



Vocal Habits of the Åga

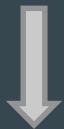
Andria Kroner, Renee Ha, Anne Clark
PhD Student Binghamton University

Background and Motivation

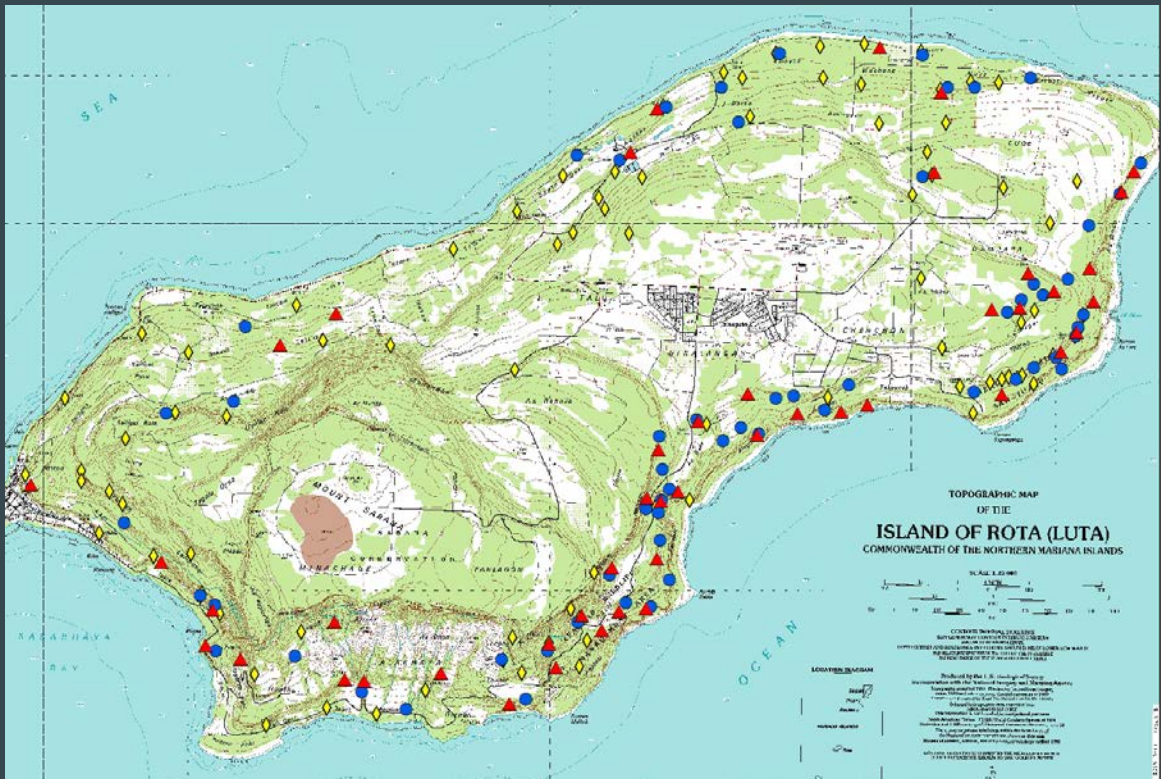
Pair loss



Connectivity



Communication



Methods

- Wildlife Acoustics recorders
- Set up in territories known to be active during the main breeding season
- Recording for one week, sunrise to sunset
- 1300 hrs (> 400Gb) of recordings!



Analysis

“Clustering” detections and Software Training :

1. 1 hr at sunrise for each site
2. Defined two broad clusters:
“Mariana Crow” and “Not Mariana Crow”
3. Calculated error
4. Accepted detections ≤ 0.5 distance
(error rate 0.047-0.245)



