

Examining occupancy and detection probability after seven years of monitoring for *Crested Ibis* (*Lophotibis cristata*)



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INTRODUCTION

Crested Ibis

- Endemic to Madagascar
- Occurs in the humid forest of the east and the dry forest of the west
- Threatened by habitat destruction and local hunters



INTRODUCTION

Objectives

- To examine trends over times in Crested Ibis occupancy and detection probability
- To determine the effect of ecological factor to occupancy probability, detection probability, local colonisation and local extirpation

METHODS

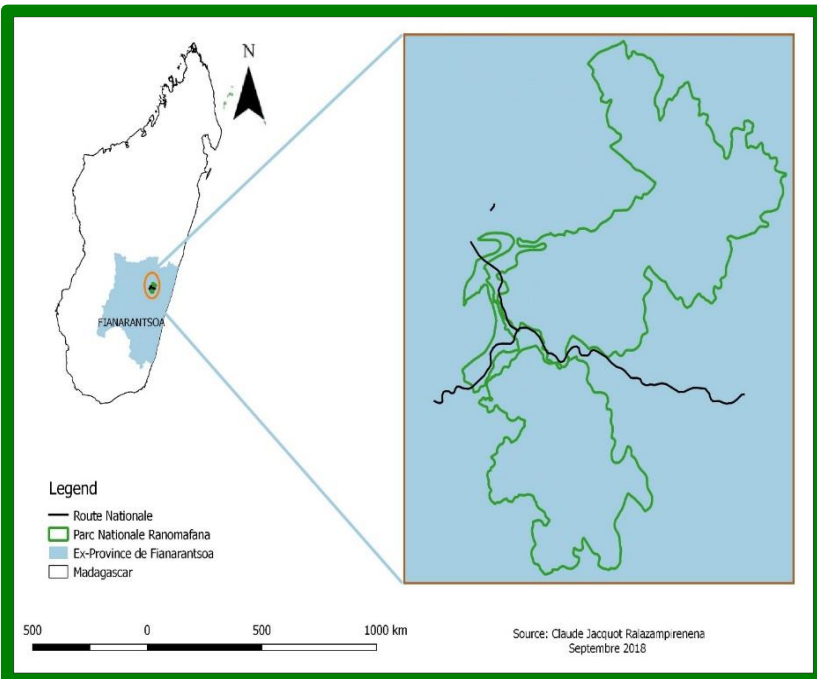
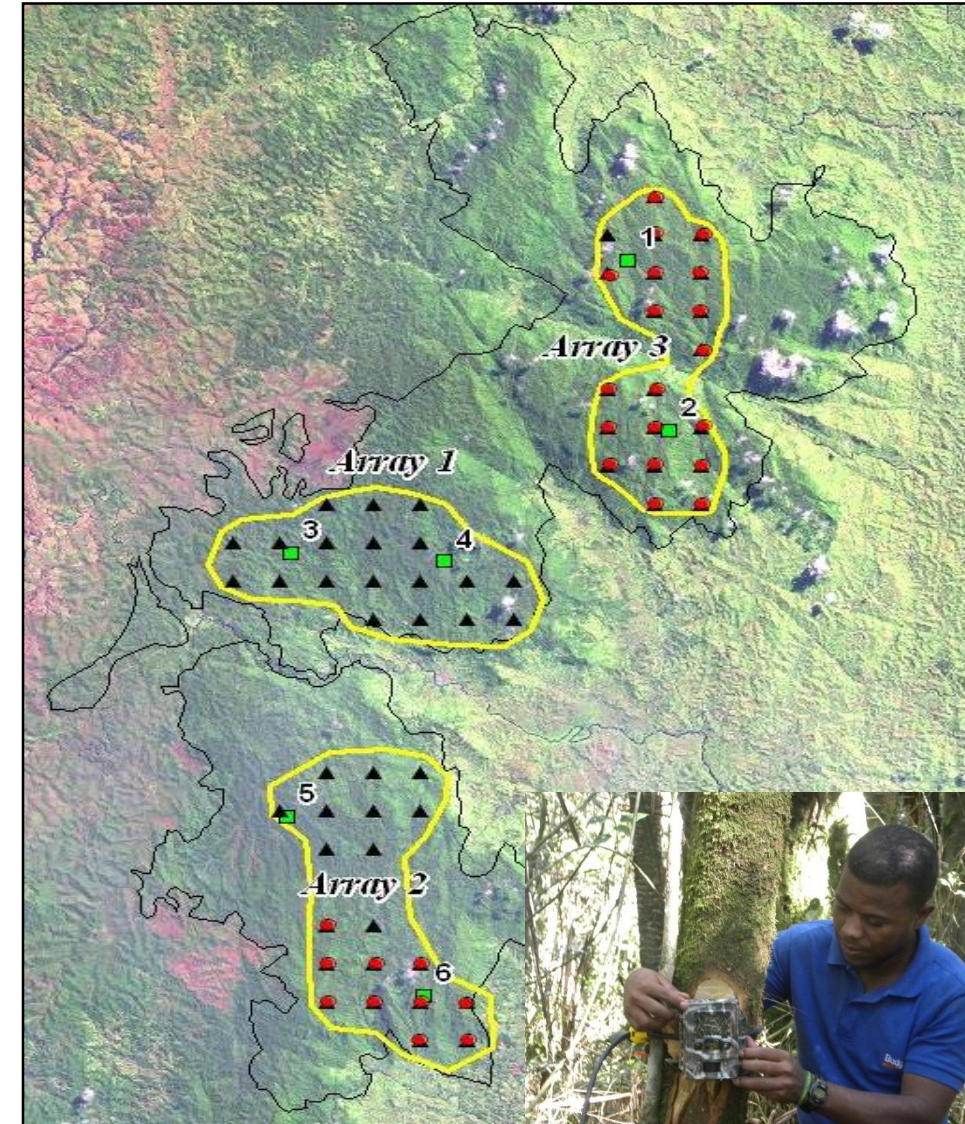
Study area and Sample design

