

Progress Report SP 2012-022

Conservation of south coast threatened birds

Animal Science

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Project status as of Feb. 11, 2021, 1:58 p.m.

Approved and active

Document endorsements and approvals as of Feb. 11, 2021, 1:58 p.m.

Project Team

granted

Program Leader

granted

Directorate

granted

Conservation of south coast threatened birds

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Context

Identifying the conservation requirements of threatened south coast birds, such as the critically endangered western ground parrot, endangered noisy scrub-bird, vulnerable western bristlebird and 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 south coast threatened birds, including interactions with predators, habitat requirements and response to fire.
- Increase the survival chances of south coast threatened birds 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.
- Survey and monitor Australasian bittern populations and habitat to assist tracking current trends.

Progress

- A paper on field testing of recording units, in relation to scrub-bird and ground parrot calls, was accepted for publication in *Emu - Austral Ornithology*.
- An analysis of occurrence of western bristlebirds in relation to fire over several decades in Fitzgerald River National Park was submitted for publication.
- Monitoring of scrub-birds at Two Peoples Bay has failed to identify obvious reasons for recent declines, although potentially contributing factors (including fire and predators) were identified. A paper has been accepted for publication in *Pacific Conservation Biology*.
- An evaluation of feral cat control and impacts on western ground parrots was submitted for publication in *Wildlife Research*.
- Population monitoring of western ground parrots and development of risk assessments were undertaken ahead of a proposed translocation.
- A short note in WA Bird Notes was published showing that Australasian bitterns forage mainly in the day rather than mostly at night as previously believed.
- Extensive surveys for Australasian bitterns were conducted and ARUs deployed as part of a collaboration with Birdlife Australia. Progress was made in using automatic recogniser software to identify Australasian bittern calls from autonomous recorder units.
- Depth and rainfall at sites known to be important for the Australasian bittern continued to be monitored.
- Experience was gained in deploying traps to catch Australasian bitterns for fitting birds with satellite trackers, but no birds were captured due to unseasonably dry conditions.

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

- Complete publication on survey data for ground parrots, scrub-birds, bristlebirds, and bitterns.
- Complete publication on occupancy of ground parrots in relation to fire.
- Carry out a translocation of western ground parrots from the one remaining population to a safe site further west on the south coast.
- Conduct trial GPS tracking of Australasian bitterns, and continue to monitor key populations of Australasian bittern and their habitat so that trends can be tracked and communicated to stakeholders and inform management.