Results- False positives

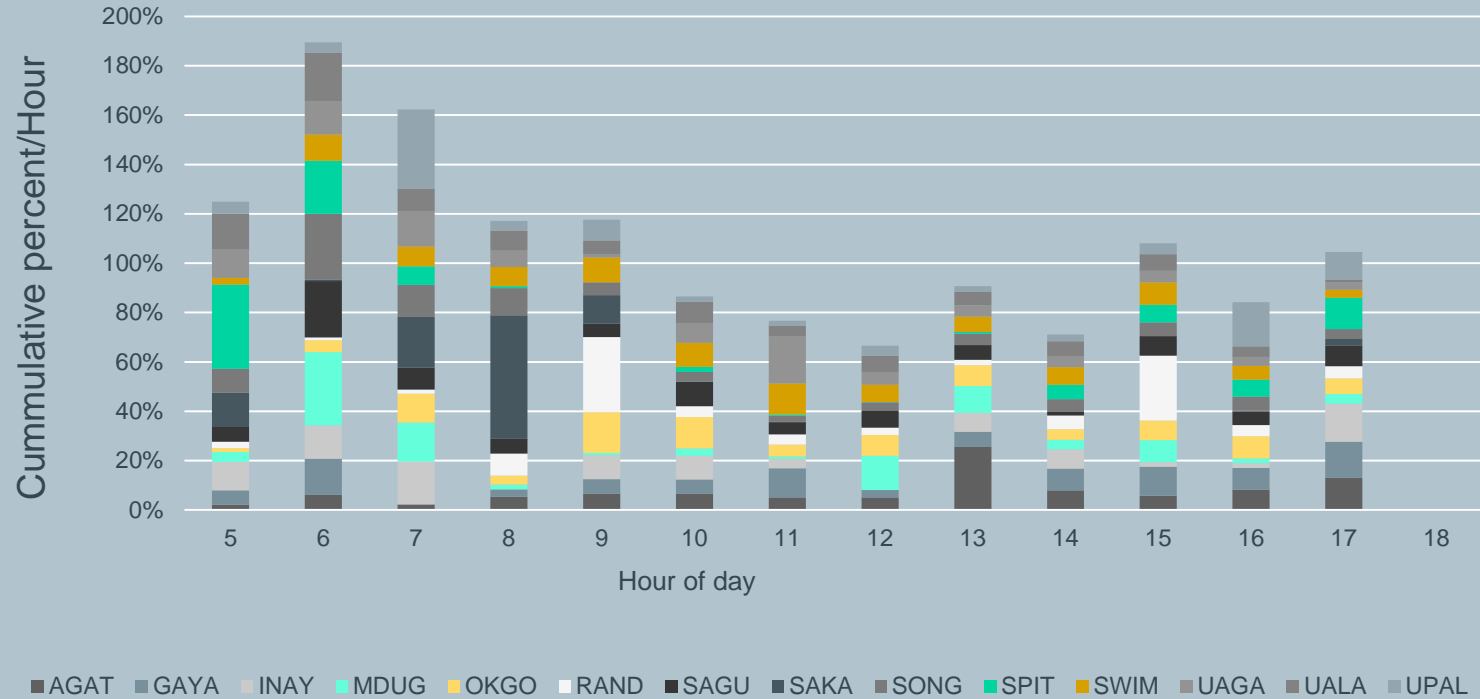
Error rate increased at further distances from center (0.56 error at 0.99 distance)

Most common false positives:

- *Micronesian Starling*
- Black Drongo
- Feral chicken
- Sea bird
- Mariana Kingfisher

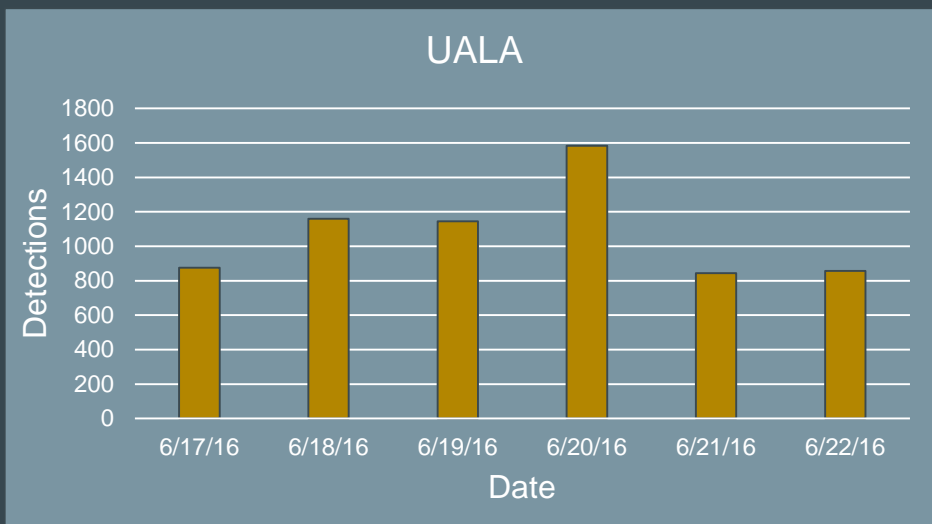
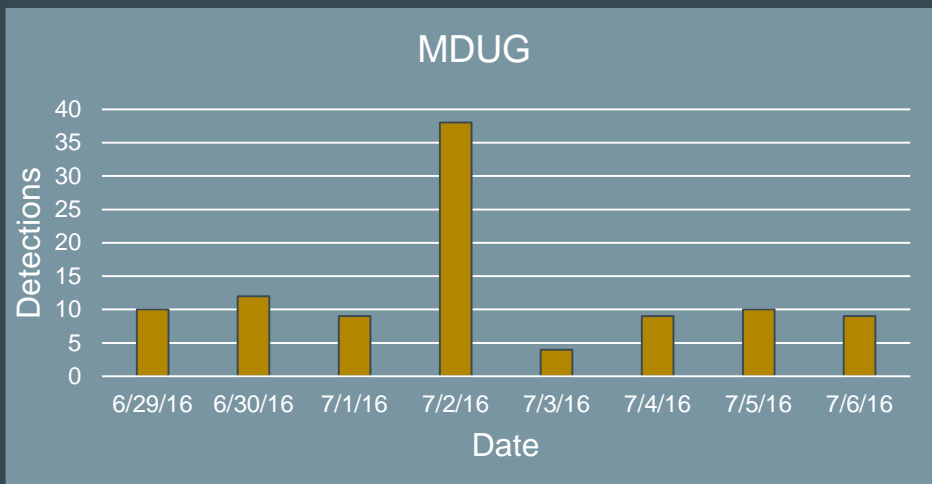


