alba) and Sooty Tern (Sterna fuscata) breed on the island.

Threatened Species Recovery Programs include:

* The Woodhen
* Lord Howe Island Phasmid
* Rodent eradication proposal

The Woodhen Recovery Program
Lord Howe Island is the only place in the world where Woodhens (Tricholimnas sylvestris) are found in the wild. Due to the small population size of the Woodhens on Lord Howe Island, the Woodhen is listed as Endangered under the NSW Threatened Species Conservation Act 1995.

In the 1970s the Woodhen was considered one of the rarest birds on earth. There were less than 30 left and it was feared that they may face extinction. They survived only on the limited areas of the mountain summits.

In the early 1980s a captive breeding program for the Woodhen was established with 3 healthy pairs. The program was very successful, with 93 captive bred Woodhens able to be released back to the wild as a result.

Today Woodhens can be seen in many parts of the island and are breeding well. Twice a year in March and November, the Lord Howe Island Board environmental staff undertake a survey to monitor the numbers of Woodhens at various locations on the Island. The current estimate of Woodhens on the Island is 220, which is thought to be an optimal number for the island.

Lord Howe Island Phasmid Recovery Program
The Lord Howe Island Phasmid or stick insect Dryococelus australis was once common on Lord Howe Island, but was extirpated by rats in the 1920s. This species was thought to be extinct until a small population was discovered on Balls Pyramid in February 2001 by a team of researchers (coordinated by the NSW National Parks & Wildlife Service). It is thought that the population on Balls Pyramid probably does not exceed 10 individuals.

No male phasmids have been observed on Balls Pyramid and the population may be composed only of females. Females are thought to be able to reproduce without males by a process know as parthenogenesis, whereby offspring are identical clones of the parent.

It is likely that a captive breeding program may be established in the near future to increase the population, with the possibility of re-introducing the species to either Lord Howe Island or neighbouring rat free islands.

Rodent eradication proposal
Rodents have had a significant impact on the indigenous biodiversity of Lord Howe Island.

Ship rats were accidentally introduced to Lord Howe Island in 1918. They were widespread by the 1920s. It is thought that mice have been present on the island since 1868. They are now also widespread.

Rats have been implicated in the extinction of 5 endemic bird species and in the decline of a number of other native and exotic birds. There are indications that rodents have also had negative impacts on native plants.

The Lord Howe Island Board undertakes regular rat control programs throughout the Permanent Park Preserve to reduce the negative impact caused by rats. Due to the large on-going cost, these programs have relied on external funding from the Commonwealth.

In September 2001 an assessment was undertaken of the feasibility of eradicating rodents from Lord Howe Island. The Department of Conservation in New Zealand have had success in eradicating rodents from Islands.

The positive effects of eradicating rodents include:

* Restoration of natural vegetative communities;
* Increased number of large invertebrates and some lizards;
* Increased number of insectivorous birds;
* Improved seabird breeding;
* Opportunities to restore the original fauna assemblage of Lord Howe Island;
* Reduced on-going effort and costs in rodent management;
* Reduced long term use of poisons in the environment;
* Increased palm seed yields

The removal of rats will provide opportunities to re-introduce extirpated species (or closely related taxa) to Lord Howe Island and to enhance those species depleted by rodents. The re-introduction of the Lord Howe Island Phasmid is one example.

Science & research
Current research projects
Research is currently being undertaken on the following:

* Woodhen - Tricholimnas sylvestris
* Providence Petrel - Pterodroma solandri

Providence Petrel Pterodroma solandri
Apart from a few pairs on Norfolk Island, Lord Howe Island is the only breeding site in the world for the Providence Petrel. The Providence Petrel is listed as Vulnerable under the Threatened Species Conservation Act 1995. The Providence Petrel is a dark grey seabird with white flashes under the wings and a short stubby black bill. They breed in the winter on the two southern mountains.

A combined research project to determine the foraging range and breeding success, threats and management requirements of the Providence Petrel at Lord Howe Island

is currently being undertaken by Charles Sturt University and the NSW National Parks & Wildlife Service. This research is due for completion in 2003.

Bird watching tip:
Walk the Little Island Track between March and November

Sooty Terns Sooty Tern Sterna fuscata
These striking black and white terns are the most numerous of the seabirds to breed at Lord Howe Island, with over one hundred thousand pairs breeding each spring and summer. The Sooty Tern is listed as vulnerable under the Threatened Species Conservation Act 1995. The largest colonies are on offshore islets, but substantial numbers bred on the northern hills (including Mt Eliza). A small number breed at Muttonbird Point and Ned's Beach. They lay one speckled egg on the ground in September.

