Concept Plan SP 2019-071

Structured decision making to support Abrolhos painted button quail conservation in the Houtman-Abrolhos Islands National Park

Animal Science

Project Core Team

Supervising Scientist	Megan D Barnes
Data Custodian	Megan D Barnes
Site Custodian	

Project status as of July 16, 2020, 3:08 p.m.

New project, pending concept plan approval

Document endorsements and approvals as of July 16, 2020, 3:08 p.m.

Project Team	granted
Program Leader	granted
Directorate	required

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Biodiversity and Conservation Science Program

Animal Science

Departmental Service

Service 6: Conserving Habitats, Species and Communities

Background

0.48 The Abrolhos islands are a popular recreation site, currently free of introduced predators, and host the only WA population of the Abrolhos painted button quail (Turnix varius scintillans), several important seabird breeding areas, and sea lion breeding areas that may be negatively impacted by disturbance, among other biodiversity values.

Abrolhos painted button quails (APBQ) were recently identified as at high risk of extinction. The APBQ is resident on East and West Wallabi Islands (a single connected population), now likely to be the only remaining population of APBQs, as a result of the extirpation of a population on North Island where they were once common.

Houtman-Abrolhos Islands National Park (HAINP) was declared on 25th July 2019. HAINP was declared for its biodiversity, heritage and landscape values and to create opportunities for visitors to enjoy their unrivalled beauty. Managing HAINP requires a base of operations which is planned on East Wallabi Island. Significant investment to implement tourism infrastructure including a new jetty on East Wallabi Island has been assigned.

Some natural values have already experienced declines on East Wallabi, and increased use may result in increased invasion risk by feral species such as rats. But how likely invasion will be is unclear, and there are also potential benefits, including increased opportunities to detect any invasion should it occur. In response to the HAINP declaration, given the likely increase in visitation and use identified in the draft management plan, and concern about the implications of the arrival of invasive mammals, a risk assessment was considered desirable. A pilot workshop was conducted at which a risk assessment was identified as a key need for APBQ.

Aims

This project aims to evaluate risks to the Abrolhos painted button quail and identify cost-effective management strategies to ensure their long term persistence, using Structured Decision Making in collaboration with the DBCA Midwest Region.

Expected outcome

The work will directly inform regional decision making by providing a better understanding of the potential risks to Abrolhos painted button quails, and identify cost-effective management strategies to ensure their long term persistence.

The project is in collaboration with representatives of the Midwest Region, and Parks and Visitor services, supporting multiple departmental goals.

Strategic context

The project contributes to the following BCS strategic goals and key deliverables including:

- Biodiversity, conservation and recovery programs are based on scientific knowledge – Recommendations regarding conservation actions necessary to maintain sustainable populations, or recovery of, targeted species including the management of threatening processes; recommendations regarding the conservation status of targeted species; purpose-specific optimal monitoring strategies
- Understanding of the effects and opportunities for mitigation of pressures and threats to terrestrial ecosystems – recommended strategies to enhance the resilience of native fauna to habitat disturbance.

- Scientific knowledge is available to inform adaptive management and decision making – development of decision support tools to improve capacity to make timely and effective management decisions.
- Conservation advice is based on scientific information – translation of research outputs in formats appropriate to the target audience to encourage adoption.
- Effective science partnerships enhance conservation outcomes - identification of external collaborative conservation research opportunities to deliver on shared goals.

Expected collaborations

Stephen Garnett - Charles Darwin University

Proposed period of the project

Sept. 1, 2019 – June 30, 2020

Staff time allocation

Role	Year 1	Year 2	Year 3
Scientist Technical Volunteer Collaborator	0.2	0.1	

Indicative operating budget

Source	Year 1	Year 2	Year 3
Consolidated Funds (DBCA) External Funding	2000		