Concept Plan SP 2018-103

Psittacine beak and feather disease, avian Polyomavirus and raven attacks in Forest Red-tailed Black Cockatoos (*Calyptorhynchus banksii naso*): Implications for managing a threatened species.

Perth Zoo Science

Project Core Team

Supervising Scientist	Peter Mawson
Data Custodian	Peter Mawson
Site Custodian	

Project status as of Sept. 7, 2018, 4:03 p.m.

New project, pending concept plan approval

Document endorsements and approvals as of Sept. 7, 2018, 4:03 p.m.

Project Team	required
Program Leader	required
Directorate	required

Psittacine beak and feather disease, avian Polyomavirus and raven attacks in Forest Red-tailed Black Cockatoos (*Calyptorhynchus banksii naso*): Implications for managing a threatened species.

Biodiversity and Conservation Science Program

Perth Zoo Science

Departmental Service

Service 7: Research and Conservation Partnerships

Aims

1. To compare the age and sex demographics, health status and rehabilitation success of Forest red-tailed black cockatoos affected by raven attacks with non-attacked birds and identify any significant differences between the two groups.

2. To determine the prevalence of Beak and Feather Disease Virus infection and clinical disease in Forest red-tailed black cockatoos and correlate these results with age and sex data.

3.To investigate the phylogenetic relationship between BFDV isolates from Forest red-tailed black cockatoos and introduced psittacines and determine whether there is any molecular evidence of transmission of disease from introduced species to Forest red-tailed black cockatoos.

4. To determine the prevalence of APV infection in Forest red-tailed black cockatoos, and investigate the relationship between BFDV and APV infection.

Expected outcome

This project will provide new health and disease data for Forest red-tailed black cockatoos and help determine how significant the two avian diseases are to Forest red-tailed black cockatoos, and how important attacks by ravens are on cockatoo populations.

Strategic context

Managing threatened species, and in particular those that occupy urban environments as part of their range is a challenge. Meeting the challenge is made simpler when the nature and extent of threatening processes are quantified. Emerging wildlife diseases are an under-researched threat to many wildlife species, and information on the interactions between species in altered landscapes presents that adversely affect one species helps in prioritizing conservation actions to remedy these threats.

Expected collaborations

This project is a post-graduate research project (for the degree of Doctor of Veterinary Medical Science) being undertaken by a John Howell Veterinary Resident based at Perth Zoo and enrolled at Murdoch University.

Proposed period of the project

July 1, 2014 – Dec. 31, 2018

Staff time allocation

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

Indicative operating budget

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