

Karen V. (née Ash) Root

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EDUCATION

- 1996 Ph.D. in Conservation Biology and Population Ecology, Florida Institute of Technology, Melbourne, FL.
1989 M.S. in Behavioral Ecology, University of Michigan, Ann Arbor, MI.
1987 B.S. in Biology (Animal Behavior emphasis), University of Minnesota, Twin Cities, MN.

RESEARCH

- 2008-2016 DEPARTMENT OF BIOLOGICAL SCIENCES GRADUATE COORDINATOR
2007-Present ASSOCIATE PROFESSOR
2002-2007 ASSISTANT PROFESSOR, , DEPT. OF BIOLOGICAL SCIENCES, BOWLING GREEN STATE UNIVERSITY, BOWLING GREEN, OH.
Research, teaching and service in conservation biology, landscape ecology and population biology.

Grants:

- PI USDA Forest Service Joint Venture Agreement (C0-PI: Rachel Kappler) I 6-JV-11242316-099: Tree Health and Demographic Analysis of Ash Tree Species Impacted by the Invasive Pest Agilus Planipennis* (6/2016-12/2019)
\$21,597
This study will focus on the population dynamics and the future of ash tree (*Fraxinus* spp.) persistence in a natural floodplain setting in the face of threats such as the Emerald Ash Borer and subsequent recovery.
- PI NSF DDIG Grant (Co-PI: Jessica Sewald) DEB-111048: A multidisciplinary approach to the conservation of bat species in the Oak Openings Region* (6/2011-5/2012)
\$15,000
Using ecological surveys, predictive models and citizen science to examine the factors that affect bat species in a highly fragmented but important ecological region.
- PI Bat Conservation International: A multidisciplinary approach to the conservation of bat species in the Oak Opening Region: Habitat and human dimensions* (5/2010-4/2011)
\$2,092
This project focuses on identifying the bat species assemblage in the Oak Openings Region through acoustic and mist nest surveys and assessing influencing factors.
- PI Florida Fish and Wildlife Conservation Commission: Risk Assessment for Eight Species* (12/08-02/09)
\$2,300
This project will specifically address the risks of eight native Florida species utilizing demographic, population and spatial data to better understand of the critical factors limiting these species and influencing its viability.

- PI Florida Fish and Wildlife Conservation Commission Grant: Habitat Suitability Assessment for the Crested Caracara* (8/05-8/07; \$25,000)
 This project, in collaboration with Dr. Joan Morrison (Trinity College), will characterize the currently occupied habitat for Audubon's Crested Caracara and develop a predictive model that will be applicable across its range in Florida.
- PI U. S. Fish & Wildlife Service Grant: Risk Assessment for Audubon's Crested Caracara, Caracara cheriway, in Florida* (05/05-09/07; \$89,000)
 This project will specifically address several critical research needs identified in the recovery plan for the caracara: demographic data for this species will be collated and analyzed, a PVA will be developed, research needs will be identified, and we will develop a better understanding of the critical factors limiting this species and influencing its viability.
- PI Ohio Department of Natural Resources Grant: Identifying Critical Ecological Requirements Of Rare Turtle Species (Co-PI: Hillary Harms)* (05/05-07/06; \$24,460)
 The objective of the proposed project is to determine the ecological requirements of a rare turtle species using a review of the literature, field sampling, and population modeling to determine variables most critical to long-term turtle viability.
- PI Ohio Department of Natural Resources Grant: Consequences of a Management Strategy for the Endangered Karner Blue Butterfly, Lycaeides melissa samuelis (Co-PI: Bradley Pickens)* (05/05-07/06; \$19,067) (05/06-07/07; \$7,242)
 In this study, behavioral observations of female Karners will focus on where egg laying occurs and examine the direct impact of current management on Karner Blue populations, as well as, examine the potential impacts of mutualistic ants on Karner populations.
- PI Ohio Department of Natural Resources Grant: Predicting the Occurrence of Rare Amphibian Species in Ohio (Co-PI: Gregory Lipps)* (5/04-06/05; \$23,000)
 Survey the range of the green salamander (*Aneides aeneus*), develop methodology for predicting its occurrence, verify the model with field surveys and make recommendations for the conservation and management of this species.
- PI Florida Fish and Wildlife Conservation Commission Grant: Risk Assessment for a Focal Set of Rare and Imperiled Wildlife in Florida* (01/04-09/07; \$35,000; 05/06-09/07; \$5,600)
 Develop spatially explicit risk assessment models for 54 species of conservation concern and make recommendations for ensuring long-term viability of these species in Florida as part of a state-wide conservation planning effort. 2nd phase includes 7 additional species' risk assessments.

1996-2002

RESEARCH ASSOCIATE, APPLIED BIOMATHEMATICS

Research in conservation biology, risk assessment and population biology.

P.I. Environmental Science web course (10/00-6/02)

Editor, author and designer for Internet-based, early undergraduate, environmental science laboratory course that includes Java applets and Web pages.

Population viability analysis and extinction risk assessment for:

- *Florida Panther in South Florida
- *Hardhead in Sierra Nevada Rivers, California
- *Desert Tortoise in Mojave Desert, California
- *Shortnose Sturgeon in Connecticut River
- *Three Redhorse Suckers in Muskingum River, OH
- *Red-cockaded Woodpecker in Louisiana
- *Blueback Herring, Threadfin Shad, Black Crappie, Striped and Hybrid Bass in SC and GA

Multispecies assessment for South Florida (11/00-6/02)

Spatially-explicit analyses for recovery of Federally listed species for the Multispecies Ecosystem Recovery Implementation Team (MERIT) of U. S. Fish and Wildlife Service.

Grants:

P.I. for NSF SBIR Phase II Grant: Multispecies Ecological Valuation and Landscape Management (4/00-4/02; \$400,000;)

Development of new methods and software for multispecies conservation incorporating risk of extinction and the habitat needs for suites of species. Includes several case studies.

P.I. for Dept. of Education SBIR Phase I Grant: An Interdisciplinary Method of Teaching Ecology in High School Science and Mathematics Classes (9/99-3/00; \$50,000;)

Wrote short course on Conservation Biology for high school students, that utilizes the Internet and custom software.

P.I. for NSF SBIR Phase I Grant: Multispecies Ecological Valuation and Landscape Management (1/99-7/99; \$100,000;)

Development of new methods and software for multispecies conservation incorporating risk of extinction and the habitat needs for suites of species. Utilized California GAP Analysis Project data for feasibility testing.

1993-1996

DISSERTATION RESEARCH

Population Viability Analysis for the Florida Scrub-Jay (Aphelocoma coerulescens coerulescens) in Brevard County, Florida.

Constructed single, stage-based, patch, and spatially-explicit population models using long-term demographic data, recent field surveys, and G.I.S. coverages for the four populations of Florida scrub-jays in Brevard County and under four proposed scrub habitat reserve designs.

(Florida Institute of Technology, Melbourne; advisor: Dr. Hilary Swain)

1994-1995

GRADUATE RESEARCH ASSISTANT

Designed G.I.S. maps of scrub habitats, of habitat quality, and of potential for restoration by fire and a habitat quality index for the Scrub Habitat Conservation and Development Plan of Brevard County, FL for the Florida scrub-jay.
(Florida Institute of Technology, Melbourne; advisor: Dr. Hilary Swain)

1990 - 1993 RESEARCH ASSOCIATE IN INTERNAL MEDICINE/G.I.
Supervised a research assistant, designed experiments, and prepared presentations and publications for cellular and molecular research on ion transport using fluorescent markers in endocytic vesicles.
(University of Michigan Medical Center, Ann Arbor; Dr. Rebecca Van Dyke)

1989 - 1990 RESEARCH ASSISTANT IN INTERNAL MEDICINE/G.I.
Conducted cellular and molecular research on ion transport using fluorescent markers in endocytic vesicles and wrote progress reports for NIH Grant.
(University of Michigan Medical Center, Ann Arbor; Dr. Rebecca Van Dyke)

1987 UNDERGRADUATE HONORS THESIS
Observational study on development of a social hierarchy of timber wolves in Minnesota Zoological Gardens.
(University of Minnesota, St. Paul; advisor: Dr. Anne Pusey)

TEACHING

Course	Level	Years	Type of Course	Location
Undergraduate				
Wildlife Biology	4300	4	Lecture	Bowling Green State University (BGSU)
Conservation Biology	4100	13	Lecture	BGSU
Landscape Ecology	4160	10	Lecture	BGSU
Concepts in Biology I	2040	1	Lecture	BGSU
Concepts in Biology I-- Honors	2040H	1	Lecture & Recitation	BGSU
Evolution	400	1	Lecture	Florida Institute of Technology (FTech)
Introductory Biology (majors)	200	1	Lecture & Laboratory	FTech
	200	3	Laboratory	FTech
	200	2	Laboratory	University of Michigan (UM)
Introductory Biology (non-majors)	100	1	Lab/Recitation	(UM)
Graduate				
Fundamentals of Ecology	6510	3	Lecture & Recitation	BGSU
Wildlife Biology	5300	4	Lecture	BGSU
Conservation Biology	5420	13	Lecture	BGSU

Landscape Ecology	5240	10	Lecture	BGSU
Seminars in Biology	7800	13	Seminar	BGSU

Other Teaching		
Topic	Type	Location
Short course on ecological modeling	Workshop	Army Corps of Engineers, Vicksburg, MS.
Tools for Population Viability Analysis	Workshop	Annual Meeting for Society for Conservation Biology, Missoula, MT
Tools for Population Viability Analysis	Workshop	Annual Meeting for Society for Conservation Biology, College Park, MD
Tools for ecological and human health risk analyses	Workshop (2-day)	Applied Biomathematics, Setauket, NY

CURRICULUM DEVELOPMENT

NEW UNDERGRADUATE COURSES

Biology 4300: **Wildlife Biology** (3 credits) offered Fall semesters.

