



Preliminary Nightjar Detectability Results for Protocol Optimization

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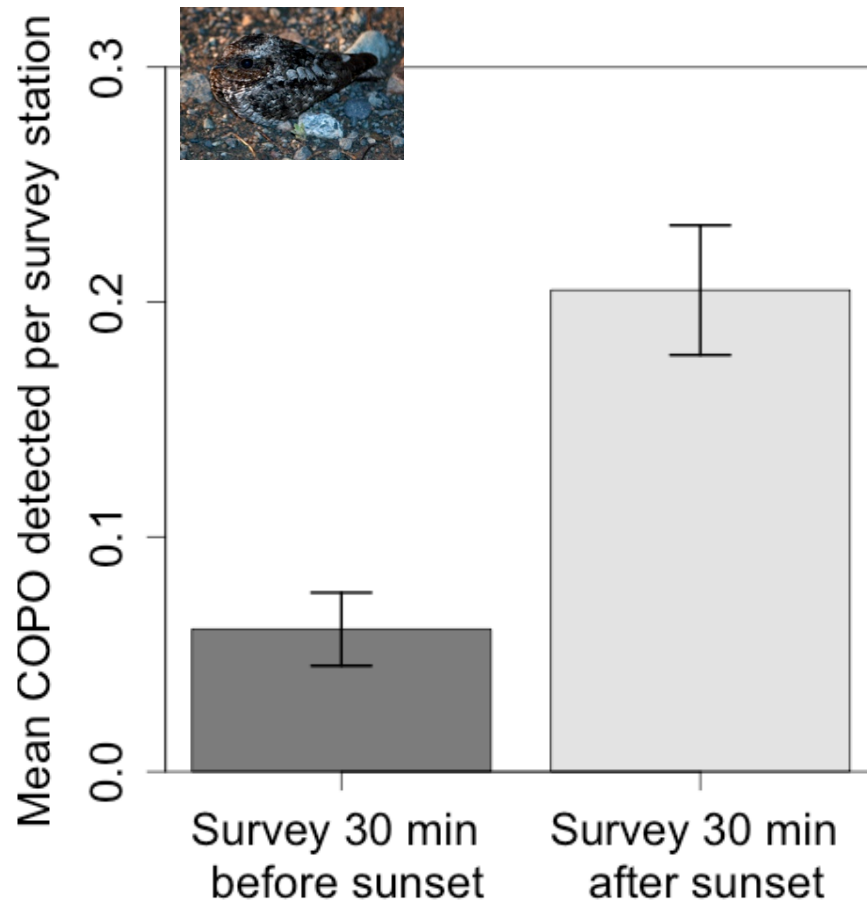
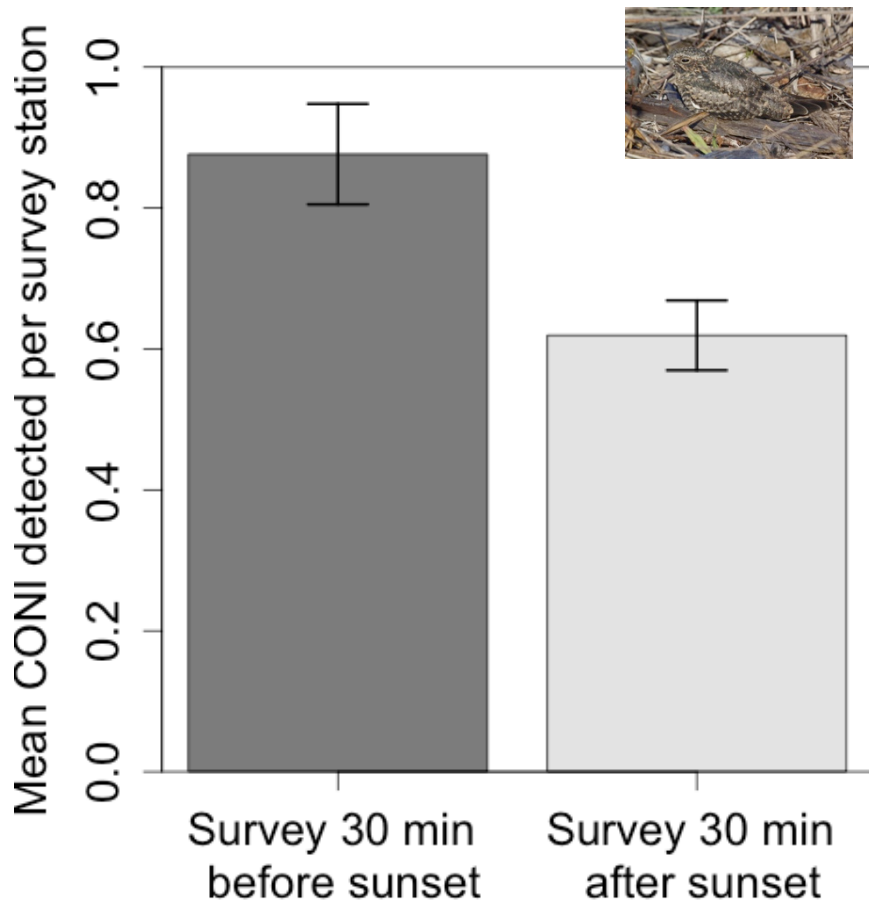
www.nightjar.ca

