



10 years of monitoring and conservation of an endemic island parrot: Seychelles black parrot *(Coracopsis barklyi)*



Jennifer Appoo Island Biology Conference 2019, La Reunion

Seychelles black parrot

Praslin Island, Seychelles



- Endemic to Seychelles
 Breeds only on Praslin
- Only remaining parrot in Seychelles
- Formerly considered a lesser vasa parrot subsp
- Declared distinct in 2014 following genetic research

Mature palm forest habitat



Monitoring objectives

- Basic ecology
- Population dynamics & trends
- Breeding behaviour
- Breeding activity and movements through ringing and re-sighting
- Reproductive constraints
- Population threats

Methods

- Population surveys
- Mist-netting and ringing adults
- Observations
- Nest monitoring
- Ringing chicks in nests
- Trapping trials to determine impact of rats on breeding success
- Disease-screening





Major findings so far

- Current population estimate: 1096–1742 birds
- 133 nests monitored
- 68 nests successful (51%)
- 93 fledglings
- 260 black parrots ringed (90 chicks, 170 adults)
- Each breeding female has unique call
- Females lay 1-4 eggs per nest
- Breeding period: October-March
- Yearly fluctuations in level of breeding activity
- Predominantly nest in coco de mer cavities
- Feed on >53 plant species

Breeding activity & nest success

Breeding activity and success 2009-2019



Breeding season

Numbers of eggs, chicks and fledglings monitored in each breeding season



Breeding season



Breeding success: predation by rats

- Aim: Quantify level of rat predation on nests
- Treatment: 3 intensities of trapping around black parrot nests
- Control: no trapping around black parrot nests



Breeding success: predation by rats

High intensity trapping





Nest success during rat trapping trial

Season 2017/18 and 2018/19 results



Trapping treatment

Food availability

- Aim: Determine seasonal and annual trends in fruiting of endemic trees and link between black parrot breeding activity
- Phenology monitoring on 18 plant species from 2009-2019
- 5 individuals of each species monitored every two weeks
- Estimate percentage of fruits, flowering and ripe fruits

Breeding activity and fruiting patterns





🗖 Deckenia nobilis 👘 🗖 Nephrosperma vanhoutteanum 👘 🗖 P

Phoenicophorium borsigianum

Verschaffeltia splendida

What next?

- 1. Understand causes of fluctuating breeding activity –continue breeding monitoring
- 2. Improve conservation status of BPs reduce threats at the Vallée de Mai, e.g. yellow crazy ant control, support translocations to suitable islands
- 3. Understand black parrot breeding ecology – more research into cooperative breeding, genetics, postfledging survival

Seychelles black parrot population stable but vulnerable

Thank you for listening



seychelles islands foundation

Breeding monitoring 2009-2019: nest locations



Black parrots - Vocalisations



Rat impacts on breeding success

Nest success during rat trapping trial



Other factors impacting breeding success

- Yellow crazy ants
- Climatic conditions / weather
- Food shortage
- Disease
- Genetics
- Other IAS: cats/mynah birds

