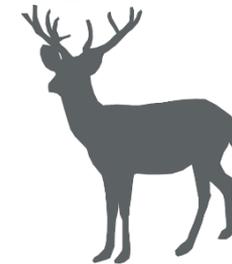




*Monitoring Mammal Movement Through
Terrestrial and Aquatic Passageways in
Antigonish, Nova Scotia Using Remote
Camera Sensing*



Stephanie White

MSc Candidate

Dr. Trevor Avery & Randy Milton





Nova Scotia Wildlife Corridors

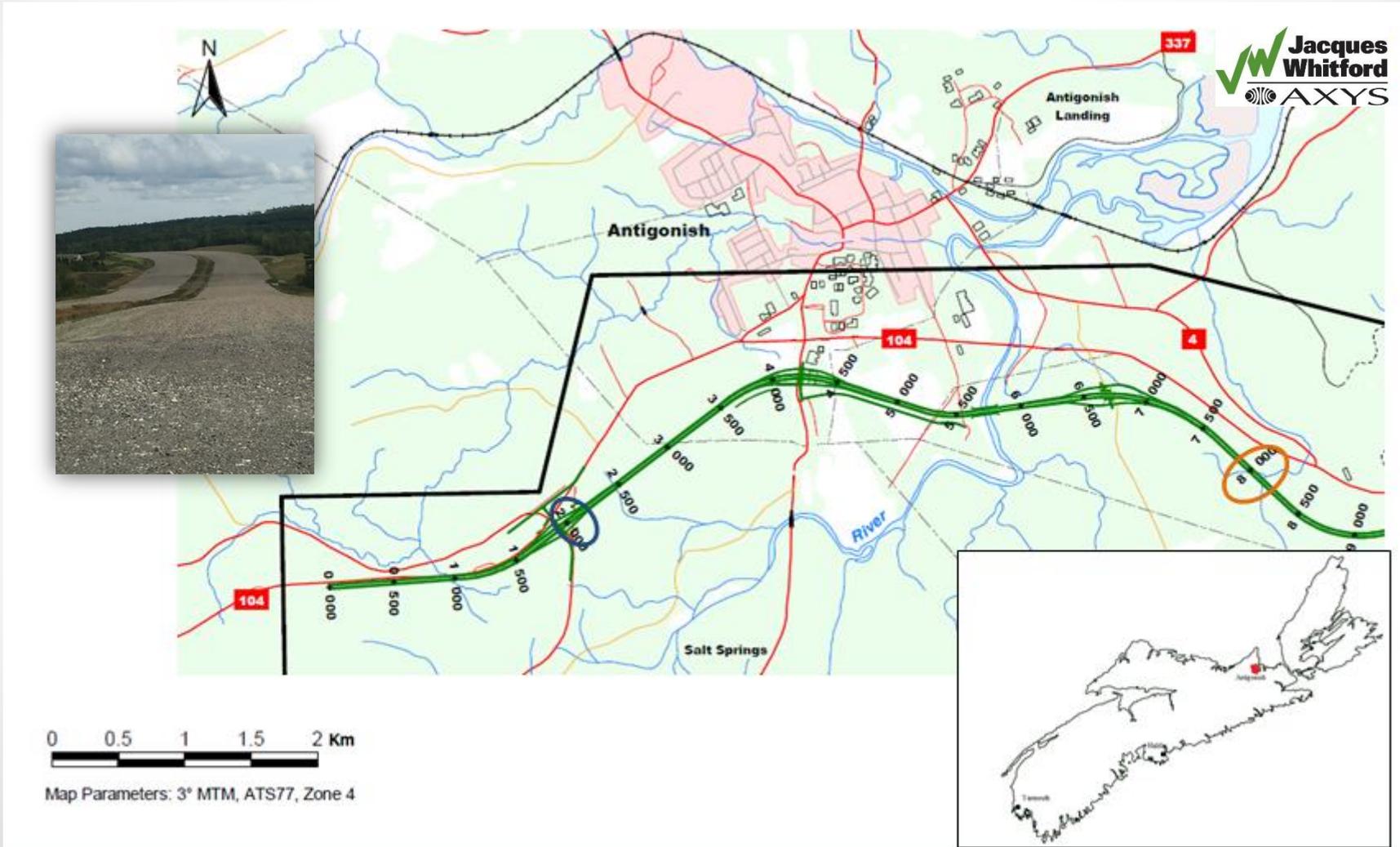


- Province
 - Area 55,283 sq km (21,345 sq mi)
 - Population < 1 million
- Existing Corridors
 - Cobequid Pass
 - Antigonish
- Wildlife Use
 - Studies



Introduction

Antigonish, Nova Scotia



Introduction

Site Components



Underpass

- Length 58m (190 ft)
- Width 1.86m (6.10 ft)
- Height 2.43m (7.97 ft)



Culvert

- Length 93m (305 ft)