Introduction to the evolution, ecology and conservation of wildlife species, with an emphasis on tetrapods. Course includes lectures, hands-on exercises, class discussions, critical writing and argument and an individual project.

Biology 4100: **Conservation Biology in Practice** (3 credits) offered each Spring semester.

The use of the basic ecological principles as a basis for conservation of biological diversity. Focus on the underlying ecological concepts, current techniques utilized in the field, problem-solving approaches, and the issues encountered when trying to conserve natural systems in a human-dominated landscape. Course includes hands-on exercises, class discussions, critical writing and argument and lectures.

Biology 4160: **Landscape Ecology** (3 credits) offered Fall semesters.

Overview of the interaction between spatial pattern and ecological processes, especially the causes and consequences of spatial heterogeneity across a range of scales. Focus on the underlying ecological concepts, current techniques utilized in the field, and problem-solving approaches. Course includes hands-on exercises, class discussions, critical writing and argument and lectures.

NEW GRADUATE COURSES/SEMINARS

Biology 6510: **Fundamentals of Ecology** (3 credits) offered each Spring semester.

Overview of the major topics in ecology, evolution and conservation biology: evolutionary ecology, behavioral ecology, population biology, species interactions, communities and diversity, ecosystems and functioning, issues of scale and heterogeneity and ecological applications. Course includes hands-on exercises, class discussions, critical writing and presentations, and lectures.

Biology 5300: **Wildlife Biology** (3 credits) offered Fall semesters.

Introduction to the evolution, ecology and conservation of wildlife species, with an emphasis on tetrapods. Course includes lectures, hands-on exercises, class discussions, critical writing and argument and an individual project.

Biology 5420: **Conservation Biology in Practice** (3 credits) offered each Spring semester.
Taught with Biology 410 as described above.

Biology 5240: **Landscape Ecology** (3 credits) offered Fall semesters.
Taught with Biology 416 as described above.

Biology 7800: **Priorities in Conservation Biology** (1 credit)
Graduate seminar on priority research questions in Conservation Biology in a student-led discussion format.

Biology 7800: **Population Viability Analysis** (2 credits)
Graduate seminar on the basics of Population Viability Analysis using hands-on exercises, discussions of the primary literature and lectures

Biology 7800: **Behavior and Conservation** (2 credits)
Graduate seminar on the application of behavioral ecology methods to conservation biology, based on primary literature, in a student-led discussion format.

Biology 7800: **Reserve Design** (2 credits)
Graduate seminar on the reserve design and planning based on primary literature, including hands-on exercises, class projects and discussions.

Biology 7800: **Conservation Modeling** (1 credit)
Graduate seminar on the techniques used in conservation biology especially Population Viability Analysis, Patch Modeling, Landscape Analysis and Habitat Suitability Analysis. Students discuss the primary literature and work with real-data sets to complete several analyses.

Biology 7800: **Applied Population Ecology** (2 credits)
Graduate seminar on the techniques used in demographic modeling and Population Viability Analysis. Students discuss the primary literature and work with real-data sets to complete several analyses.

Biology 7800: **Conservation Behavior** (1 credit)
Graduate seminar on the application of behavioral ecology methods to conservation biology, based on Primer of Conservation Behavior by Blumstein and Esteban Fernandez-Juricic, in a student-led discussion format.

Biology 7800: **Advanced Ecology and Evolution** (2 credits)
Graduate seminar on topics in ecology, evolution and conservation biology based on a textbook (*An Introduction to Methods & Models in Ecology, Evolution, & Conservation Biology* by S. Braude and B. Low) and primary literature and including hands-on exercises, class projects and discussions.

ADVISING AND STUDENT COMMITTEES

Undergraduate Students (Ecology & Conservation Biology Specialization)

2008-2009

Cody Adams

2008-2009

Meagan Aliff

2007-2009

David Bonner	2008-2009
Tyler Brown	2008-2009
Katheryn Campbell	2008-2009
Juston Carpenter	2008-2009
Troy Chamberlain	2008-2009
Lisa Curtis	2008-2009
Jeremy Didion	2008-2009
Ivy Fischer	2008-2009
Mia Hall	2007-2009
Kenneth Hickerson	2009-2009
David Houser	2008-2009
Daniel Lubin	2008-2009
Adam Meeker	2007-2009
Brandon Perry	2008-2009
Kristyn Pitchford	2008-2009
Jeffrey Porter	2009-2009
Nicole Rosenthal	2009-2009
Miriam Saas	2007-2009
Rebecca Safron	2007-2009
Cassandra Tyson	2007-2009
Ellen Wakeley	2007-2009
Stacy Wilcox	2008-2009
Lauren Zielke	2007-2009
Jennifer Chaffin	2007-2008*
Mary Esbenshade	2007-2008*

BIOLOGY HONORS

Christine Whorton	2010-2013*
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Students in **bold** are those that I have directly advised

Graduate Students

Current (16)

Greg Gustafson	M.S. (BGSU)	Advisor	2016-present
Amanda Martin	Ph.D. (BGSU)	Advisor	2016-present
Tyler Turner	M.S. (BGSU)	Advisor	2016-present
Jennifer Hollen	M.S. (BGSU)	Advisor	2015-present
Lauren Jonaitis	M.S. (BGSU)	Advisor	2015-present
Rachel Kappler	Ph.D. (BGSU)	Advisor	2014-present
Amanda Kuntz	Ph.D. (BGSU)	Advisor	2009-present
Alexis Majorczyk	Ph.D. (BGSU)	Committee Member	2009-present
Danielle McNeil	M.S. (BGSU)	Committee Member	2013-present

Sarah Wofford	Ph.D. (BGSU)	Committee Member	2013-present
Jamie Becker	Ph.D. (BGSU)	Committee Member	2015-present
Ngan Nguyen	M.S. (BGSU)	Committee Member	2015-present
Paul Tuck	M.S. (BGSU)	Committee Member	2016-present
Audrey Maran	Ph.D. (BGSU)	Committee Member	2016-present

Past (50)

Christian Nordal	M.S. (BGSU)	Advisor	2014-2016*
Matthew Cross	Ph.D. (BGSU)	Advisor	2011-2016*
Amanda Martin	M.S. (BGSU)	Advisor	2013-2015*
Sara Zaleski	M.S. (BGSU)	Advisor	2013-2015*
Bryce Adams	M.S. (BGSU)	Advisor	2012-2014*
Kathleen Baczynski	Ph.D. (BGSU)	Advisor	2009-2013*
Gregg Janos	M.S. (BGSU)	Advisor	2010-2013*
Jessica Sewald	Ph.D. (BGSU)	Advisor	2008-2012*
Timothy Schetter	Ph.D. (BGSU)	Advisor	2006-2012*
Steven Wilson	M.S. (BGSU)	Advisor	2008-2012*
Lauren Yarrish	M.S. (BGSU)	Advisor	2008-2011*
Amanda Kuntz	M.S. (BGSU)	Advisor	2007-2009*
Rachel Kappler	M.S. (BGSU)	Advisor	2007-2009*
Hillary Harms	Ph.D. (BGSU)	Advisor	2004-2008*
Melanie Coulter	M.S. (BGSU)	Advisor	2006-2008*
Jami Barnes	Ph.D. (BGSU)	Advisor	2003-2007*
Christine Johnston	M. S. (BGSU)	Co-advisor	2005-2007*
Brad Pickens	M.S. (BGSU)	Advisor	2004-2006*
Marcus Ricci	M.S. (BGSU)	Co-advisor	2003-2006*
Gregory Lipps	M.S. (BGSU)	Advisor	2003-2005*
Marina Martinez-Ortiz	M.S. (BGSU)	Advisor	2002-2004*