2014 Protocol Changes



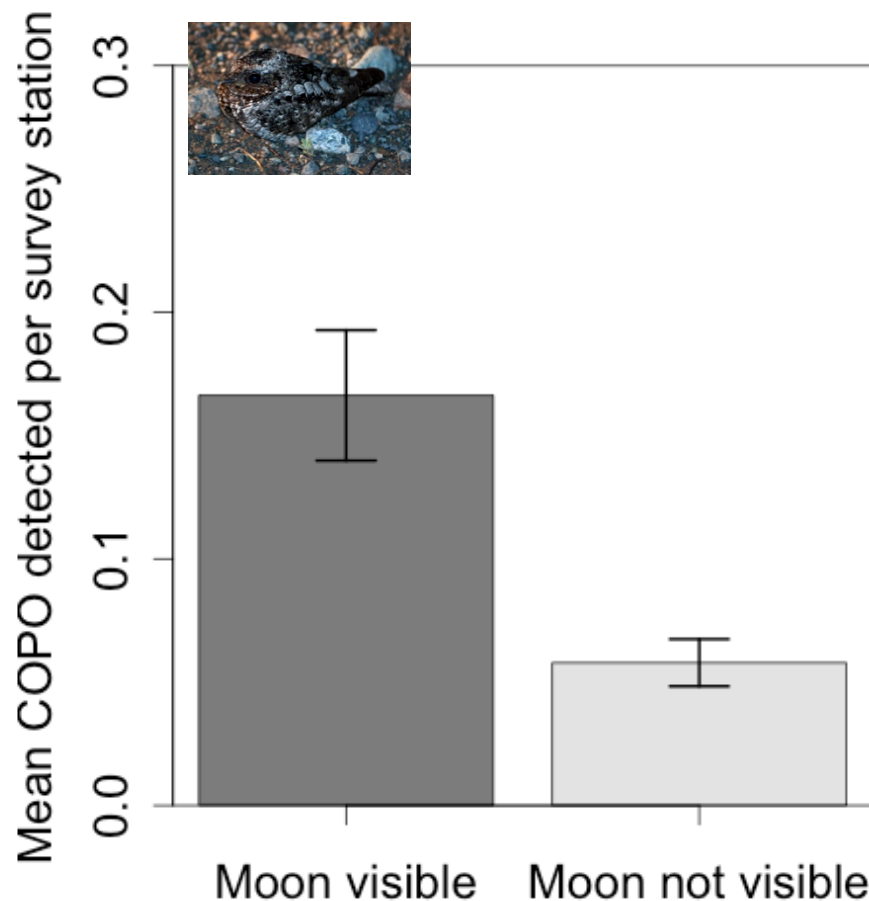
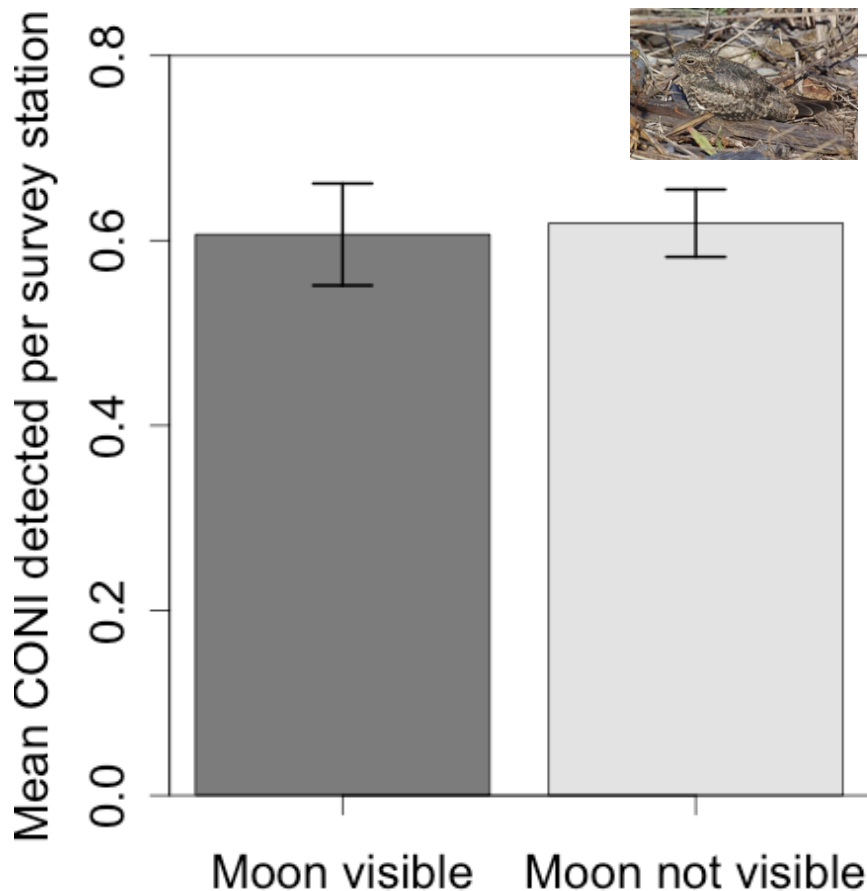
- Survey for CONI at 30 minutes before sunset
- Remove moon phase restriction
- Creation of Two-Species & One-Species Zone to target each species at optimal time of day
 - One-Species Zone: 10 stations
 - Two-Species Zone: 6 stations surveyed twice on same night
 - Starting at 30 minutes before sunset
 - Starting at 30 minutes after sunset

