

JODIE M. JAWOR

Program Director, Behavioral Systems
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Directorate for Biological Sciences
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Education:

B.S. Biology Ball State University, 1993
M.S. Biology Ball State University, 1998
Ph.D. Biology University of Dayton, 2002

Professional Experience:

2015- Program Director - Behavioral Systems, Integrative Organismal Systems,
National Science Foundation
2015- Affiliate Research Faculty, New Mexico State University
2014-2015 Associate Professor, University of Southern Mississippi
2006-2014 Assistant Professor, University of Southern Mississippi.
2003-2006 Post-doctoral research associate, Indiana University.
2002-2003 Adjunct professor, introductory biology for non-majors, Univ. of Dayton.
1998-2001 Laboratory teaching assistant, University of Dayton.
1996-1998 Laboratory teaching assistant, Ball State University

Courses Taught:

BSC110 Introductory Biology for Majors 1 (USM)
BSC418/518 & Lab Avian Biology (USM)
BSC453/553 Environmental Physiology (USM)
BSC473/573 General Endocrinology (USM)
BSC474/574 Comparative Endocrinology (USM)
SCI230 & Lab Introductory Biology (Non-majors, University of Dayton)
BIO101 Introductory Biology (Non-majors, University of Dayton)
BIO201L Investigative Laboratory II (University of Dayton)

Various lab courses as a teaching assistant (Animal Behavior, Ecology, Aquatic Biology, Introductory Biology for majors) at University of Dayton and Ball State University.
Additional topics courses at USM (Behavioral Endocrinology, Vertebrate Endocrinology)

Awards and Grants:

2013 Department of Defense (DoD): Influence of alternative material nest boxes on cavity nesters using DoD lands: are there impacts to behavior, physiology, and population structure? (\$4,556)

2013 DoD: Physiology and behavior impacts of human disturbance on the eastern bluebird:
long term impacts of stress on individual fitness and reproductive success (\$9332)
2012 Proposal Development Grant (University of Southern Mississippi, \$2,000)
2008 Aubrey Keith Lucas and Ella Ginn Lucas Endowment for Faculty Excellence award
(University of Southern Mississippi, \$4, 041)
2005 E-Bird USA Exchange Visit Funding (NSF Research Coordination Network, \$1000)
2005 Center for the Integrative Study of Animal Behavior (Indiana University, \$500)

Refereed Publications: (2013 Journal Impact Factor given)

- [1] DeVries, M.S., Winters, C.P. & **Jawor, J.M.** Testosterone might not be necessary to support female aggression in incubating northern cardinals. **Animal Behaviour**, *In press*.
- [2] Holbrook, A.L., **Jawor, J.M.**, Hinderliter, M., Lee, J.R. & Qualls, C.P. A hatchling gopher tortoise (*Gopherus polyphemus*) care protocol for experimental research and headstarting programs. **Herpetological Review**, *In press*.
- [3] **Jawor, J.M.**, Hooker, J.D. & Mohn, R. 2014. Testosterone production in non-breeding northern cardinals (*Cardinalis cardinalis*): Is temperature influential? **Wilson Journal of Ornithology**, 126:261-268.
- [4] DeVries, M.S., Winters, C.P. & **Jawor, J.M.** 2014. Female performance of male courtship display in northern cardinals. **The Southeastern Naturalist** 13:N13-N17.
- [5] DeVries, M. S. and **Jawor, J. M.** 2013. Natural variation in circulating testosterone does not predict nestling provisioning rates in the northern cardinal, *Cardinalis cardinalis*. **Animal Behaviour** 85:957-965.
- [6] Selman, W., Jawor, J.M., & Qualls, C.P. 2012. Seasonal variation of corticosterone levels in *Graptemys flavimaculata*, an imperiled freshwater turtle. **Copeia** 4:698-705.
- [7] DeVries, M.S., Winters, C.P., & **Jawor, J.M.** 2012. Testosterone elevation and response to gonadotropin-releasing hormone challenge by male Northern Cardinals (*Cardinalis cardinalis*) following aggressive behavior. **Hormones and Behavior** 62:99-105.
- [8] DeVries, M.S., Holbrook, A.L., Winters, C.P., & **Jawor, J.M.** 2011. Non-breeding gonadal testosterone production of male and female northern cardinals (*Cardinalis cardinalis*) following GnRH challenge. **General and Comparative Endocrinology** 174:370-378.
- [9] McGlothlin, J.W., Whittaker, D.J., Schrock, S.E., Gerlach, N.M., **Jawor, J.M.**, Snajdr, E.A. & Ketterson, E.D. 2010 Natural selection on testosterone production in a wild songbird population. **American Naturalist** 175:687-701.
- [10] Gopal, T., Herron, S.S., Mohn, R.S., Hartsell, T., **Jawor, J.M.**, Blickenstaff, J.C. 2010. Effect of an interactive web-based instruction in the performance of undergraduate anatomy and physiology lab students. **Computers & Education** 55:500-512.
- [11] **Jawor, J.M.** & MacDougall-Shackleton, S. 2008. Seasonal and sex-related variation in song control nuclei in a species with near-monomorphic song, the northern cardinal. **Neuroscience Letters** 443:169-173.
- [12] McGlothlin, J.W., **Jawor, J.M.**, Greives, T.J., Casto, J.M., Phillips, J.L. and Ketterson, E.D. 2008. Hormones and honest signals: males with larger ornaments elevate testosterone more when challenged. **Journal of Evolutionary Biology** 21:39-48.

