

Enviro News

The Environment Unit of the Lord Howe Island Board is pleased to offer the Summer edition of the 'Enviro News' detailing environmental management activities for the Island. These notes have been prepared to provide up to date information for operators within the Island's tourism industry to assist with guiding and for informing island visitors.

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Annual Woodhen Survey

The annual woodhen survey was conducted by Environment Unit staff during late November and early December 2005.

A total of 172 birds were recorded in total comprising 78 records for the settlement, 61 records for Mt Gower, 22 records for Far Flats, 9 records for Grey Face to Boat Harbour and 2 records for Erskine Valley. Of the overall total of 172, there were 61 new bandings, and 45 birds were recaptured to complete their banding. The remainder were seen or heard.

In comparison to last year (2004) 164 birds were recorded, comprising 81 records for the settlement, 51 records for Mt Gower, 21 records for Far Flats, 9 records for Grey Face and 2 records for Erskine Valley. In 2004 there were 67 new bandings, and 41 recaptures.

Further comparisons to total numbers recorded in previous years for those areas surveyed in 2003 (117), 2002 (133), 2001 (150) and 2000 (140) suggest the woodhen population is relatively stable. Minor fluctuations in the numbers recorded (for example in 2003) had more to do with unfavourable weather conditions which impacted upon

observations and capture success during the survey period.

Once again the continued support and involvement of Island residents during these surveys is greatly appreciated. The community's efforts greatly contributes to the successful recovery of the woodhen, bringing it back from being on the brink of extinction.



A pair of (unbanded!) woodhens above the Getup Place, Mt Gower. Photo: S. Thompson

Invasive species

CSIRO scientist Dr Ben Hoffman recently visited the Island to assist Environment Unit staff develop a control strategy for the African big-headed ant (*Pheidole megacephala*). The African big-headed ant occurs in a number of locations on the Island, and is principally confined to the settlement area.

Big-headed ants are known to have serious environmental impacts where they occur on the mainland. These ants also pose major threat to island biodiversity. Big-headed ants out-compete and displace almost all native invertebrates, particularly other ant species. This ant is also a serious pest in and around buildings.

Dr Hoffman demonstrated mapping techniques, and assisted with ant identification as there is another similar looking ant (*Tetramorium bicarinatum*) that occurs on Lord Howe Island.

A control strategy is being developed which will aim toward eradicating this ant species from the Island.



CSIRO research scientist Dr Ben Hoffman places a marker flag to assist identifying areas where the African big-headed ant occurs. Photo: S. Thompson

Current research activities



Controlling Formosan lilly

PhD research candidate Ms Susanne Warner of the University of New England recently commenced a three year study on the biology and ecology of Formosan, or tiger lilly (*Lilium formosanum*). This study will focus on this weed impact's on native and endemic species, and the role this weed plays in the Island's ecosystem. Of particular interest will be investigations into possible biological control mechanisms.

Formosan lilly is a highly successful invader as it is capable of producing many offspring through the high number of seeds each plant produces, and the ease by which those seeds have spread throughout the Island. As such it has potential to spread across large parts of the Island and become the dominant plant species.

Researcher Susie Warner (left) marking out one of her study sites. Photo: John Duggan.

Current research continued...

Department of Environment and Conservation (DEC) scientist Mr Nicholas Carlile commenced a year long study to assess the population size and distribution of the Lord Howe currawong (*Strepera graculina crissalis*). The LH currawong is a distinct subspecies of the mainland variety, having a larger bill, less white colouration, and has a distinct call. As the LH currawong only occurs here it is listed as a threatened species under the NSW Threatened Species Conservation Act.

Little factual information is known about the ecology of this species, such as distribution, group size, and density. This study will assist to answer some the gaps in our knowledge of the currawong.

During this study Mr Carlile colour banded more than 120 individual birds to assist tracking their movements and to help determine their group size.

Initial results from the survey suggest the Island's currawong population to be about 180-200 individual birds. Nicholas has estimated that breeding pairs require an area of about 15 hectares, and that this equates to a total population of fewer than 100 breeding pairs on the Island.

Nicholas also observed foraging behaviour of parent birds for their nestlings, which revealed the majority of food brought to nestlings was (in order of decreasing importance) invertebrates, fruits, reptiles (predominately the introduced rainbow skink), and nestlings of other bird species.

Data collected from this project will also assist with the broader proposal for the eradication of rodents from the Island. Currawongs are one of the bird species considered to be at some degree of risk from aerial baiting, if aerial baiting eventuates as the preferred method for rodents eradication.

DEC scientists trap a currawong. Photo: S.Thompson



Sean (above) ponders his next move.

The ranger goes rangersing...

Sean Thompson will be departing the Island mid January 2006 to take up a NSW national parks ranger position at Myall Lakes National Park for about 12 months. Sean has been the Board's ranger for over two years and was responsible for a diverse range of tasks including coordinating scientific research activities, animal importation approvals, noxious weed inspections, wooden surveys, environmental assessments, mooring approvals, and collating twice yearly this prodigious and acclaimed publication. The chance to work at Lord Howe Island has proved invaluable and rewarding career opportunity given the diversity of tasks and responsibilities.