Amanda Curtis	M.S. (BGSU)	Committee Member	2012-2014*
Matthew Linn	M.S. (BGSU)	Committee Member	2012-2014*
Thomas Studer	M.S. (BGSU)	Committee Member	2013-2014*
Ryan Walsh	Ph.D. (BGSU)	Committee Member	2009-2013*
Jacob Meier	M.S. (BGSU)	Committee Member	2011-2013*
Sarah Wofford	M.S. (BGSU)	Committee Member	2012-2013*
Jeremiah Davis	M.S. (BGSU)	Committee Member	2011-2013*
Michael Plenzler	Ph.D. (BGSU)	Committee Member	2009-2012*
Michelle Longstreet	M.S. (BGSU)	Committee Member	2009-2012*
Steven Gauthier	M.S. (BGSU)	Committee Member	2011-2012*
Adam Meade	M.S. (BGSU)	Committee Member	2009-2011
Jeremy Ross	Ph.D. (BGSU)	Committee Member	2004-2010*
Meg Woller	Ph.D. (BGSU)	Committee Member	2006-2009*

Brian Zimmerman	M.S. (BGSU)	Committee Member	2006-2009*
Timothy Herman	M.S. (BGSU)	Committee Member	2006-2009*
Rosa I. Strem	M.S. (BGSU)	Committee Member	2007-2008*
Andrey Zamyatin	Ph.D. (BGSU, Photochem Sciences)	Graduate College Representative	2004-2008
Huidong Liu	M.S. (BGSU, Geology)	Committee Member	2007-2008*
Michael Plenzler	M.S. (BGSU)	Committee Member	2007-2008*
Paula Furey	Ph.D. (BGSU)	Committee Member	2004-2008*
Nathan Donelson	Ph.D. (BGSU)	Committee Member	2005-2007*
Dhan Shahi	M.S. (BGSU)	Committee Member	2005-2006*
Jacob LaCroix	Ph.D. (U of Toledo)	Committee Member	2003-2006*
Scott Hevner	Ph.D. (BGSU)	Committee Member	2004-2006
Jessie Knapp	M.S. (BGSU)	Committee Member	2004-2005*
Marybeth Bauer	Ph.D. (BGSU, Philosophy Dept.)	Committee Member	2003-2004*
Hillary Harms	M.S. (BGSU)	Committee Member	2003-2004*
Nathan Fries	M.S. (BGSU)	Committee Member	2002-2003*
Christine Warner	M.S. (BGSU)	Committee Member	2002-2003*

Students in **bold** are those that I have directly advised
 BGSU = Bowling Green State University
 *successful completion of the degree program

PROFESSIONAL ACTIVITIES AND SERVICES

Professional Societies and Service

Secretary, NA Society for Conservation Biology	2015-present
Board of Governors, NA Society for Conservation Biology	2015- present 2002-2004
Conference Committee, NA Society for Conservation Biology	2015-present
Oak Openings Region Conservation Plan Steering Committee; co-chair: Science Working Group	2008-present
Green Ribbon Advisory Board (Ohio)	2005-present
Vice President, Northwest Ohio Chapter of the Society for Conservation Biology	2009-present
Chair, Committee on North American Meetings, Society for Conservation Biology	2004-2005
Conference Committee of the Society for Conservation Biology	2002-2005
Editorial Board, Journal of Conservation GIS	2001-2004
T & P External Reviewer, Western Kentucky University, Dept. of Biological Sci	2014
Reviewer, PLOS	2016-present
Reviewer, Environmental Management journal	2010-present
Reviewer, Ecology Letters journal	2006-present
Reviewer, Journal of the Torrey Botanical Society	2004-present
Reviewer, Conservation Biology journal	2004-present

Reviewer, Plant Science	2003-present
Reviewer, Environmental Conservation journal	2003-present
Reviewer, Biological Conservation journal	2002-present
Reviewer, Ecological Applications journal	1999-present
Member, Society for Conservation Biology	1995-present
Assistant to the Secretary for Society for Conservation Biology (1993-1995)	
Member, Ecological Society of America	1995-present
Member of American Institute of Biological Sciences	1995-present
Member of Natural Areas Association	1995-present
Member of The Wildlife Society	1999-present
Member of Sigma Xi	2006-present
Member of Citizen Science Association	2014-present

University Service

College of Arts & Sciences Global Themes Initiative: Sustainability Cluster	2015-present
College of Arts & Sciences: Faculty Mentoring Program (role: Mentor)	2013-2015
Faculty Search Committee for Spatial Ecologist position in School of Earth, Environment, and Sustainability	2012-2013
NSF Grant Writing Team for BGSU Advance Project	2012-present
NSF-Sponsored IDEAL Project, Year 3 Project Member	2011-2012
University Faculty Senate, Senator	2009-2012
Faculty Senate Amendments & Bylaws Committee	2009-2010
ESL Advisory Committee	2009-2012
Advisor, Ecology & Conservation Biology Specialization	2007-2009
Dean of Arts & Sciences Search Committee	2008-2009
Arts & Sciences Council	2006-2009
Arts & Sciences Technology Committee	2005-2012
University Academic Honesty Committee	2006-2007
Information Technology Committee	2003-2004
Faculty Search Committee for faculty position in ENVS and Geology	2003
School of Earth, Environment & Society Advisory Board	2006-present
Environmental Studies (ENVS) Program Advisory Board	2002-2008

Departmental Service

Graduate Coordinator	2008-2016
Graduate Committee;	2005-present;
Chair	2008-2016
Computer Facilities/Web Committee	2004-present
Executive Committee	2006-2007; 2004-2005

Chair, Faculty Search Committee for Ecologist position	2012-2013
Faculty Search Committee for Community Ecologist position	2011-2012
Faculty Search Committee for faculty position in Web-based Educator	2004
Faculty Search Committee for faculty position in Biology Education	2004
Computer Facilities Coordinator	2004-2013
Faculty Advisor to Biology Graduate Student Association	2003-2014
Curriculum Committee	2003-2004, 2007-2009
Blackboard Coordinator for Biological Sciences	2003-2013
Biological Sciences Webmaster	2002-2014

Professional Development

Participation in BGSU Learning Community “Integrating Sustainability Across the Curriculum Learning Community”	2015-2017
Computing for Data Analysis Course (using R)	Fall 2013
Blackboard Basics for Online Faculty Course	Fall 2008
Participation in CIRTLL Forum on Graduate Education “Aligning the Preparation of Graduate Students for STEM Early Faculty Careers”	2008
Participation in BGSU Learning Community “Active Learning in Natural Sciences and Mathematics”	2007-2008
Participation in BGSU Learning Community “Teaching Scientifically: Bringing Interactive Engagement Strategies to the Biology Classroom”	2005-2006
Participation in NSF-sponsored Learning Community “Active Learning in the Biology Classroom” with University of Michigan, Ann Arbor, MI	2004-2005

PUBLICATIONS

Books:

- Root, K. V. 2012 (e-text) *Environmental Science: Science-based Problem Solving in Today’s World*. Sinauer Associates, Sunderland, MA.
- Root, K. V. (ed.) 2005. *Environmental Science Interactive*. Web School of Science, Setauket, NY. (Note: peer-reviewed.)
- Root, K. V. 2002. *RAMAS Multispecies Assessment: Estimating Multispecies Conservation Values across the Landscape*. Applied Biomathematics, Setauket, NY.
- Root, K. V. (ed.). 2002. *Environmental Science on the Web: Interactive Online Laboratories for Environmental Science*. Applied Biomathematics, Setauket, NY.
- Shultz, S.M.; A.E. Dunham; K.V. Root; S.L. Soucy; S.D. Carroll, L.R. Ginzburg. 1999. *Conservation Biology with RAMAS[®] EcoLab*. Sinauer Associates, Sunderland, MA.

Peer-reviewed publications: (* undergrad student coauthor; ** graduate student coauthor)

- Kappler**, R. and K. V. Root. In review. *Peromyscus* population dynamics and distribution in Midwest Oak Savannas. *Journal of Mammalogy*.

