Vocal Habits of the Åga

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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)
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

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Questions?