

## Concept Plan SP 2020-044

### 1 RISK ASSESSMENT FOR THE ABROLHOS PAINTED BUTTON QUAIL

#### Animal Science

#### Project Core Team

Supervising Scientist	Megan Barnes
Data Custodian	Megan Barnes
Site Custodian	

#### Project status as of June 9, 2020, 12:53 p.m.

New project, pending concept plan approval

#### Document endorsements and approvals as of June 9, 2020, 12:53 p.m.

Project Team	required
Program Leader	required
Directorate	required

# section[RISK ASSESSMENT FOR THE ABROLHOS PAINTED BUTTON QUAIL]RISK ASSESSMENT FOR THE ABROLHOS PAINTED BUTTON QUAIL

## Biodiversity and Conservation Science Program

Animal Science

## Departmental Service

Service 6: Conserving Habitats, Species and Communities

## Background

The Abrolhos islands are an extremely popular recreation site, currently free of introduced predators, and host the only WA population of Painted Button Quail, 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 in particular, were recently identified as at high risk of extinction (Geyle et al, Pac. Cons Biol, 24, 157-167, 2018), as a result of the extirpation of one of only three populations. The only remaining populations of APBQ occur on East and West Wallabi Islands.

Houtman-Abrolhos Islands National Park (HAINP) was declared on July 25<sup>th</sup> 2019. HAINP was declared for 'the islands' 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, one of only three islands where the Abrolhos Painted Button Quail resides. Approximately \$10million dollars have been assigned to implement tourism infrastructure including a new jetty on East Wallabi Island. Some natural values have already experienced declines on East Wallabi. Increased use may result in increased invasion risk by feral species such as rats, or increased fire risk, but how likely invasion will be is unclear.

## Aims

This project aims to evaluate risks to Abrolhos Painted Button and identify cost-effective management strategies to ensure their long term persistence, using Structured Decision Making and expert elicitation of invasion risk.

## Expected outcome

The project will result in better understanding of risks to Abrolhos Painted Button Quails, identify novel cost-effective management actions for APBQ, and inform park planning with high accountability and transparency. The project will be conducted in collaboration with representatives of the region, and Parks and Visitor services, supporting multiple departmental divisions and cross-divisional partnership.

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.

## Strategic context

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- 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 - CDU.

Rob Davis (and Student) – ECU

## Proposed period of the project

Sept. 15, 2019 – Jan. 31, 2021

## Staff time allocation

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

## Indicative operating budget

Source	Year 1	Year 2	Year 3
Consolidated Funds (DBCA)	1000		
External Funding			