- Cross**, M. and K. V. Root. In review. Spatial ecology of eastern box turtles (*Terrapene c. carolina*) in a biodiversity hotspot in northwestern Ohio. *Herpetologica*.
- Martin**, A., and K. V. Root. In review. Spatial patterns of herpetofauna biodiversity in Ohio. *Herpetological Conservation & Biodiversity*.
- Cross**, M., K. V. Root, C. J. Mehne, J. McGowan-Stinski, D. Pearsall, and J. C. Gillingham. 2015. Multi-scale responses of eastern Massasauga rattlesnakes (*Sistrurus catenatus catenatus*) to prescribed Fire. *American Midland Naturalist* 173 (2): 346-362.
- Sewald**, J., Whorton*, C. and K.V. Root. In review. Rebranding bats: Developing quantitative measures to increase efficacy of informal education focused on human perceptions of a misunderstood animal. *Journal of Environmental Education*.
- Cross**, M., E. J. Tobin, G. Lipps and K. V. Root. 2014. Pattern-recognition Software as a Method of Identifying Individual Eastern Box Turtles (*Terrapene c. carolina*). *Herpetological Review* 45(4): 584–586.
- Sewald*, J., Whorton**, C. and K.V. Root. 2014. Developing macrohabitat models for bats in parks using Maxent and testing them with data collected from citizen scientists. *International Journal of Biodiversity and Conservation* 6(2): 171-183. [DOI: 10.5897/IJBC2013.0647].
- Janos**, G. and K. V. Root. 2014. Bats do not alter their foraging activity in response to owl calls. *American Midland Naturalist* 171:375-378.
- Schetter**, T. A., T. Walters and K. Root. 2013. A multi-scale spatial analysis of native and exotic plant species richness within a mixed-disturbance oak savanna landscape. *Environmental Management*. 52(3):581-594 (DOI: 10.1007/s00267-013-0120-y).
- Kappler**, R., H. Michaels, and K. V. Root. 2012. Impact of Mice Seed Predation on Wild Lupine in and near Oak Savannas. *American Midland Naturalist* 168:18-29.
- Schetter**, T. A., and K. V. Root. 2011. Assessing an imperiled oak savanna landscape in northwestern Ohio using Landsat data. *Natural Areas Journal* 31(2):118-130.
- Pickens**, B. and K. V. Root. 2009. Butterfly behavior as a tool for assessing a managed landscape: A case study of the Karner Blue Butterfly. *Landscape Ecology* 24:243-251.
- Pickens**, B. and K. V. Root. 2008. Oviposition strategy and behavior of the Karner Blue Butterfly, *Lycaeides melissa samuelis*. *Journal of the Lepidopterists' Society* 62(3): 130-132.
- Pickens**, B. and K. V. Root. 2008. Identifying factors affecting nutrition for the endangered Karner Blue Butterfly, *Lycaeides melissa samuelis*. *Natural Areas Journal* 28(3):210-217.
- Kautz, R., R. Kawula, T. Hctor**, J. Comiskey, D. Jansen, D. Jennings, J. Kasbohm, D. Land, F. Mazzotti, R. McBride, L. Richardson, and K. Root. 2006. How Much Is Enough? Landscape-scale Conservation for the Florida Panther. *Biological Conservation* 130:118-133.
- Root, K. V. 2004. Using models to guide recovery efforts for the Florida Panther. Pages 491-504 in H. R. Akçakaya, M. Burgman, O. Kindvall, C. C. Wood, P. Sjogren-Gulve, J. Hatfield, and M. McCarthy (eds.), *Species Conservation and Management: Case Studies*, Oxford University Press, New York, NY.
- Regan, H. M.; H. R. Akçakaya, S. Ferson, K. V. Root, L. R. Ginzburg; R. Pastorok. 2003. Treatments of uncertainty and variability in ecological risk assessment of populations, ecosystems and landscapes. *Human and Ecological Risk Assessment* 9(4):889-906.
- Root, K. V. 2003. Prioritizing conservation of biodiversity using a multispecies approach. *Gap Analysis Bulletin* 11:18-23. (http://www.gap.uidaho.edu/Bulletins/11/Prioritizing_conservation.htm)
- Root, K. V.; H. R. Akçakaya; L.R. Ginzburg. 2003. A Multispecies Approach to Ecological Valuation and Conservation. *Conservation Biology* 17:196-206.

- Root, K. V. 2002. Evaluating risks for threatened aquatic species: The shortnose sturgeon in the Connecticut River. In W. Van Winkle, P.J. Anders, D. H. Secor, and D.A. Dixon(eds.), *Biology, Management and Protection of North American Sturgeon*, American Fisheries Society.
- Root, K. V. 2001. Classification of species. In Pastorok, R.A., S.M. Bartell, S. Ferson, and L.R. Ginzburg. (eds.). *Ecological modeling in risk assessment: Chemical effects on populations, ecosystems, and landscapes*. Lewis Publishers, Boca Raton, FL.
- Root, K. V. 1998. Evaluating the effects of habitat quality, connectivity and catastrophes on a threatened species. *Ecological Applications* 8(3):854-865.
- Van Dyke, R. W.; K. V. Root; R. A. Hsi. 1996. cAMP and Protein Kinase A stimulate acidification of rat liver endosomes in the absence of chloride. *Biochemical and Biophysical Research Communications* 222:312-316.
- Swain, H. S.; P. Schmalzer; D. Breininger; K. Root; S. Boyle; S. Bergen; S. MacCaffree. 1995. Appendix B: Biological consultant's report. Pages b1-b300 in Brevard County Office of Natural Resources. *Scrub Conservation and Development Plan*. Melbourne, FL.
- Root, K. V.; J. F. Engelhardt; M. P. Post; J. W. Wilson; R. W. Van Dyke. 1995. CFTR does not alter acidification of L-Cell endosomes. *Biochemical and Biophysical Research Communications* 205:396-401.
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- Van Dyke, R. W.; K. V. Root. 1993. Ethynyl estradiol decreases acidification of rat liver endocytic vesicles. *Hepatology* 18:604-613.
- Van Dyke, R. W.; K. V. Root; J. H. Schreiber; J. M. Wilson. 1992. Role of CFTR in lysosome acidification. *Biochemical and Biophysical Communications* 184:300-305.

Invited reviews:

- Root, K. V. 2014. A Primer of Conservation Biology. Fifth Edition. By Richard B. Primack. Sunderland (Massachusetts). *Quarterly Review of Biology*
- Root, K. V. 2009. A Primer of Conservation Biology. Fourth Edition. By Richard B. Primack. Sunderland (Massachusetts). *Quarterly Review of Biology*

Technical reports:

- Root, K. V. February 2009. *Risk Assessment for Eight Species*. Final report to Florida Fish and Wildlife Conservation Commission Grant # 10250132. **Note: Peer-reviewed.**
- Pickens, B. and K. V. Root. 2007. *An assessment of ant abundance in oak savanna, the evaluation of two butterfly reintroduction techniques, and recommendations for the Karner Blue Butterfly in Ohio*. Final report to Ohio Division of Wildlife for State Wildlife Grant.
- Root, K. V. and Barnes, J. R. 2007. *Risk assessment for Audubon's Crested Caracara, Caracara cheriway, in Florida*. Final Report to U. S. Fish & Wildlife Service (Agreement # 401815G027).
- Morrison, J.M., Root, K. V., Barnes, J. R., and Lipps, G., 2006. *Habitat suitability and demographic population viability models for Florida's Crested Caracaras*. Final Report to Florida Fish and Wildlife Conservation Commission (Contract #01213). **Note: Peer-reviewed**
- Root, K. V. and Barnes, J. June 2006. *Risk Assessment for a Focal Set of Rare and Imperiled Wildlife in Florida*. Final report to Florida Fish and Wildlife Conservation Commission Grant #03111. **Note: Peer-reviewed.**
- Harms, H. and Root, K. V. June 2006. *Identifying Critical Ecological Requirements Of Rare Turtle Species*. Final report to Ohio Division of Wildlife for State Wildlife Grant.

