

Dustin Eric Brewer

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Completed Education

- 2016 *Master of Science. in Biology*, concentration Applied Ecology (4.0 GPA).
Eastern Kentucky University, Richmond, KY
Thesis: Characteristics, contexts, and possible functions of the vocalizations of Blue Jays
- 2014 *B.S. in Wildlife Science*, Purdue University (3.6 GPA)
Purdue University, West Lafayette, IN

Employment History

- August 2019 to present *Graduate Research Assistant*,
Central Michigan University
- January 2018 to July 2019 *Research Associate and Lab Manager*,
Environmental Resilience Institute, Indiana University
- January 2017 to December 2017 *Field Biologist*,
Florida Fish and Wildlife Conservation Commission
- September to December 2016 *Contracted Hawk Counter*,
Detroit River Hawk Watch
- August 2014 to May 2016 *Graduate Teaching Assistant, Field Biologist*,
Eastern Kentucky University
- May to August, 2014, 15, 16 *Avian point Count Technician*,
Bird Conservancy of the Rockies
- August to December, 2012, 13 *Undergraduate Teaching Assistant*,
Purdue University
- May to July, 2011 *Avian Point Count Technician*,
Purdue University

Research Interests

Conservation Biology	Field Ornithology	Acoustics	Radio Telemetry
Wildlife Pop. Monitoring	Assisted Migration	Urban Ecology	Conspecific Attraction

Teaching/Mentoring Experience and Training

- 2019 Participated in a semester-long workshop about teaching methods (Central Michigan University)
- 2018 Served as a Groups Scholar program mentor; instructed a student during the summer semester in research activities (Indiana University)
- 2015, 16 **Introductory Biology for Non-Majors (BIO 100)**; taught lab sections for four semesters and completed a workshop focusing on teaching methods (Eastern Kentucky University)

2013, 14

Dendrology (FNR 225); taught lab sections for two semesters (Purdue University)

Scientific Products

Published, peer-reviewed

Brewer, D.E. and A.M. Fudickar. 2019. American Robin (*Turdus migratorius*) feeds a nestling carcass to nestlings in an urban environment. *Urban Naturalist*.

Brewer, D.E. and A.M. Fudickar. In press. Perceived wintering latitude determines timing of song output in a migratory bird. *Ecology and Evolution*.

In Review

Brewer, D.E. The vocal repertoire of Blue Jays: a spectrographic snapshot and suggested nomenclature. *Wilson Journal of Ornithology*.

In Preparation, will be peer-reviewed

Brewer, D.E. and A.M. Fudickar. A comparison of birdsong complexity between an urban and rural environment. Target journal: *Journal of Urban Ecology*.

K.E. Miller, C. Hunter, **D.E. Brewer**. Historical distribution of Ivory-billed Woodpeckers in Florida. Target journal: *Southeastern Naturalist*.

K.E. Miller, S. Dudek, **D.E. Brewer**. Conservation translocation of Florida Scrub-jays (title tentative, no target journal yet).

Contracted Reports

Brewer, D.E., and G. Norwood. 2016. Detroit River Hawk Watch 2016 season summary. USFWS. Detroit River International Wildlife Refuge. See at: <http://detroitriverhawkwatch.org/files/2016DRHWSeasonSummary.pdf>

Brewer, D.E. and D. Brown. 2016. Bird diversity at the Hidden Valley Training Facility. Submitted to the National Guard.

Brewer, D.E. and D. Brown. 2016. Bird diversity at the Artemus Training Facility. Submitted to the National Guard.

Master's Thesis

Brewer, D.E. 2016. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. See at: <http://encompass.eku.edu/etd/347/>

Presentations

*Denotes Presenter

A.M. Fudickar* and **D.E. Brewer**. 2020. Distance matters: experimental test of the influence of avian migration distance on readiness to breed in spring. Society for Integrative and Comparative Biology Annual Meeting. Talk.

Brewer, D.E.* and A.M. Fudickar. 2019. Urban and rural comparison of the song repertoire size and characteristics of a songbird. American Ornithological Society Conference. Poster.

Fudickar, A. M.*, **D.E. Brewer**, D. Gaughan. 2019. Impact of variation in non-breeding photoperiod on HPG stimulation in spring in migratory birds. Society for Behavioral Neuroendocrinology. Poster.

