

Progress Report SP 2012-022

Conservation of south coast threatened birds

Animal Science

Project Core Team

Supervising Scientist

Allan Burbidge

Data Custodian

Site Custodian

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Project Team

granted

Program Leader

granted

Directorate

granted

Conservation of south coast threatened birds

A Burbidge, A Clarke, S Comer, J Lane

Context

Identifying the conservation requirements of threatened south coast birds, such as the Critically Endangered western ground parrot, the Vulnerable western bristlebird, the western subspecies of the western whipbird, and the Endangered Australasian bittern, will aid *in situ* management of these taxa. Understanding responses to fire and hydrological changes, biological and behavioural characteristics, such as vulnerability to predation, and nesting site requirements are essential knowledge for the conservation of these Western Australian birds (some of them endemic to the south-west) and the development of management programs.

Aims

- Develop an understanding of the biological and ecological factors that limit the distribution and numbers of western ground parrots and western bristlebirds, including interactions with predators, habitat requirements and response to fire.
- Increase the survival chances of the western ground parrot, western bristlebird and western whipbird and increase their total population size through creation of management prescriptions that will benefit all threatened south coast animals.
- Investigation of life history characteristics and ecological processes impacting on recruitment in the Australasian bittern.
- Characterise and map habitat critical to the survival of the Australasian bittern.
- Survey and monitor Australasian bittern populations and habitat to assist tracking current trends.

Progress

- Monitoring of western ground parrots after extensive fires in Cape Arid National Park and Nuytsland Nature Reserve continued and preliminary examination of the data suggests that abundance levels are stable.
- Ground parrot monitoring protocols are being further refined through use of audio recordings and analysis of trends in current data set.
- Assisted in finalising the recovery plan for the Australasian bittern in Western Australia.
- Completed modelling to predict future distribution of ground parrots in the face of climate change, and to assist in selection of translocation sites. A paper is currently in review.
- Book chapters dealing with western ground parrot and noisy scrub-bird were published in *Recovering Australian Threatened Species. A Book of Hope*.
- Two conference papers were presented.
- Progress has been made on developing Australasian bittern monitoring protocols through the analysis of audio recordings and refining of detection techniques.
- Camera trapping surveys have provided information on foraging behaviour and habitat preferences of Australasian bitterns.
- Continued monitoring surveys of Australasian bittern in critical breeding habitat in the Le Grand Unallocated Crown land after very hot fire damaged 80% of the wetland in November 2016.

Management implications

- Knowledge of the biology and responses to threats of south coast threatened birds provides a basis for decision making and management actions for their recovery, especially with respect to introduced predators and fire, in important conservation reserves on the south coast.
- The collection of high quality depth and water quality data will be critical to the development of modelling designed to predict the hydrological futures for high priority bittern breeding wetlands. These research findings will help inform stakeholders and land managers where to target mitigation strategies.

Future directions

- Finalise writing up of data on response to fire by bristlebirds and write up data on morphometrics of the western ground parrot.
- Continue to develop monitoring analyses and techniques, and finish writing up recent survey data.
- Identify knowledge gaps in the ecological requirements of the Australasian bittern to improve the conservation and management of the species.
- Continue to monitor key populations of Australasian bittern and their habitat so that on going trends can be tracked and communicated to stakeholders and inform management.