- Pickens, B. and Root, K. V. June 2006. *Consequences of a Management Strategy for the Endangered Karner Blue Butterfly, Lycaeides melissa samuelis*. Final report to Ohio Division of Wildlife for State Wildlife Grant.
- Lipps, G. and Root, K. V. June 2005. *Predicting the occurrence of rare amphibian species in Ohio*. Final report to Ohio Division of Wildlife for State Wildlife Grant.
- Root, K. V. March 2002. *Multispecies ecological valuation and landscape management*. Final report for National Science Foundation SBIR Phase II Grant #9983279.
- Root, K. V. February 2000. *An interdisciplinary method of teaching ecology in high school science and mathematics classes*. Final report for Department of Education Phase I Grant # ED-99-PO-4648.
- Root, K. V. July 1999. *Multispecies ecological valuation and landscape management*. Final report prepared for National Science Foundation SBIR Phase I Grant #98-60415.
- Dunham, A.E.; K. V. Root; H. R. Akçakaya. April 1999. *Correspondence between IUCN and USFWS classifications of threatened species*. Prepared for Southern California Edison and Electric Power Research Institute.
- Root, K. V. January 1999. *RAMAS[®] Ecological Risk Model for Desert Tortoise: Phase II Report*. Prepared for Southern California Edison and Electric Power Research Institute.
- Root, K. V.; H. R. Akçakaya; S. Ferson; L. Ginzburg. December 1998. *Using RAMAS[®] Methods to Solve Ecological Problems Facing Utilities*. TR-111387. Prepared for Electric Power Research Institute.
- Root, K. V. June 1998. *Ecological Risk Analysis as a Management Tool for Native Fish Species in the Sierra Nevada Range of California*. Prepared for Southern California Edison and Electric Power Research Institute.
- Root, K. V.; H. R. Akçakaya. April 1998. *RAMAS[®] Ecological Risk Model for Desert Tortoise*. Prepared for Southern California Edison.
- Oines, G; K. V. Root; L. Ginzburg; S. Ferson. June 1997. *Assessment of Population-Level Threat from Entrainment at Russell Dam on Thurmond Reservoir Fishes*. Prepared for US Army Corps of Engineers.
- Root, K. V.; H. R. Akçakaya. March 1997. *RAMAS[®] Ecological Risk Model for Assessing Temperature Effects on Redhorse Sucker Species in the Muskingum River*. Prepared for American Electric Power Service Corporation.
- Root, K. V; H. R. Akçakaya. February 1997. *Ecological Risk Analysis for the Shortnose Sturgeon Populations in the Connecticut River*. Prepared for Northeast Utilities.

Graduate Student Theses/Dissertations:

- Cross, Matthew. 2016. *Spatial ecology of Eastern Box Turtles (*Terrapene c. carolina*) in the Oak Openings Region of northwestern Ohio*. Ph.D. Dissertation.
- Nordal, Christian. 2016. *A spatial and temporal analysis of bat activity and diversity within a heavily fragmented landscape*. M.S. Thesis.
- Martin, Amanda. 2015. *Spatial analysis of amphibians and reptiles in the Oak Openings Preserve*. M.S. Thesis.
- Zaleski, Sara. 2015. *Environmental influences on avian presence in roadside ditches in an agricultural landscape*. M.S. Thesis.
- Adams, Bryce. 2014. *Effects of matrix quality, fragmentation, and structural diversity of habitat on Midwestern breeding birds in human-dominated landscapes*. M.S. Thesis.
- Baczynski, Kathleen. 2013. *Evaluating Anuran relative abundance and assessing salamander movements in protected areas*. Ph.D. Dissertation.

- Janos, Gregg. 2013. Utilizing acoustic methods to classify bat species, and to assess their habitat use and perception of owls. M.S. Thesis.
- Sewald, Jessica. 2012. A multidisciplinary approach to bat conservation in the Oak Openings Region of Northwest Ohio. Ph.D. Dissertation.
- Wilson, Steven. 2012. Movement and ecology of the Eastern Box Turtle (*Terrapene carolina carolina*) in a heterogeneous landscape. M.S. Thesis.
- Schetter, Timothy. 2012. A Multi-scale spatial analysis of Oak Openings plant diversity with implications for conservation and management. Ph.D. Dissertation.
- Yarrish, Lauren. 2011. Butterfly conservation in oak savanna: Site characterization, nectar resources, and the effects of management. M.S. Thesis.
- Kappler, Rachel. 2009. *Peromyscus* population dynamics and seed predation of *Lupinus perennis* in and near oak savannas of Northwest Ohio. M.S. Thesis.
- Kuntz, Amanda. 2009. Assessing the effects of White-tailed Deer (*Odocoileus virginianus*) on the oak savanna. M.S. Thesis.
- Coulter, Melanie. 2008. A multi-scale characterization of Lark Sparrow habitat and the management implications. M.S. Thesis.
- Harms, Hillary. 2008. Conservation of the Spotted Turtle (*Clemmys guttata*): Identifying critical demographic and environmental constraints affecting viability. Ph.D. Dissertation.
- Barnes, Jami. 2007. An integrative approach to conservation of the Crested Caracara (*Caracara cheriway*) in Florida: Linking population and habitat modeling for prioritization. Ph.D. Dissertation.
- Johnston, Christine. 2007. Ecological and behavioral impacts of snag density on cavity-nesting birds in the oak savanna. M.S. Thesis.
- Pickens, Brad. 2006. The consequences of a management strategy for the endangered Karner blue butterfly. M.S. Thesis.
- Ricci, Marcus. 2006. Using conservation GIS to build a predictive model for oak savanna ecosystems in Northwest Ohio. M.S. Thesis.
- Lipps, Gregory. 2005. A framework for predicting the occurrence of rare amphibians: A case study with the green salamander. M.S. Thesis.
- Martinez-Ortiz, Marina. 2004. Predicting habitat suitability and occurrence for Blanchard's cricket frogs (*Acris crepitans blanchardi*) in Northwest Ohio. M.S. Thesis.

PRESENTATIONS (* UNDERGRAD STUDENT COAUTHOR; ** GRADUATE STUDENT COAUTHOR)

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|---------------|--|
| November 2016 | ASSOCIATION FOR HIGHER EDUCATION, COLUMBUS, OH
L. K. Hanasono, E. Broido, M. M. Yacobucci, K. V. Root, S. Pena and D. A. O'Neil. Secret service: Revealing gender biases in the visibility and value of faculty service in the higher education landscape |
| October 2016 | THE WILDLIFE SOCIETY ANNUAL MEETING, RALEIGH, NC
M. Cross and K. V. Root. The effects of prescribed fire on Eastern Box Turtles in the Oak Openings Region of northwestern Ohio
J. Hollen** and K. V. Root. Bat diversity, richness, and habitat use in a mixed disturbance landscape
L. Jonaitis** and K. V. Root. Predicting movement patterns of vertebrates using road and visual surveys |
| July 2016 | SOCIETY FOR CONSERVATION BIOLOGY, MADISON, WI
L. Jonaitis** and K. V. Root. Predicting movement hot spots of vertebrates |

- using road mortality
- R. Kappler** and K. V. Root. Exploring the population viability of Green Ash (*Fraxinus pennsylvanica*) with a stage-based model
- C. Nordal** and K. V. Root. Influence of roadside characteristics on bat species presence and relative abundance
- May 2016 BOX TURTLE SYMPOSIUM, URBANA, IL
- M. Cross**, L. Sparrow and K. V. Root. The effects of prescribed fire on eastern box turtles in the Oak Openings Preserve
- April 2016 MIDWEST BAT WORKING GROUP ANNUAL MEETING
- C. Nordal** and K. V. Root. Influence of roadside characteristics on bat species' presence and relative activity in Northwest Ohio
- March 2016 MIDWEST ECOLOGY AND EVOLUTION ANNUAL CONFERENCE, DAYTON, OH
- M. Cross** and K. V. Root. The effects of early-season prescribed fire on eastern box turtles in the Oak Openings Preserve of Northwestern Ohio.
- R. Kappler** and K. V. Root. Exploring the population viability of Green Ash (*Fraxinus pennsylvanica*) with a stage-based model.
- January 2016 OAK OPENINGS RESEARCH FORUM, TOLEDO, OH
- M. Cross**, L. Sparrow and K. V. Root. The effects of prescribed fire on eastern box turtles in the Oak Openings Preserve
- R. Kappler**, K. Knight and K. V. Root. Ash tree (*Fraxinus spp.*) seedling dynamics in emerald ash borer (*Agrilus planipennis*) infested forests
- C. Nordal** and K. V. Root. Monitoring Bat Species in the Oak Openings Region.
- November 2015 ASSOCIATION FOR HIGHER EDUCATION, DENVER, CO
- L. K. Hanasono, E. Broido, M. M. Yacobucci, M. Benedict, D. A. O'Neil, S. Pena, S. J. Roberts, and K. V. Root. The Spiral of Service: Explaining the Role of Service and Gender in Faculty Members' Job Satisfaction and Career Advancement
- November 2015 GEOLOGICAL SOCIETY OF AMERICA, BALTIMORE, MD
- L. K. Hanasono, M. M. Yacobucci, E. Broido, S. Peña, S. J. Roberts, K. V. Root. The Spiral Project: Supporting Progress in Rebalancing Academic Life
- August 2015 ECOLOGICAL SOCIETY OF AMERICA, BALTIMORE, MD
- R. Kappler**, K. S. Knight, and K. V. Root. Ash tree (*Fraxinus spp.*) seedling dynamics in emerald ash borer (*Agrilus planipennis*) infested forests
- March 2015 OAK OPENINGS RESEARCH FORUM, TOLEDO, OH
- M. Cross** and K. V. Root. Box turtles in the Metroparks: findings from our pilot study
- R. Kappler**, K. Knight, and K. V. Root. Ash tree (*Fraxinus spp.*) seedling dynamics in Northwest Ohio
- A. Martin** and K. V. Root. Surveying Herpetofauna within the Oak Openings Preserve
- February 2015 OHIO FISH AND WILDLIFE CONFERENCE, COLUMBUS, OH
- M. Cross**, G. Lipps, J. Sapak, E. Tobin, and K. V. Root. Pattern-recognition Software as a Supplemental Method of Identifying individual Eastern Box Turtles