Percent of detections at each site per hour



Detections per day

- Highly variable within and between sites!
- Implications for search effort

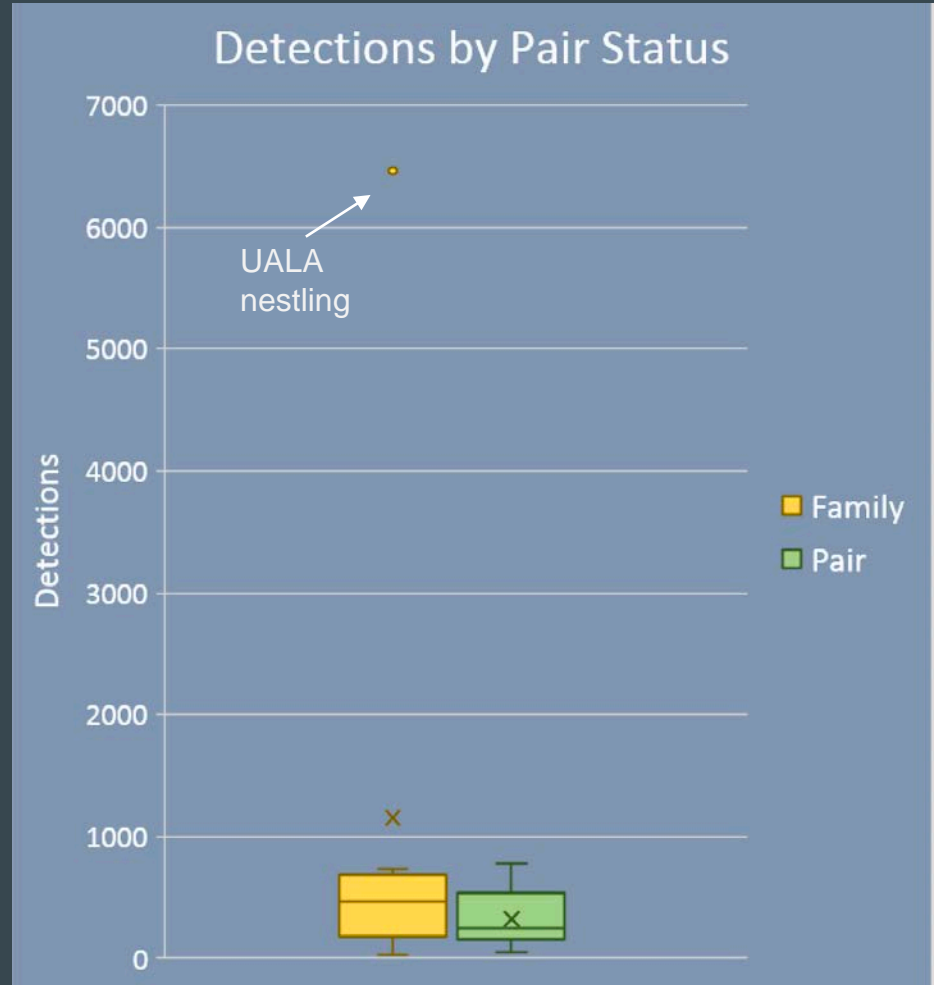


Are family groups noisier?

No significant difference ($p=0.24$)



Jose Antonio Diaz



Summary

- Supports field observations of åga vocal behavior*
- Potential option for reducing human effort
- Can keep fine tuning training for auto ID
- Lots of flexibility in additional questions

Future directions

- How does pair density affect vocal behavior?
- How does captive rearing vs. wild rearing affect vocal development?



Thank you!

Wildlife Acoustics' Scientific Product Grant

Suzanne Medina-Guam DAWR

Renee Ha, Sarah Faegre, Rumaan Malhotra- University of Washington

Questions?