

John B. Dunning, Jr.

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Department of Forestry and Natural Resources

Professional Preparation

Kent State University Biological Sciences, B.S. (summa cum laude) 1978

University of Arizona Ecology & Evolutionary Biology, Ph.D. 1986

University of Georgia Ecology, Post-doc position 1987-1989

Appointments (all in the Department of Forestry and Natural Resources unless otherwise noted)

Director, Office of Student Services Purdue University 2016-present

Associate Head of Academic Programs Purdue University 2015-present

Professor of Wildlife Ecology Purdue University 2010-present

Associate Professor Purdue University 1999-2010

Assistant Professor Purdue University 1994-1999

Visiting Temporary Research Scientist University of Georgia 1989-1994

Honors and Awards

Inducted into Purdue's Book of Great Teachers, 2013.

Outstanding Undergraduate Teacher, Department of Forestry and Natural Resources, 5 years.

Richard L. Kohls Outstanding Undergraduate Teacher Award, College of Agriculture, 2010-11.

Charles Murphy Outstanding Undergraduate Teaching Award, Purdue University, 2011.

NACTA Teaching Award of Merit, 2011

Inducted into Purdue's Teaching Academy, September 2011

Elected as *Fellow* in the American Ornithologists' Union, 2007.

President, Indiana Chapter of The Wildlife Society, 2004.

Phi Beta Kappa, 1978

Products

Kellner, K.F., P.J. Ruhl, J.B. Dunning, J.K. Riegel, and R.K. Swihart. 2016. Multi-scale responses of breeding birds to experimental forest management in Indiana, USA. *Forest Ecology and Management* 382:64-75.

Doughty, C.E., J. Roman, S. Faurby, A. Wolf, A. Haque, L. Bakker, Y. Malhi, J.B. Dunning, J.-C. Svenning. 2016. Global nutrient transport in a world of giants. *Proceedings of the National Academy of Sciences* 113:868-873.

Ruhl, P.J., R.N. Chapman, and J.B. Dunning. 2016. Field-testing a standard metabolic rate estimation technique for eastern red-backed salamanders. *Journal of Herpetology* 50:138- 144.

- Ruhl, P. J., and J. B. Dunning. 2015. Morphometrics of Worm-eating Warblers in south-central Indiana: hatching year and after hatching year comparison. *North American Bird Bander* 43:81-84.
- Ruhl, P. J., J. K. Riegel, and J. B. Dunning. 2015. Confirmation of successful chestnut-sided warbler breeding in south-central Indiana. *Proceedings of the Indiana Academy of Science* 124:38-42.
- Bortoleto, L. A., C. J. M. Figueira, J. B. Dunning, J. Rodgers, and A. M. da Silva. 2015. Suitability index for restoration in landscapes: an alternate proposal for restoration projects. *Ecological Indicators*, 60:724-735.
- Jukema, J., J. B. Dunning, P. Vlas, L. Brierley, and P. Brooks. 2015. Morphological variation in spring migrant American Golden-Plovers (*Pluvialis dominica*). 2016. *Wader Bulletin*, 122:128-134.
- Shields, J. M., M. A. Jenkins, M. R. Saunders, K. D. Gibson, P. A. Zollner, and J. B. Dunning. 2015. Short-term response of native flora to the removal of non-native shrubs in mixed-hardwood forests. *Forests* 6:1878-1896.
- Leonard, O. D., J. W. Moore, J. K. Riegel, A. R. Meier, J. B. Dunning, K. F. Kellner, and R. K. Swihart. 2015. Effect of forest-management practices on winter occupancy of Barred Owls and Eastern Screech-Owls in deciduous forests in the east-central United States. *Journal of Field Ornithology* 86:115-129.
- Shields, J. M., M. J. Jenkins, M. R. Saunders, K. D. Gibson, P. A. Zollner, and J. B. Dunning. 2015. Influence of intensity and duration of invasion by Amur honeysuckle (*Lonicera maackii*) on mixed-hardwood forests of Indiana. *Invasive Plant Science and Management* 8:44-56
- Meier, A. R., A. Pizzo, M. Malloy, J. K. Riegel, and J. B. Dunning. 2015. Breeding birds and forest management in the Hardwood Ecosystem Experiment and the Central Hardwoods Region. Purdue University Cooperative Extension Publication FNR-500-W.
- Losada-Prado, S., B. Finegan, F. DeClerck, F. Casanoves, and J. Dunning. 2014. Home-range size of Chestnut-backed Antbird (*Myrmeciza exsul*) in fragmented landscapes in southwestern Costa Rica. *Ornitologia Neotropical* 25:1-11.