- July 2014 SOCIETY FOR CONSERVATION BIOLOGY, MISSOULA, MT
B. Adams** and K. V. Root. Influences of Midwestern breeding bird occupancy: matrix versus habitat
- March 2014 MIDWEST ECOLOGY AND EVOLUTION ANNUAL CONFERENCE, DAYTON, OH
B. Adams** and K. V. Root. Influences of Midwestern breeding bird occupancy: matrix versus habitat
M. Cross** and K. V. Root. Temporal changes in distribution of female eastern box turtles in the Oak Openings Region.
C. Cunningham*, M. Cross**, and K. V. Root. Seasonal movements of female eastern box turtles.
- February 2014 OHIO NATURAL HISTORY CONFERENCE, COLUMBUS, OH
B. Adams** and K. V. Root. Influences of Midwestern breeding bird occupancy: matrix versus habitat
- January 2014 OAK OPENINGS RESEARCH FORUM, TOLEDO, OH
B. Adams** and K. V. Root. Birds of the Oak Openings Region: Habitat loss, fragmentation, and matrix influences on diversity and spatial distributions
E. Cantwell*, B. Adams** and K. V. Root. Influence of developed land cover and snags on woodpeckers.
C. Cunningham*, M. Cross**, and K. V. Root. Seasonal movements of female eastern box turtles.
M. Cross** and K. V. Root. Predicting suitable habitat for eastern box turtles in the Oak Openings Region
- October 2013 OHIO AVIAN RESEARCH & CONSERVATION CONFERENCE
B. Adams** and K. V. Root. Evaluating relationships between avian diversity and anthropogenic land use across the Oak Openings Region
E. Cantwell*, B. Adams** and K. V. Root. Influence of Developed Landcover and Snags on Woodpeckers.
- October 2013 THE WILDLIFE SOCIETY ANNUAL MEETING, MILWAUKEE, WI
A. Kuntz** and K. V. Root. Developing a spatially explicit model for mid-size mammals in a mixed disturbance landscape
- August 2013 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING
A. Kuntz** and K. V. Root. Assessing the spatial distribution and habitat associations of three focal species in a mixed disturbance landscape.
- March 2013 MIDWEST ECOLOGY AND EVOLUTION ANNUAL CONFERENCE
G. Janos** and K. V. Root. How do bats perceive owls: friend or foe?
C. Whorton* and K. V. Root. Assessing the occurrence of bats in protected and unprotected areas of the Oak Openings Region.
- January 2013 OAK OPENINGS RESEARCH FORUM, TOLEDO, OH
K. Baczynski** and K. V. Root. Amphibians and leaf litter: Experimental and field results.
M. Cross** and K. V. Root. Multi-scale habitat utilization by eastern box turtles (*Terrapene carolina carolina*) in the Oak Openings Preserve.
G. Janos** and K. V. Root. How do bats perceive owls: Friend or foe?
C. Whorton* and K. V. Root. Assessing the occurrence of bats in protected and unprotected areas of the Oak Openings Region.
- October 2012 NORTH AMERICAN SOCIETY FOR BAT RESEARCH, SAN JUAN, PUERTO RICO
J. Sewald** and K. V. Root. A holistic approach to bat conservation:

- Education, citizen science and habitat models.
- July 2012 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, SAN JOSE, CA
K. Baczynski** and K. V. Root. Amphibian Diversity in a Fragmented Hotspot of Biodiversity.
J. Sewald** and K. V. Root. Knowledge and attitudes about bats and how outreach can be used to increase awareness and propel our ecological understanding of bats
S. Wilson** and K. V. Root. Monitoring the influence of a heterogeneous landscape on the movements and ecology of the eastern box turtle.
- July 2012 SETGO RESEARCH FORUM, BOWLING GREEN, OH
H. Clendenin*, M. Cross**, and K. V. Root. An exploration of microhabitat use of the eastern box turtle (*Terrapene carolina carolina*) within Oak Openings Preserve Metropark.
- February 2012 OHIO NATURAL HISTORY CONFERENCE, COLUMBUS, OH
J. Sewald** and K. V. Root. The value of citizen science data to test a model of bat presence and increase public understanding of a disliked group of animals.
- January 2012 OAK OPENINGS RESEARCH FORUM, TOLEDO, OH
K. Baczynski** and K. V. Root. Anuran diversity and habitat use in Northwest Ohio.
J. Sewald** and K. V. Root. Using citizen science data to test a model of habitat suitability for bats within protected areas.
S. Wilson** and K. V. Root. Movement and ecology of the Eastern Box Turtle (*Terrapene carolina carolina*) in a heterogeneous landscape.
- August 2011 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, AUSTIN, TX
K. Baczynski** and K. V. Root. Assessing amphibian species in wetlands along an urban-rural gradient.
A. Kuntz** and K. V. Root. Assessing the spatial distribution and diversity of three focal species in a mixed disturbance landscape.
J. Sewald** and K. V. Root. Evaluating the relationship between knowledge of and attitudes towards bats.
J. Sewald** and K. V. Root. The importance of heterogeneity in protected areas for bat species.
- July 2011 SETGO RESEARCH FORUM, BOWLING GREEN, OH
H. Clendenin*, A. Kuntz**, and K. V. Root. Exploring spatial relationships between omnivorous mammals and native fruiting plants in three Metroparks.
B. Crim*, J. Sewald**, and K. V. Root. Assessing the impact of wind turbines on local bat populations in Bowling Green, OH.
J. Kaseman*, K. Baczynski**, and K. V. Root. Using fluorescent powder to track Anurans dispersing from vernal pools.
- February 2011 SOUTHEASTERN MAMMAL COLLOQUIUM, LOUISVILLE, KY
Sewald**, J. and K. V. Root. The importance of heterogeneity in protected areas for bats species.
- February 2011 ANNUAL WETLANDS CONFERENCE, BARABOO, WI
Baczynski**, K. and K. V. Root. Assessing Amphibian Species in Wetlands Along an Urban-Rural Gradient.
- January 2011 OAK OPENINGS RESEARCH FORUM, TOLEDO, OH

- Baczynski**, K. and K. V. Root. Assessing amphibian species in wetlands in an urban-rural matrix.
- Kuntz**, A. and K. V. Root. Dead or alive: estimating mesopredator activity and abundance in 3 Metroparks in the Oak Openings Region.
- Schetter**, T., T. Walters, and K. V. Root. A multi-scale assessment of Oak Openings plant diversity: implications for conservation and management.
- Sewald**, J. and K. V. Root. The importance of heterogeneity in protected areas for bat species.
- Yarrish**, L., H. Michaels, and K. V. Root. Butterfly conservation in oak savanna: site characterization, nectar resources, and the effects of management.
- November 2010 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BOWLING GREEN, OH
 Sewald**, J. and K. V. Root. Assessing Bat Species Composition and Relative Foraging in a Mixed Disturbance Environment
 Yarrish**, L., H. Michaels, and K. V. Root. Butterfly conservation in oak savanna: site characterization, nectar resources, and the effects of management.
- July 2010 SETGO RESEARCH FORUM, BOWLING GREEN, OH
 Tucker*, E., J. Sewald**, and K. V. Root. Assessing the relationship between available roost and bat activity.
 Whorton*, C., A. Kuntz**, and K. V. Root. A comparison of two methods for assessing tree canopy gap fraction.
- July 2010 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, EDMONTON, AB, CANADA
 Kuntz**, A. and K. V. Root. Deer me! : Assessing White-tailed Deer (*Odocoileus virginianus*) Impacts and Movement in the Oak Savanna
 Sewald**, J. and K. V. Root. Assessing Bat Species Composition and Relative Foraging in a Mixed Disturbance Environment
 Yarrish**, L. E, H. M. Michaels, and K. V. Root. Aseessing Factors that Influence the Success of Butterfly Communities in Oak Savanna
- March 2010 MIDWEST ECOLOGY AND EVOLUTION ANNUAL CONFERENCE, AMES, IA
 Baczynski**, K. and K. V. Root. Assessing Amphibian Species in Wetlands Along an Urban-Rural Gradient- A proposal.
 Kuntz**, A. and K. V. Root. Assessing the terrestrial mesopredator community at diverse edges in Northwest Ohio—A proposal.
 Sewald**, J. and K. V. Root. Assessing Bat Species Composition and Relative Foraging in a Mixed Disturbance Environment
 Yarrish**, L., K. V. Root, and H. Michaels. Assessing Factors that Influence the Success of the Karner Blue Butterfly in Northwest Ohio
- February 2010 ANNUAL OHIO NATURAL HISTORY CONFERENCE, SUNBURY, OH
 Kuntz**, A. and K. V. Root. Deer me! : Assessing White-tailed Deer (*Odocoileus virginianus*) Impacts and Movement in the Oak Savanna
 Yarrish**, L., K. V. Root, and H. Michaels. Assessing Factors that Influence the Success of the Karner Blue Butterfly in Northwest Ohio
- November 2009 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BOWLING GREEN, OH