- Diameter 2.60m (8.53ft)

Introduction

Site Components



Atrium



Bushnell Camera Name 53F11°C ●

08-04-2016 07:33:50

Gates



Fencing

Introduction

Site Layout





Methods

Atrium & Camera Logistics

Camera Logistics

- Passage/fencing placement
- Highway Monitoring

Atrium Variables

- Temp/Light intensity
- Moon phases
- Cloud coverage



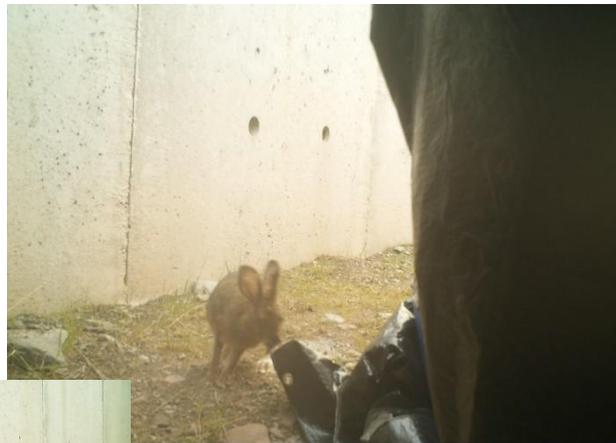


Results

Qualitative Monitoring



- Mammal Movement
 - Before/After Fence
 - Medium/Large Mammals
 - Time Spent within Passage per species



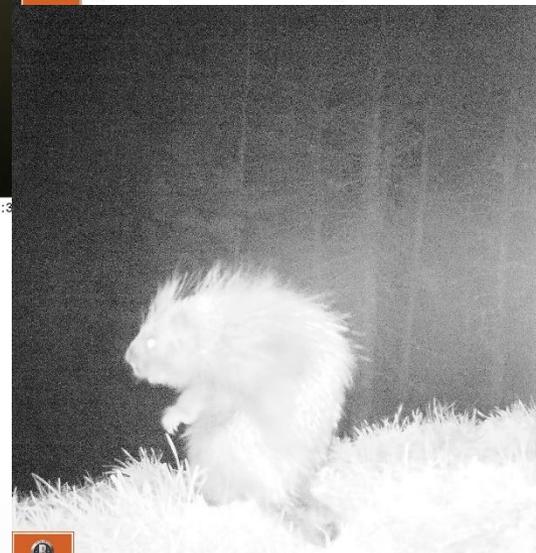
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Bushnell Camera Name 71°F21°C ● 08-06-2016 12:07:47