Time of Day



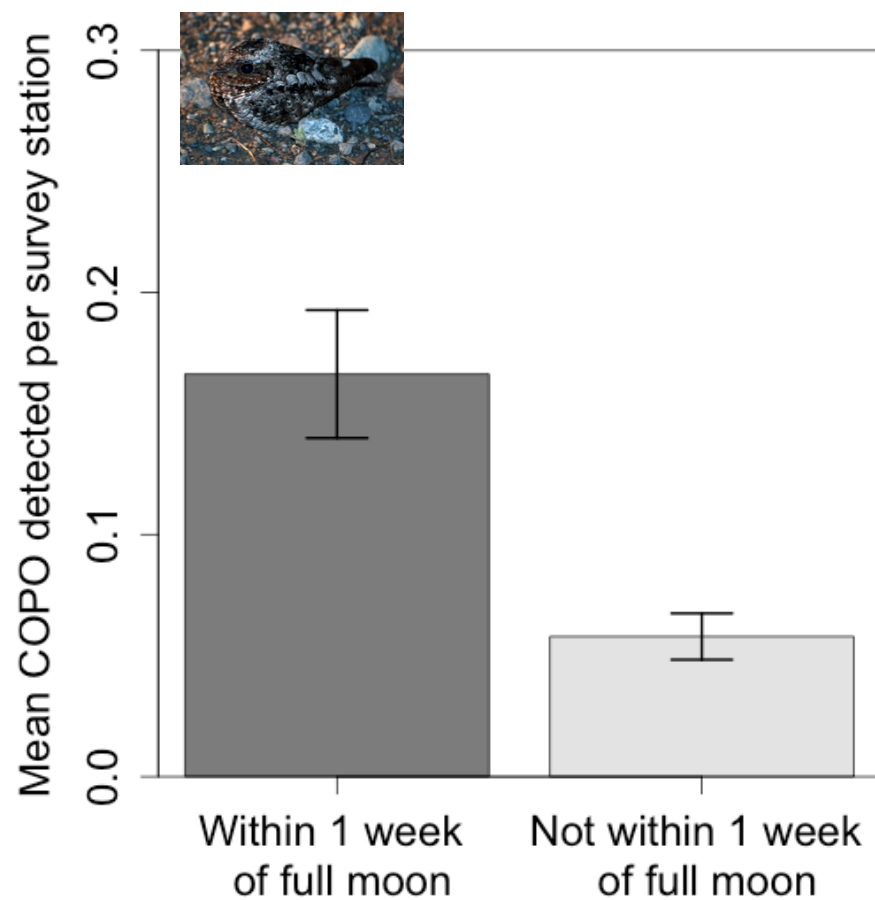
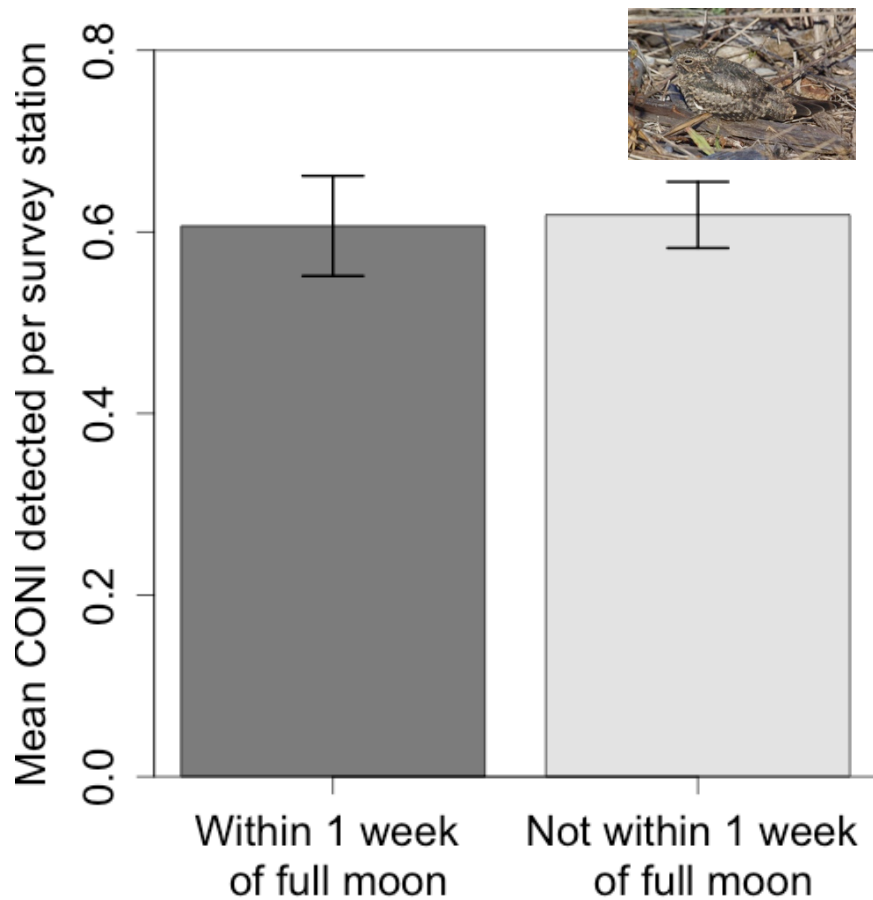
CONI: $V = 6755$, $P < 0.001$; COPO: $V = 1773.5$, $P < 0.001$