- [13] McGlothlin, J.W., **Jawor, J.M.** & Ketterson, E.D. 2007. Natural variation in a testosterone-mediated trade-off between mating effort and parental care. **American Naturalist** 170:864-875.
- [14] **Jawor, J.M.**, McGlothlin, J.W., Casto, J.M., Greives, T.J., Snajdr, E.A., Bentley, G.E., & Ketterson, E.D. 2007. Testosterone response to GnRH in a female songbird varies with stage of reproduction: implications for adult behaviour and maternal effects. **Functional Ecology** 21:767-775.
- [15] **Jawor, J.M.** 2007. Testosterone in Northern Cardinals (*Cardinalis cardinalis*): Possible influence of prolonged territorial behavior. **Auk** 124:331-338.
- [16] **Jawor, J.M.**, McGlothlin, J.W., Casto, J.M., Greives, T.J., Snajdr, E.A., Nolan III, V., and Ketterson, E.D. 2006 Seasonal and individual variation in response to GnRH challenge in male dark-eyed juncos (*Junco hyemalis*). **General and Comparative Endocrinology**. 149:182-189.
- [17] Greives, T.J., McGlothlin, J.W., **Jawor, J.M.**, Demas, G.E. & Ketterson, E.D. 2006. Testosterone and immune function co-vary in a wild population of breeding Dark-eyed Juncos (*Junco hyemalis*). **Functional Ecology** 20:812-818.
- [18] **Jawor, J.M.** & Breitwisch, R. 2006. Is mate provisioning predicted by ornamentation? A test with northern cardinals (*Cardinalis cardinalis*). **Ethology** 112:888-895.
- [19] **Jawor, J.M.**, Young, R., & Ketterson, E.D. 2006. Females competing to reproduce: dominance matters but testosterone may not. **Hormones and Behavior** 49:362-368.
- [20] **Jawor, J.M.**, Gray, N., Beall, S.M. & Breitwisch, R. 2004. Multiple ornaments as indicators of individual quality in female northern cardinals (*Cardinalis cardinalis*). **Animal Behaviour** 67:875-882.
- [21] **Jawor, J.M.** & Breitwisch, R. 2004. Multiple ornaments in male northern cardinals (*Cardinalis cardinalis*) as indicators of condition. **Ethology** 110:113-126.
- [22] **Jawor, J.M.**, Linville, S.U., Beall, S.M. & Breitwisch, R. 2003. Assortative mating by multiple ornaments in northern cardinals (*Cardinalis cardinalis*). **Behavioral Ecology** 14:515-520.
- [23] **Jawor, J.M.** & Breitwisch, R. 2003. Melanin ornaments, honesty, and sexual selection. **Auk** 120:249-265.
- [24] **Jawor, J.M.** & Gray, N. 2003. Use of Northern Cardinal nest by fledgling Carolina Wrens. **Wilson Bulletin** 115:95-96.
- [25] **Jawor, J.M.** & Breitwisch, R. 2003. A unique female ornament display in Northern Cardinals. **Wilson Bulletin** 115:464-467.
- [26] **Jawor, J.M.** 2000. Female dominance and aggressive behaviors in House sparrow flocks. **Auk** 117:799-802.
- [27] Tarvin, K.A., Garvin, M.C., **Jawor, J.M.** & Dayer, K.A. 1998. A field evaluation of techniques used to estimate density of Blue Jays. **Journal of Field Ornithology** 69:209-222.

Book Chapters:

Cain, K., **Jawor, J.M.** & McGlothlin, J.W. Individual variation and selection on hormone-

mediated phenotypes in male and female dark-eyed juncos. *In: No Bird Like the Snowbird: Integrative Approaches to Understanding Evolutionary Diversity in the Avian Genus Junco* (E.D. Ketterson & J.W. Atwell, eds.), *In final preparation*.

Invited Presentations:

October 2003: Indiana University
February 2006: University of Southern Mississippi
February 2006: University of Arkansas, Little Rock
February 2009: Piney Woods Audubon Society
February 2011: Mississippi State University
March 2012: Southeastern Louisiana University
July 2012: Georgia State University
December 2015: New Mexico State University

Professional Service

2007-2015, Committee Member, USM Institutional Animal Care and Use Committee
2009-2015, Committee Member, USM Lake Thoreau planning committee
Reviewer for various journals and granting agencies (primarily NSF)
2011-2013, Chair, USM Institutional Animal Care and Use Committee
Event Supervisor, Mississippi Science Olympiad 2010: Ornithology
Judge, student paper competition at 2010 Society for Integrative and Comparative Biology meeting: Division of Animal Behavior (DAB).
Judge, student paper competition at 2008 Graduate Student Symposium at USM
Judge, student paper competition at 2007 Society for Integrative and Comparative Biology meeting: DAB and Division of Comparative Endocrinology (DCE).

Professional Society Membership and Presentations:

Animal Behavior Society (oral and poster presentations), American Ornithologist's Union (oral and poster presentations), Society for Behavioral Neuroendocrinology (poster presentations only), Society for Comparative and Integrative Biology (oral and poster presentations), International Society for Behavioral Ecology (poster presentations only), International Society of Avian Endocrinologists (poster presentations only)

Mentored Students at USM (Undergraduate and Graduate):

M. Susan DeVries (Graduate, Doctoral), graduated 2013
B. Matthew Duckworth (Graduate, Masters), graduated 2015
Kaylee Gentry (formerly Undergraduate Honors advisee; currently Graduate, Masters), anticipated graduation December 2015)
Lauren Gillespie (Graduate, Doctoral), anticipated graduation 2016
Aaron Holbrook (Graduate, Doctoral), anticipated graduated 2015
Jeffrey Hooker (Undergraduate, Honors College), graduated 2011
Jamie Jackson (Undergraduate, Honors College), graduated 2015
Caitlin Winters (Graduate, Masters), graduated 2011