

# Ontogeny of individual variation in food calling in the common raven



SCAN ME

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## Background

Ravens (*Corvus corax*) tend to give food-associated calls ('haa') when food is difficult to access.<sup>1</sup> These calls are thought to develop from **begging calls** (given during early life stages)<sup>2</sup>, but it is yet unknown whether the individual variation observed in young ravens' begging translates into the variation observed in food calls during later life stages.

### Predictions:

- Differences in calling rates  
→ in all life stages
- High begging rates  
→ high 'haa' rates

## Methods

**Study subjects:** ravens born in captivity from 2017-2021 and released into free flight.

### Life stages observed:

- Early (0-1 year): Fledgling, Juvenile
- Late (1+ years): Sub-adult, Adult

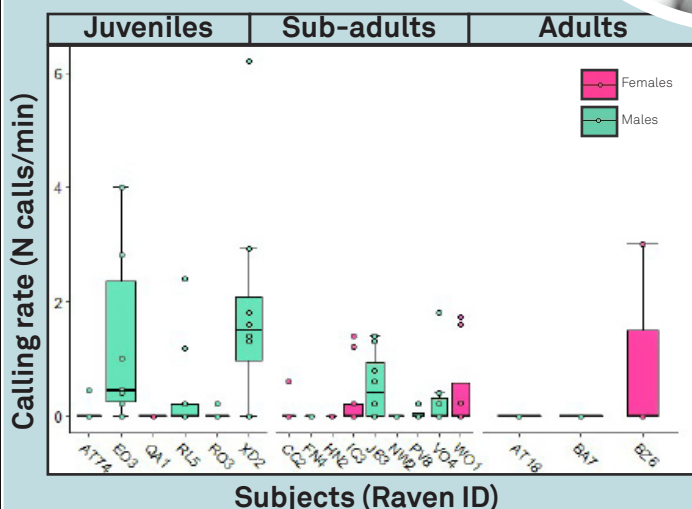
**Variables:** Calling rate (N calls/min), sex, age

**Data collection:** focal protocols with videos



## Preliminary results

N = 18



Calling rates of free flight ravens seem to differ between individuals and within life stages.

## Conclusion

The patterns shown indicate individual-specific differences in calling rates and an effect of age on overall calling rate, possibly of sex as well. These results would be in line with previous findings on ravens' food calls.

### Open questions

- Are differences in calling rates consistent across life stages?
- How do vocal characteristics of food calls change throughout development?

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**References:** <sup>1</sup>Heinrich, B. (1988), Behavioral Ecology and Sociobiology, 23(3), 141-156; <sup>2</sup>Bugnyar et al (2001), Animal Behaviour, 61(5), 949-958.