Moon - Visibility



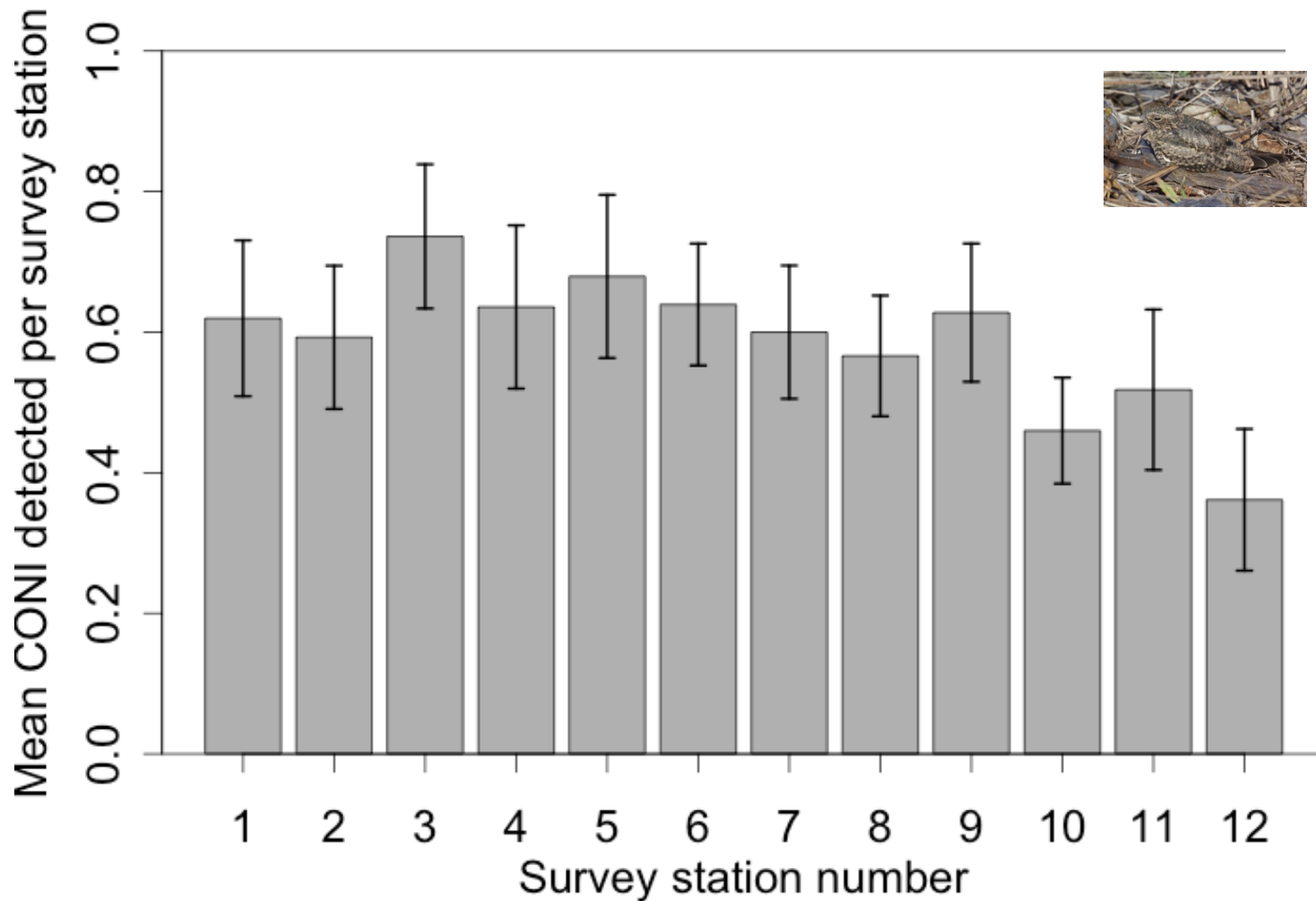
CONI: $W = 253953.5$, $P = 0.64$; COPO: $W = 267203$, $P < 0.001$

