

Range-wide similarities in Cerulean Warbler breeding ground behavior and natural history.

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Nest-site selection

- females select trees in proportion to their availability (Ontario, Michigan, Tennessee)
- male-female interactions during nest-site selection
 - sit-spin (Ontario, Michigan, Tennessee)
 - mate following & whisper song



Why structural variability matters

- importance of late-phenology or low leaf volume trees (e.g. *Carya*) for CERW?
 - ON, IL, TN
- as a surrogate for topography?
- song degradation issues
- foraging opportunities



Barg et al. 2006. *Auk* 123:795-806



N1 score = 0



N3 score = -1



N2 score = -1



Song post tree

Final Score
 $0 + (-1) + (-1) + 1 = -1$



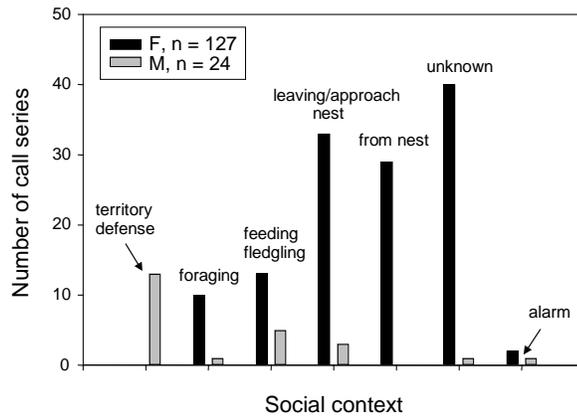
N4 score = 1

Male-female communication

- coordination of activity at nest
- range of female vocalizations



Male-female communication



Rogers. 2006. WJO 118:145-51.

Male-female communication

- coordination of activity at nest
- range of female vocalizations
- male whisper song/call



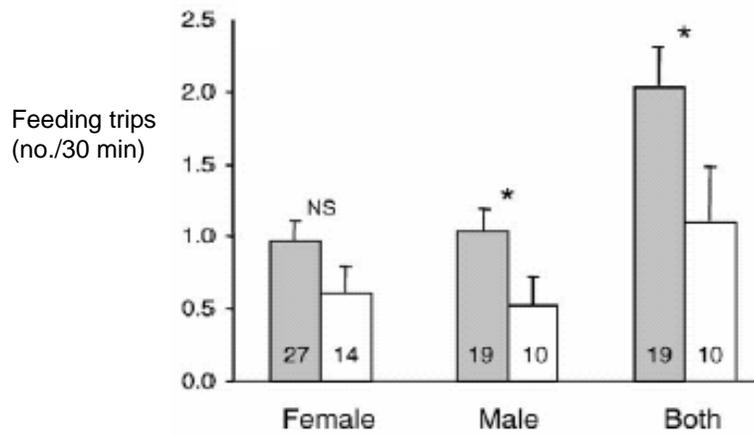
Behaviors at the nest I

- **incubation rhythms**
 - Ontario (87% attendance)
 - Tennessee (84% attendance)
- **brooding rhythms**
 - Ontario (67% attendance)
 - Tennessee (20% attendance)
- **feeding rhythms**
 - Ontario (male and female each feed about 1 trip/30min)
 - Tennessee (females: 3/30min; males: 2.1 trip/30min)

Ontario - time spent brooding decreased and feeding increased as nestlings aged

feeding data - Ontario 67.5 hours of observation, Tennessee 12.3 hours of observation

Nest success and feeding trips



Barg et al. 2006. WJO. In press.

* $P < 0.05$ for a t-test.

Behaviors at the nest I



implication of difference in female off-bout frequency?
- high predation risk

Behaviors at the nest II

- mate feeding during courtship and incubation
 - Ontario, Tennessee
- nest material thievery
 - Ontario, Indiana, Tennessee
- BTBW feeding CERW nestlings in Tennessee



Mating systems

- social monogamy with genetic promiscuity
- bigamy
- double-brooding
- mate switching



Behavioral research needs

- females, females, females
- intrinsic limits to fecundity
- post-fledging behavior of HY
- dispersal and connectivity



Acknowledgments

- Contributors
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