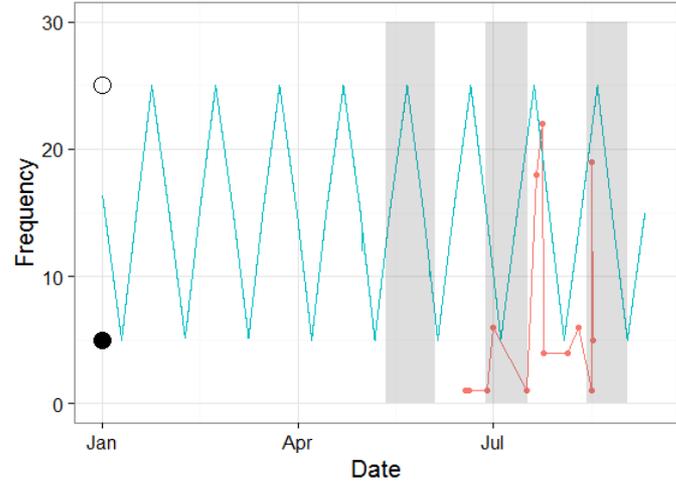
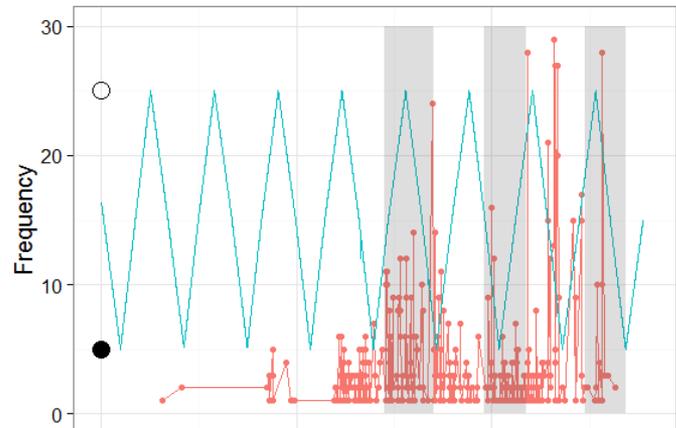
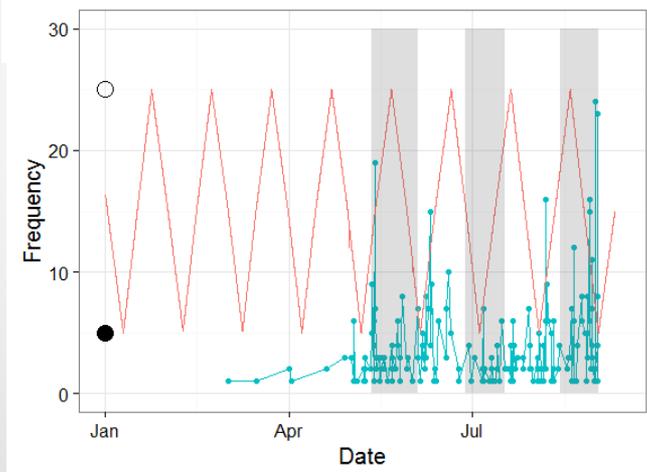
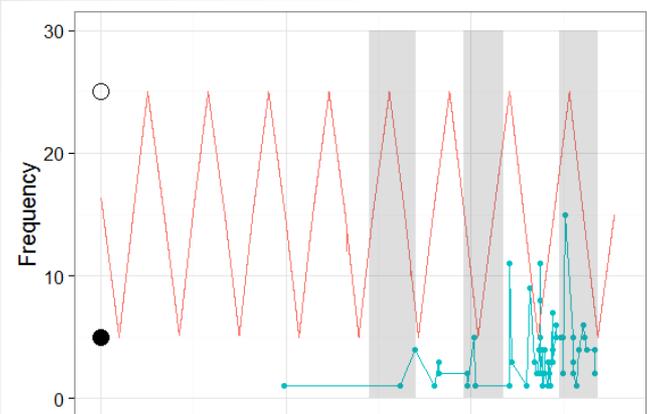
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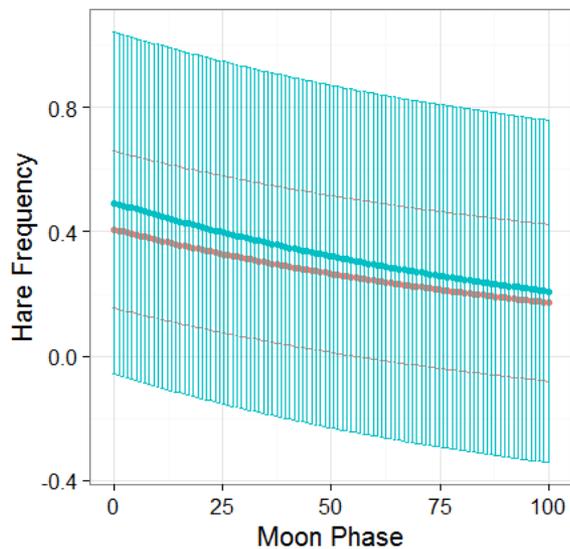
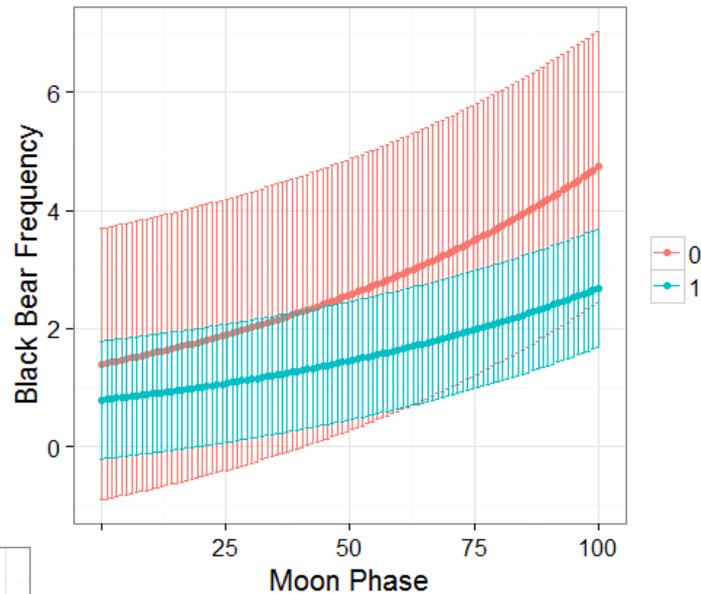
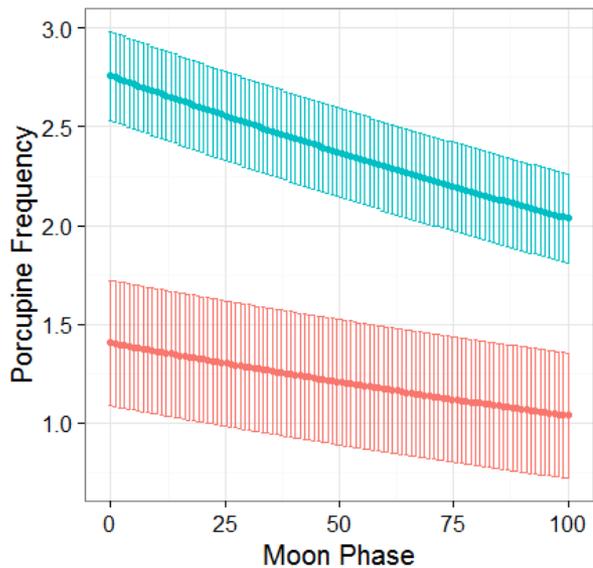
Bushnell Camera Name 48°F3°C ● 05-13-2016 21:24:04

Results/Discussion

Quantitative Monitoring



Results/Discussion Quantitative Monitoring



Conclusion



- Species activity levels
- Other variables
- Future analysis



Camera Name 68°F20°C 09-05-2015 15:11:21





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Questions?



NOVA SCOTIA

**Transportation and
Infrastructure Renewal**



NOVA SCOTIA

Natural Resources