Moon - Phase



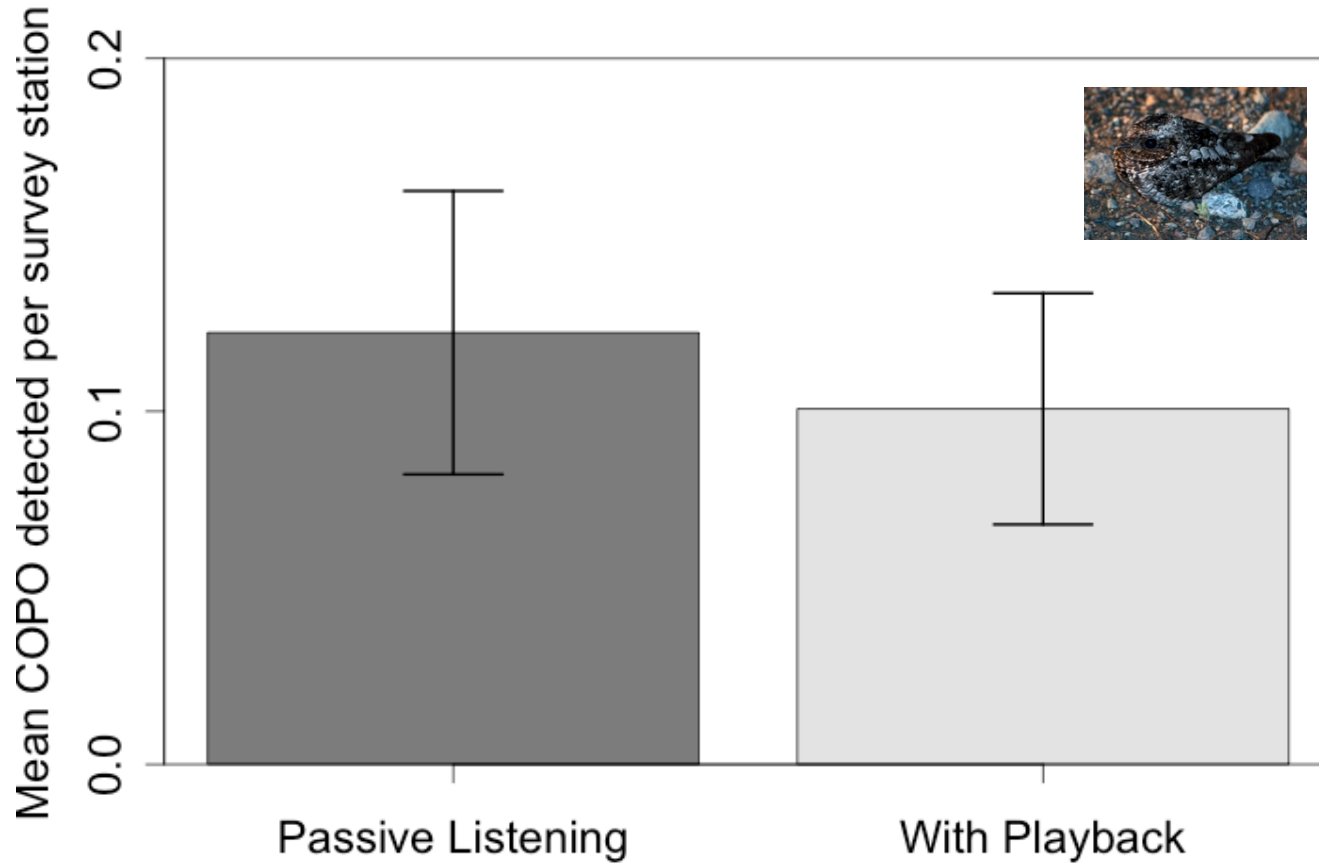
CONI: $W = 354785.5$, $P = 0.37$; COPO: $W = 365923$, $P < 0.001$

Number of Stations



$$H_{11} = 8.02, P = 0.71$$

Call Playbacks



$V = 30, P = 0.35$

2015 Protocol Changes



- More narrow survey periods
 - One-Species Zone: June 15 – July 15
 - Two-Species Zone: June 10 – July 10
- Recommended survey period for two weeks around the full moon in the Two-Species Zone
 - June 24 – July 8

2016 Looking Ahead



- Testing difference in detectability between one survey and two surveys per season
 - Volunteer survey: 80% support two surveys (n = 10)
- Comparing citizen science surveys to ARU data