A combined research project into the ecology, conservation & management of Sooty Terns on Lord Howe Island is currently being undertaken by Charles Sturt University and NSW National Parks & Wildlife Service. This research is due for completion in 2003.

Bird watching tip:
Sooty Terns can easily seen at Neds Beach common from September to January.

* Lord Howe Island Currawong
* Masked Booby (NSW National Parks & Wildlife Service)
* Invertebrates (Australian Museum)
* Endemic Plant Survey (NSW National Parks & Wildlife Service)

Scientific Research Facility
Accommodation for researchers is provided at the Research Facility on Lord Howe Island. The facility can accommodate 6 people. It is fully self contained and includes a workspace with benches and sinks. Permission to stay at the research facility requires the approval of the Lord Howe Island Board. For more information contact the Senior Ranger, Lord Howe Island Board on rangers_lhib@bigpond or phone (02) 6563 2066.

Research on Lord Howe Island
It is a legislative requirement that most research undertaken on Lord Howe Island, off-shore islands and coral reefs in the lagoon need the permission of the Lord Howe Island Board. As Board meetings are only held once every 3 months, applications to undertake research should be received a number of months in advance. Contact the Lord Howe Island Senior Ranger prior to submitting an application to undertake research on rangers_lhib@bigpond or phone (02) 6563 2066.

Researchers should be aware that some areas of the island (such as the remote southern mountains and fragile seabird nest sites) are restricted unless accompanied by a local guide.

List of the declared species on Lord Howe Island
Threatened Species Conservation Act 1995, NSW

Endangered Species (Schedule 1)

Woodhen Gallirallus sylvestris (endemic)*#^
Lord Howe Island Phasmid Drycocelus australis*
Land Snail Placostylus bivaricosus*#
Pericryptodrilus nanus (earthworm found on Mount Gower)

Chamaesyce psammogeton (perennial herb on foreshore of NSW)

Vulnerable Species (Schedule 2)

* White-bellied Storm Petrel Fregetta grallaria
* Kermadec Petrel Pterodroma neglecta
* Black-winged Petrel Pterodroma nigripennis
* Providence Petrel Pterodroma solandri#
* Little Shearwater Puffinus assimilis
* Flesh-footed Shearwater Puffinus carneipes #
* Red-tailed tropic bird Phaethon rubricauda
* Masked Booby Sula dactylatra #
* White Tern Gygis alba ^
* Sooty Tern Sterna fuscata
* Pied Currawong (Lord Howe Island subsp) Strepera graculina crissalis # ^
* Silvereye (Lord Howe Is. subsp.) Zosterops lateralis tephropleura
* Golden Whistler (Lord Howe Is. subsp.) Pachycephala pectoralis contempa
* Lord Howe Island Southern Gecko Christinus guentheri ^
* Lord Howe Island Skink Pseudomoia lichenigerum

Key Threatening Processes (Schedule 3)

Predation by ship rat Rattus rattus

Species Presumed Extinct

* Tasman Starling (Lord Howe Is. Subsp.) Aplonis fusca hullianus ^
* White-throated Pigeon (Lord Howe Is. Subsp.) Columba vitiensis godmanae ^
* Red-crowned Parakeet (Lord Howe Is. subsp.) Cyanoramphus novaezelandiae subflavescens ^
* Lord Howe Gerygone Gerygone insularis ^
* Southern Boobook (Lord Howe Is. subsp.) Ninox novaeseelandiae albaria ^
* White Gallinule Porphyrio albus ^
* Grey Fantail (Lord Howe Is. subsp.) Rhipidura fuliginosa cervina ^
* Island Thrush (Lord Howe Is. subsp.) Turdus poliocephalus vinitinctus^
* Robust White-eye Zosterops strenuus ^
* Lord Howe Island Bat Nyctophilus howensis

Draft Recovery Plans have been written for the following:
Woodhen
Placostylus bivaricosus
In addition some initial recovery actions have been written for the Lord Howe Island Phasmid.

Other significant species
Large Forest Bat Vespadelus darlihgtoni

Bird watching tips

Walk the Little Island Track between March and November to view the spectacular aerial courtship displays by the winter breeding Providence Petrel.

Red Tropic Birds can be viewed from the northern Hills or the Goathouse walking track below Mt. Lidgbird.

Sooty Terns can easily be seen at Ned's Beach common and the Northern Hills from September to January.

Watch the Fleshy footed Shearwaters return to their nesting burrows at dusk, at Neds Beach.

Masked Boobies can be seen nesting and gliding along the sea clifs at Mutton Bird Point – bring your binoculars.

The keen bird watcher may see many other migratory or vagrant species, especially over the summer months