Alcantara, S. *, **D.E. Brewer**, A.M. Fudickar. 2018. The impact of urbanization on song repertoires of Song Sparrows. Groups Scholar Research Symposium. Poster.

Cardas, A,* K. Miller, **D. E. Brewer**, B. Bankovich, J. Garcia, R. Risch, J. Bishop. 2017. Florida scrub-jay translocations from Ocala National Forest: Winter 2017 Update. Florida Wildlife Society Conference. Poster.

Brewer, D.E.* 2016. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. EKU Biology Department Seminar. Talk.

Brewer, D.E.* 2016. Characteristics, contexts, and possible functions of Blue Jay Vocalizations. EKU Natural Areas Spring meeting. Talk.

Brewer, D.E.* 2015. Characteristics, contexts, and possible functions of Blue Jay Vocalizations. Spring Research Symposium – University of Kentucky (Center for Ecology, Evolution, and Behavior). Talk.

Journal Reviewer

Journal of Avian Biology

Research Grant Proposals

In Review

2019. A comparison of marsh bird monitoring techniques: ARUs, eDNA, and human observers. Scientific Product Grant Program (Wildlife Acoustics). \$4995.

Funded

2018. Effects of urbanization on the song repertoire size of Song Sparrows. Groups Scholars Program (NSF). \$1000.

2015. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. Burt Monroe Grant (Kentucky Ornithological Society). \$879.

2015. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. Kentucky Society of Natural History Grant. \$500.

2015. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. EKU Natural Areas Grant. \$100.

Not Funded

2018. Effects of urbanization on song repertoire size, and song characteristics, in Song Sparrows. Indiana Academy of Science. \$1642.

2015. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. Marcia Athey Fund (Kentucky Academy of Science). \$1793.

2015. Characteristics, contexts, and possible functions of the vocalizations of Blue Jays. Sigma Xi. ~\$1000.

Current Professional Memberships

- The Wildlife Society, since 2017 (Certified Associate Wildlife Biologist)
- The Midwest Migration Network, since 2018
- American Ornithological Society, since 2019
- Wilson Ornithological Society, since 2019

Executive Experience

- Served as a student member of the Central Michigan University Biology Department Seminar Speaker Committee (2019-2020).
- Board member of the Sassafras Audubon Society (2018-19)
- President of the Biological Organization of Graduate Students (2015-16)
- Vice-President of the Purdue Student Chapter of The Wildlife Society (2012-13)

Service/Volunteer Experience

- Helped to teach a class of third graders and children at the Mt. Pleasant Children's Museum (3 days, Fall 2019).
- Helped to 65+ elementary students how to catch and track birds (April 2019), sec 27 to 36 of this [commercial](#).
- Demonstrated how to catch and band birds to Girl Scouts, in conjunction with IN DNR (September 2018).
- Led a bird walk (6 attended) for the Sassafras Audubon Society (August 2018)
- Demonstrated how to catch and band birds to REU students (July 2018)
- Ran a Breeding Bird Survey route ('Pimento', IN) (June 2018 2019)
- Helped lead a bird banding demonstration at Wings Over Muscatatuck Festival, with the Indiana Department of Natural Resources (May 2018)
- Monitored marsh birds during three separate surveys (April to June 2018)
- Educated children and adults Bird Fest in Bloomington, IN (April 2018)
- Helped to band Northern Saw-whet Owls from (October to November 2017)
- Helped to conduct a count of Sandhill Cranes (October 2017)
- Presented to children: 'Bird Study' via Lake County Parks, FL (February 2017)
- Was the main graduate student contact/helper for the TWS 2016 Southeastern Wildlife Conclave (December 2015 to March 2016)
- Designed and conducted a monitoring project of Floracliff Nature Sanctuary's bird communities (September to December 2015)
- Led a fall migrants bird identification walk at Floracliff (September 2015)
- Participated in BioBlitzes at Floracliff Nature Sanctuary and Maywoods (June 2015)
- Instructed at the Floracliff Bird Banding Workshop (May 30 and May 31, 2015)

Skills

Field

Mist-netting birds

Banding birds

Nest searching, monitoring

Radio telemetry tracking

Acquiring banding and collecting permits

Recording bird vocalizations

Data Analysis

R, R Studio

Github

Microsoft Suite (Excel, Word, etc.)

Raven Pro (vocal analysis software)

GIS (ArcPro, ArcMap, QGIS)

Bandit and Hawkcount (Databases)