Other publications (from 105+)

- Malloy, M.C., and J.B. Dunning. 2012. Breeding bird communities of the Hardwood Ecosystem Experiment. In Swihart, R., M. Saunders, and R. Kalb (eds.). The Hardwood Ecosystem Experiment: a framework for studying responses to forest management. USDA Forest Service Gen. Tech. Report NRS-P-108, pp. 126-141.
- Urban, N. A., R. K. Swihart, M. C. Malloy, and J. B. Dunning. 2012. Improving selection of indicator species when detection is imperfect. *Ecological Indicators* 15:188-197.
- Dunning, J.B., D.M. Scheiman, and A. Houston. 2011. Demographic and dispersal data from anthropogenic grasslands: what should we measure? Pp. 239-257, in: *Sources*,

Sinks, and Sustainability, (Liu, J., Hull, V., Morzillo, A.T., and Wiens, J., eds.)
Cambridge Univ. Press, Cambridge, UK.

Packett, D.L., and J.B. Dunning. 2009. Stopover habitat selection by migrant landbirds in a fragmented forest-agricultural landscape. *Auk* 126:579-589.

Dunning, J.B., R. Meilan, D. Jacobs, G.B. Blank, T. Easley, and M. Olsson. 2008. Collaborative Study Abroad – combining efforts to improve undergraduate experience. *The NACTA Journal* 53(4):20-24.

Scheiman, D.M., J.B. Dunning, and K. With. 2007. Metapopulation dynamics of bobolinks occupying agricultural grasslands in the Midwestern United States. *American Midland Naturalist* 158:415-423.

Elphick, C.S., J.B. Dunning, and D.A. Sibley 2001. *The Sibley Guide to Bird Life and Behavior*. A. A. Knopf Publ., New York.

Dunning, J. B., B. J. Danielson, and H. R. Pulliam. 1992. Ecological processes that affect populations in complex landscapes. *Oikos* 65:169-175

Synergistic Activities

My current research uses the concepts of landscape ecology to investigate how fragmentation affects wildlife on forest lands subjected to timber harvest, newly restored wetland and grassland patches, and other natural habitats impacted by anthropogenic change. I work with an interdisciplinary group of natural resource faculty to understand the short-term and long-term impacts of active forest management, especially techniques designed to regenerate oak-dominated forests. I have also worked with the U.S. Forest Service personnel to study the effects of overall forest management in the Hoosier National Forest, a highly fragmented property in southern Indiana.

My second major research initiative uses restored wetlands and grasslands as a model system for studying organism response to changing habitat distributions in the agriculture-dominated landscapes of the Midwest. My students and I have looked at the response of migratory waterfowl and shorebirds, breeding amphibians, small mammals, and breeding grassland birds to the characteristics of the restorations, including project size, restoration technique, and landscape placement. This research is used by conservation groups such as The Nature Conservancy to assess results of large-scale restoration projects.

I was one of the first Purdue faculty to incorporate the use of audience response technology in the teaching of large lecture classes. Audience response technology allows students to participate interactively with the lecturer in class and see their responses tabulated immediately. It allows students to offer their opinions on controversial subjects, compare their opinions to other students in the class, and review difficult subjects. I have used this technology in teaching a freshman environmental science course (average enrollment – 400 students) for the past 8 years. A team of Purdue faculty evaluated student attitudes towards this type of technology using an online survey tool, resulting in two publications published in education technology journals. These are among 15 peer-reviewed papers I have published in the field of science education. I have been selected as the Outstanding Undergraduate Teaching in the department 6 times and in 2011 I was selected the Kohls Award winner (outstanding undergraduate teacher in the College of Agriculture). In 2011 I also was given the Murphy Award for Outstanding Undergraduate Teaching, which is the highest teaching award given at the university level.

I served on the editorial board for the Society of Conservation Biology for 15 years and also review manuscripts for 36 scientific journals and proposals for 5 agencies including the NSF. I have served on the Board of Directors for state chapters of professional societies such as The Wildlife Society. I have also published 15 peer-reviewed extension publication to disseminate knowledge from my research to the general public.

Collaborators & Other Affiliations

Collaborators: Andrew DeWoody (Purdue University), Alexandria Houston (U.S. Geological Survey), Kacie Miller (Rocky Mountain Bird Observatory), Melissa Malloy (National Park Service), Bryan Pijanowski (Purdue University), Marisol Sepulveda (Purdue University), Daniel Scheiman (National Audubon Society), Robert Swihart (Purdue University), Harmon Weeks (Purdue University, retired), Rodney Williams (Purdue University), Natasha Urban (National Park Service), Patrick Zollner (Purdue University).

Graduate and Postdoctoral Advisors: H. Ronald Pulliam, University of Georgia; Stephen M. Russell, University of Arizona (both retired)

Thesis Advisor and Postgraduate-Scholar sponsor (12): Thomas Braile, Kathleen Coates, Toby Days, Parr Durr, Kacie Ehrenberger, Alexandria Houston, Kathryn Lester, Melissa Malloy, Julia Mast, Diane Packett, Alexandria Pizzo, Patrick Ruhl, Daniel Scheiman, Jessica Tinklenberg, Bryan Wee.