Conducted within 3 Arrays & 6 Sites of
Ranomafana National Park

Array 1: (Middle)
- Site 3 & Site 4

Array 2: (South)
- Site 5 & Site 6

Array 3: (North)
Site 1 & Site 2





METHODS

Statistical Analysis

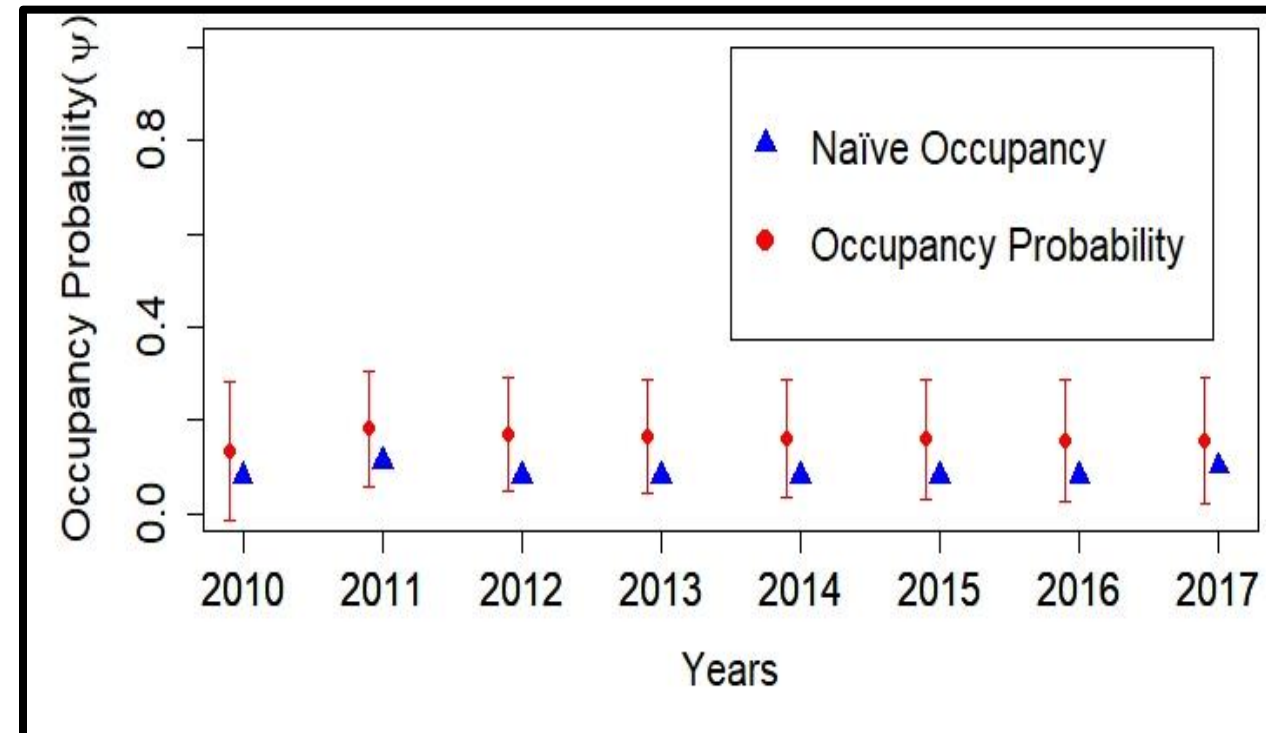
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- Occupancy Modeling
- Multi-season occupancy model

RESULTS

- Crested Ibis was detected in 27 of 60 camera traps location
- Naïve occupancy probability = 0.45
- Occupancy Equilibrium ($\lambda = 0.33$)





CONCLUSION

- Yearly estimates occupancy probability were remarkably similar
- All naïve occupancy probability were under to the predicted occupancy
- One take home from this study was the decrease in Numbers of Crested Ibis



Thanks

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