- Kuntz**, A. and K. V. Root. Deer me! : Assessing White-tailed Deer (*Odocoileus virginianus*) Impacts and Movement in the Oak Savanna
- Sewald**, J. and K. V. Root. Determining Predictors for Relative Activity of Bats at Different Scales in the Oak Openings Region of Northwest Ohio.
- Yarrish**, L., K. V. Root, and H. Michaels. Assessing Factors that Influence the Success of the Karner Blue Butterfly in Northwest Ohio
- October 2009 10TH BIENNIAL CONFERENCE OF RESEARCH ON THE COLORADO PLATEAU, FLAGSTAFF, AZ
- Root, K. V. A multispecies approach for conserving rare and vulnerable species across many scales in the Oak Openings Region
- August 2009 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, ALBUQUERQUE, NM
- Kappler**, R. and K. V. Root. Factors affecting white-footed mice (*Peromyscus leucopus*) seed predation upon wild blue lupine (*Lupinus perennis*) in Northwest Ohio
- Kuntz**, A. and K. V. Root. Assessing movement of white-tailed deer (*Odocoileus virginianus*) and potential impacts in Oak Openings Metropark
- Schetter**, T, T. Walters, and K. V. Root. Patterns of plant diversity in remnant Oak Openings prairies: Implications for restoration within a mixed disturbance landscape
- July 2009 2009 MIDWEST OAK SAVANNA AND WOODLAND CONFERENCE, TOLEDO, OH
- Kappler**, R. and K. V. Root. *Peromyscus* Population Dynamics And Seed Predation Of *Lupinus perennis* In And Around Oak Savannas
- Kuntz**, A. and K. V. Root. Deer me! : Assessing the Effects of White-tailed Deer (*Odocoileus virginianus*) On the Black Oak / Lupine Barren
- Schetter**, T, T. Walters, and K. V. Root. Landscape Context Influences Native And Nonnative Plant Species Richness In Remnant Oak Openings Prairies
- November 2008 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BOWLING GREEN, OH
- Kappler**, R. and K. V. Root. Local & Landscape Effects of White-footed Mice Seed Predation upon Wild Lupine.
- Kuntz**, A. and K. V. Root. Deer me! : Assessing the effects of white-tailed deer on the black oak/ lupine barren.
- Safron*, R., H. M. Harms**, and K. V. Root. Population Ecology of Spotted Turtles, *Clemmys guttata*, in NW Ohio.
- November 2008 THE WILDLIFE SOCIETY ANNUAL MEETING, MIAMI, FL
- Kappler**, R. and K. V. Root. Local & Landscape Effects of White-footed Mice Seed Predation upon Wild Lupine.
- Kuntz**, A. and K. V. Root. Deer me! : Assessing the effects of white-tailed deer on the black oak/ lupine barren.
- October 2008 2008 IOWA CONSERVATION SYMPOSIUM, AMES, IA.
- (Invited Talks) (KEYNOTE SPEAKER) Root, K. V. *A Multispecies Approach for Large-Scale Management and Conservation in a Heterogeneous Landscape.*

DEPARTMENT OF NATURAL RESOURCE ECOLOGY AND MANAGEMENT, IOWA

STATE, AMES, IA.

Root, K. V. Conserving rare and vulnerable species across many scales in the Oak Openings Region.

- October 2007 NATURAL AREAS ASSOCIATION ANNUAL MEETING, CLEVELAND, OH.
Coulter**, M. and K. V. Root. Determining Lark Sparrow breeding habitat requirements and success to inform sand barren restoration.
Harms**, H. and K. V. Root. Assessing viability and identifying critical environmental variables and genetic structure of a rare freshwater turtle.
Root, K. V. Large-scale conservation planning using spatially-explicit multispecies models in Florida.
Schetter**, T., J. F. Jaeger, S. R. Abella, and K. V. Root. An assessment of the conservation status of Ohio's Oak Openings Region using remotely sensed data.
- September 2007 JOINT CONFERENCE OF THE RAPTOR RESEARCH FOUNDATION AND THE HAWK MIGRATION ASSOCIATION OF NORTH AMERICA, ALLENTOWN, PA.
Barnes**, J., G. Lipps**, K. Root, and J. Morrison. Predicting habitat distribution for the Crested Caracara (*Caracara cheriway*) using a spatial modeling approach.
- April 2007 DEPARTMENT OF ENVIRONMENTAL SCIENCES, UNIVERSITY OF TOLEDO, OH.
(Invited Talk) Root, K. V. Conserving Rare and Vulnerable Species across Many Scales.
- March 2007 MIDWEST ECOLOGY AND EVOLUTION CONFERENCE ANNUAL MEETING, KENT STATE UNIVERSITY, OH.
Barnes**, J., G. Lipps**, J. Morrison, and K. V. Root. Predicting habitat: Modeling suitable habitat for the Crested Caracara in Florida.
Coulter**, M. and K. V. Root. Investigating Effects of Plant Invasions on Habitat Selection: A Proposal.
Harms**, H. and K. V. Root. Assessing Viability and Identifying Critical Ecological Variables of Rare Freshwater Turtles.
- January 2007 OAK OPENINGS RESEARCH FORUM, TOLEDO METROPARKS, TOLEDO, OH
Harms**, H. and K. V. Root. Assessing Viability and Identifying Critical Ecological Variables and Genetic Structures of Rare Freshwater Turtles.
Johnston**, C. J., K. V. Root & P. A. Moore. Disturbance-related Resources: The Impacts of Snags on the Fitness of Cavity-nesting Birds.
- November 2006 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BOWLING GREEN, OH
Barnes**, J. and K. V. Root. Linking Population Viability and Spatial Analyses for the Conservation of the Crested Caracara (*Caracara cheriway*) in Florida.
Harms**, H. and K. V. Root and J. Miner. Determining the Critical Ecological Variables for Rare Freshwater Turtles.
Johnston**, C., P. Moore, and K. V. Root. Effects of disturbance on the fitness of cavity nesting birds in oak savannas.
Root, K. V. A Multispecies Risk Assessment for Rare and Imperiled

Species in Florida.

- June 2006 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, SAN JOSE, CA.
Barnes**, J. and K. V. Root. A Multispecies Risk Assessment For Rare and Imperiled Species in Florida.
Barnes**, J. and K. V. Root. Linking population viability analysis and habitat suitability for the conservation of Audubon's Crested Caracara (*Caracara cheriway*) in Florida. ****Student Award Finalist****
Harms**, C., D. Pavuk, and K. V. Root. A Multifactorial Characterization of Pond Turtle Habitat.
Johnston**, C., P. Moore, and K. V. Root. Effects of disturbance on the fitness of cavity nesting birds in oak savannas.
Pickens**, B. and K. V. Root. Using abundance and behavior as tools for assessing a management strategy for an endangered butterfly.
Ricci, M., H. Michaels, and K. V. Root. Using conservation GIS to detect oak savannas and oak barrens in northwest Ohio.
- March 2006 MIDWESTERN ECOLOGY AND EVOLUTION CONFERENCE, ST. LOUIS, MO
Pickens**, B. and K. V. Root. Community Interactions of the Karner Blue Butterfly.
Ricci, M., H. J. Michaels, and K. V. Root. Using Conservation GIS to Detect Oak Savannas and Oak Barrens in Northwest Ohio.
- March 2006 OHIO REPTILE AND RESEARCH CONSERVATION CONFERENCE, OHIO BIOLOGICAL SOCIETY AND OH DEPARTMENT OF NATURAL RESOURCES, COLUMBUS, OH
Harms**, C., D. and K. V. Root. Determining the Critical Ecological Variables of Rare Freshwater Turtles.
- January 2006 OAK OPENINGS RESEARCH FORUM, TOLEDO METROPARKS, TOLEDO, OH
Pickens**, B. and K. V. Root. The Karner Blue Butterfly: "Where do we go from here?"
Ricci**, M., H. Michaels, and K. V. Root. Detecting Oak Savannas using Ecological Indicators.
- November 2005 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BOWLING GREEN, OH
Harms**, H. and D. Pavuk, K. V. Root and J. Miner. Habitat selection by painted turtles, *Chrysemys picta*, in a fragmented landscape.
Pickens**, B. and K. V. Root. The Effects of Management and Vegetation on Habitat Quality for the Karner Blue Butterfly, *Lycaeides melissa samuelis*
Ricci**, Marcus, H. Michaels, and K. V. Root. Detecting Oak Savannas using Ecological Indicators: A Decision Support System for Northwest Ohio Oak Openings.
- November 2005 FOURTH ANNUAL BGSU RESEARCH CONFERENCE, BGSU, BOWLING GREEN,

OH

Pickens**, B. and K. V. Root. The Effects of Management and Vegetation on Habitat Quality for the Karner Blue Butterfly, *Lycaeides melissa samuelis*.

Ricci, Marcus, H. Michaels, and K. V. Root. Prioritizing oak savanna conservation using ecological indicators.

October 2005
(Invited Talk)

U. S. FISH AND WILDLIFE SERVICE, CARACARA HABITAT STRATEGY MEETING, VERO BEACH, FL

Root, K. V. Conserving rare species: Lessons we have learned from the Florida Panther.

October 2005
(Invited Talk)

DEPARTMENT OF BIOLOGY, COLLEGE OF WOOSTER, WOOSTER, OH

Root, K. V. Risk assessment for the Audubon's Crested Caracara.

September 2005

NATURAL AREAS ASSOCIATION ANNUAL MEETING, LINCOLN, NB.

Ricci**, M., H. Michaels, and K. V. Root. Detecting oak savannas using ecological indicators. ****Best Student Presentation Award****

September 2005

THE WILDLIFE SOCIETY ANNUAL MEETING, MADISON, WI

Lipps**, G. and K. V. Root. Finding the small, slimy, and secretive: A framework for predicting the occurrence of rare amphibians.

August 2005

ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, MONTREAL, QUEBEC, CA

Barnes**, J. and K. V. Root. Using risk assessment for prioritizing research and conservation for a set of rare and imperiled species in Florida.

July 2005

SOCIETY FOR AMPHIBIANS AND REPTILES ANNUAL MEETING, TAMPA, FL

Lipps**, G. and K. V. Root. A framework for predicting the occurrence of rare amphibians: Case study of the green salamander.

November 2004

ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BGSU, BOWLING GREEN, OH

Barnes**, J. and K. V. Root. Risk assessment for a set of rare and imperiled species in Florida.

Harms**, H. and D. Pavuk, K. V. Root and J. Miner. Habitat selection by painted turtles, *Chrysemys picta*, in a fragmented landscape.

Lipps**, G. and K. V. Root. Small, slimy and secretive: predicting the occurrence of rare amphibians.

Pickens**, B. and K. V. Root. Consequences of differing management strategies for the endangered Karner Blue Butterfly, *Lycaeides melissa samuelis*: A Proposal.

Ricci**, Marcus, H. Michaels, and K. V. Root. Priotizing oak savanna conservation using ecological indicators.

November 2004

THIRD ANNUAL BGSU RESEARCH CONFERENCE, BGSU, BOWLING GREEN, OH

Barnes**, J. and K. V. Root. Risk assessment for a set of rare and imperiled species in Florida.

- Harms**, H. and D. Pavuk, K. V. Root and J. Miner. Habitat selection by painted turtles, *Chrysemys picta*, in a fragmented landscape.
- Lipps**, G. and K. V. Root. Small, slimy and secretive: predicting the occurrence of rare amphibians.
- August 2004 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, NEW YORK, NY.
Martinez**, M and K. V. Root. Predicting Habitat Suitability and Occurrence for Cricket Frogs (*Acris crepitans blanchardi*) in Northwest Ohio.
- March 2004 MIDWEST ECOLOGY AND EVOLUTION CONFERENCE ANNUAL MEETING, UNIVERSITY OF NOTRE DAME, IN.
Barnes**, J. R. and K. V. Root. Cryptic burrowers: A preliminary study on the ecology of the American Badger in Northwest Ohio.
Martinez**, M. and K. V. Root. Predicting habitat suitability and occurrence for the cricket frog, (*Acris crepitans blanchardi*), in Northwest Ohio.
- January 2004 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BGSU, BOWLING GREEN, OH
Barnes**, J. and K.V. Root. Population Dynamics and Ecology of the American Badger, *Taxidea taxus*: A Proposal.
Lipps**, G. and K. V. Root. Small, Slimy, and Secretive: Predicting the Occurrence of Rare Amphibians.
Martinez**, M. and K.V. Root. Predicting Habitat Suitability and Occurrence for Cricket Frogs (*Acris crepitans blanchardi*) in Northwest Ohio.
- November 2003 SECOND ANNUAL BGSU RESEARCH CONFERENCE, BGSU, BOWLING GREEN, OH
Martinez**, M. and K.V. Root. Predicting Habitat Suitability and Occurrence for Cricket Frogs (*Acris crepitans blanchardi*) in Northwest Ohio.
- August 2003 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, SAVANNAH, GA.
Root, K. V. A multispecies approach to ecological assessment and conservation in Florida.
- June 2003 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, DULUTH, MN.
Root, K. V. Assessing the viability and potential effects of management options for the Florida Panther.
- November 2002 ANNUAL BIOLOGICAL SCIENCES DEPARTMENTAL RESEARCH RETREAT, BGSU, BOWLING GREEN, OH
Root, K. V. Evaluating the viability and potential recovery options for the Florida Panther.
- August 2001 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, MADISON, WI.
Root, K. V. Evaluating the viability and potential recovery options for the Florida Panther.
- July 2001 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, HILO, HA.
Root, K. V. A multispecies approach to endangered species conservation

and management in South Florida.

- September 2000 THE WILDLIFE SOCIETY ANNUAL MEETING, NASHVILLE, TN.
Root, K. V. Habitat-based Viability Analysis using RAMAS GIS
- August 2000 AMERICAN FISHERIES SOCIETY ANNUAL MEETING, ST. LOUIS, MO.
(Invited Talk) Root, K. V. Ecological risk analysis for the Shortnose Sturgeon populations in the Connecticut River
- June 2000 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, MISSOULA, MT.
Root, K. V.; L. Ginzburg; H. R. Akcakaya; and S. Ferson. Proactive prioritization through risk classification of abundant species
- April 2000 ECOLOGICAL SOCIETY OF AMERICA MEETING, ORLANDO, FL.
Root, K. V. A multispecies approach to ecological assessment and conservation
- August 1999 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, SPOKANE, WA.
Root, K.V. Evaluating the effects of fragmentation and raven predation on a desert tortoise metapopulation
- June 1999 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, COLLEGE PARK, MD.
Root, K. V. A multispecies approach to ecological valuation and landscape management
- June 1998 MEETING OF THE ELECTRIC POWER RESEARCH INSTITUTE ADVISORY COMMITTEE, DENVER, CO.
(Invited Talk) Root, K. V. . Ecological risk analysis for the shortnose sturgeon.
- June 1997 SHORTNOSE STURGEON WORKSHOP HOSTED BY NORTHEAST UTILITIES AND NATIONAL MARINE FISHERIES SERVICE, MILFORD, CT.
(Invited Talk) Root, K. V. . Ecological risk analysis for the shortnose sturgeon.
- August 1996 ECOLOGICAL SOCIETY OF AMERICA/SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, PROVIDENCE, RI.
Root, K.V.; H.M. Swain. How can stage-based models be used to evaluate the effects of habitat quality, epidemics and dispersal for the Florida scrub-jay under proposed reserve designs?
- July 1995 ECOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING, SNOWBIRD, UT.
Root, K.V.; D. R. Breininger; R. Bowman; H.M. Swain. What can population viability analysis (PVA) tell us about the probable success of a spatially explicit reserve design: The Florida Scrub Jay in Brevard County as a case study
- June 1995 SOCIETY FOR CONSERVATION BIOLOGY ANNUAL MEETING, FORT COLLINS, CO.

Root, K; D. Breininger; R. Bowman; H. Swain. Prognosis for a population:
Assessing a reserve design for the Florida Scrub Jay in Brevard County,
Florida

May 1995
**(Best Student
Paper
Award)**

FLORIDA ACADEMY OF SCIENCES ANNUAL MEETING, TAMPA, FL.

Root, K. What are the population consequences for the Florida Scrub Jays
in proposed reserve designs in Brevard County, Florida

April 1995

FLORIDA ECOLOGICAL AND EVOLUTIONARY SYMPOSIUM, LAKE PLACID, FL.

Root, K. What are the implications of the proposed reserve designs for
scrub jay viability in Brevard County, Florida