Curriculum Vitae John P. McCarty

Professor of Biology and Director of the Environmental Studies Program
Department of Biology, 422G Allwine Hall
University of Nebraska at Omaha
6001 Dodge St., Omaha, NE 68182-0040
E-mail: jmccarty@unomaha.edu

E-mail: jmccarty@unomana.ed Telephone: (402) 554-2849

Education

PhD: Cornell University, Ithaca, NY, Section of Ecology and Systematics, August 1995 Dissertation Title: Effects of Short-term Changes in Environmental Conditions on the Foraging Ecology and Reproductive Success of Tree Swallows, *Tachycineta bicolor*.

BSc: University of Wisconsin, Madison, December 1987 Major: Zoology

Professional Affiliations

Aug. 2005- Present	Professor of Biology and Director of the Environmental Studies Program, University of Nebraska at Omaha.
Aug. 2001- Aug. 2005	Associate Professor of Biology and Director of the Environmental Studies Program, University of Nebraska at Omaha.
Aug. 2005- Present	Courtesy Professor, School of Natural Resources, University of Nebraska at Lincoln.
Aug. 2008 – July 2009	Visiting Scientist, Centre for Ecological and Evolutionary Synthesis, University of Oslo, Norway
Sept. 2000 – Aug. 2001	AAAS Roger Revelle Fellow, USDA Forest Service, Research and Development, Washington Office.
Sept. 1998- Aug. 2000	AAAS Science and Engineering Fellow, sponsored by the American Association for the Advancement of Science and the U.S. Environmental Protection Agency.
June 1998 – July 2001:	Assistant Research Scientist, Department of Biology, University of Maryland at College Park
June 1996- May 1998	Postdoctoral Associate, Department of Zoology, University of Florida Postdoctoral advisors: Dr. Douglas J. Levey and Dr. Cathryn H. Greenberg
Aug. 1995-Aug. 1996	Visiting Assistant Professor, State University of New York, College at Brockport
Summers 1994-1995	Biologist, U.S. Fish and Wildlife Service, New York Field Office, Cortland, NY
Aug. 1988-Aug. 1995	Ph.D. Candidate, NSF Graduate Research Fellow, Teaching Assistant; Field of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY

Leadership Activities, Fellowships, Awards, & Honors

2014 University of Nebraska Omaha Excellence in Teaching Award
2013-2014 Alumni Outstanding Teacher Award, College of Arts and Sciences, UNO
2011-2012 Alumni Outstanding Research Award, College of Arts and Sciences, UNO
Elected Member, American Ornithologists' Union
Certified Senior Ecologist, Ecological Society of America
Fellow, Aldo Leopold Leadership Program
Adjunct Professor, School of Natural Resources, University of Nebraska at Lincoln

Fellow, Center for Great Plains Studies

Board of Governors, Center for Great Plains Studies (2011-2014)

Governing Council, Association of Field Ornithologists (2010-2013)

Board of Directors of the Ornithological Council (2010-2013)

Board of Trustees, The Nature Conservancy, Nebraska Chapter (2004-2008, 2010-19)

2000 AAAS Roger Revelle Fellowship in Global Stewardship

1998-99 AAAS Science and Engineering Fellow

Teaching and Advising

Undergraduate Education

Environmental Problems and Solutions – ENVN 2010 – Introductory seminar for Environmental Studies majors.

Environmental Biology – BIOL 1330 – Introductory course targeted at both beginning Environmental Studies majors and non-majors.

Biology II – BIOL 1750 – Second semester of a team-taught introductory biology course for majors.

GIS Applications for Environmental Science – ENVN 4600 – Lab-based introduction to applications of GIS for ecology, conservation, and environmental sciences.

Environmental Monitoring and Assessment – BIOL 4610 – Capstone course for Environmental Studies majors with an emphasis on the evaluation and assessment of environmental conditions. Students work in teams on projects focused on Inventory and Monitoring, NEPA (Environmental Assessments and Environmental Impact Statements), and applications of Geographic Information Systems (GIS) to environmental science.

Ornithology – BIOL 4980 and 8986 - Lecture and laboratory course for advanced undergraduates and graduate students.

Graduate Advising

I am co-major advisor, with L. Wolfenbarger, for students completing master's degrees as part of the UNO Laboratory of Avian Ecology. I also serve as a committee member for other graduate students both in the Department of Biology and other departments. Since I arrived at UNO in 2001, 17 students in our lab have completed theses:

Shannon Engberg. 2004. Landscape and Habitat Effects on Grassland Birds. MS Thesis, University of Nebraska at Omaha. (Department of Biology's nominee for the university-wide 2004 Elton S. Carter Award for Excellence in a Master's Thesis. Position after graduation: Conservation Genetics Lab Manager, Henry Doorly Zoo, Omaha, NE).

Lorelle Berkeley. 2004. The postfledging ecology of Dickcissels (*Spiza americana*). MS Thesis, University of Nebraska at Omaha. (Awarded the university-wide 2005 Elton S. Carter Award for Excellence in a Master's Thesis at UNO. Position after graduation: Ph.D. Candidate, Wildlife Ecology and Management, University of Minnesota, St. Paul, MN and Research Wildlife Biologist, Montana Fish, Wildlife, and Parks)

Page Klug. 2005. The effects of local grassland habitat and surrounding landscape composition on the predators of grassland bird nests. MS Thesis, University of Nebraska at Omaha. (Selected for the Best Student Paper Award at the 2004 Annual Meeting of the Cooper Ornithological Society. Position after graduation: Ph.D. in Ecology and Evolutionary Biology, Kansas State University earned in 2009, currently Research Ecologist, Ft. Collins Science Center, USGS.

Nichollette ZooknRider. 2006. The cumulative effects of using transgenic herbicidetolerant (HT) soybeans on plant and butterfly diversity in marginal field habitat. MS

- Thesis, University of Nebraska at Omaha. (Position after graduation: Doctor of Veterinary Medicine, Iowa State University, Ames, IA).
- Joel Jorgensen. 2007. Buff-breasted Sandpiper (*Tryngities subruficollis*) Abundance, Habitat Use, and Distribution During Migratory Stopover in the Rainwater Basin, Nebraska. MS Thesis, University of Nebraska at Omaha. (Department of Biology's nominee for the university-wide 2007 Elton S. Carter Award for Excellence in a Master's Thesis. Received Best Student Paper Award at the 2005 Natural Areas Conference. Position after graduation: Non-game Bird Program Manager, Nebraska Game and Parks Commission and Ph.D. Candidate, Applied Ecology, School of Natural Resources, University of Nebraska at Lincoln.)
- Erin M. Kucera. 2011. Effects of Grazing on Vegetation and Grassland Bird Densities in the Nebraska Sandhills Prairie. MS Thesis, University of Nebraska at Omaha. (Position after graduation: Biology Instructor, Northeast Community College & Pheasants Forever Farm Bill Biologist).
- Melissa E. Mount. 2013. Effects of Urbanization on the Species Richness and Abundance of Native Grassland Birds. MS Thesis, University of Nebraska at Omaha. Position after graduation: Biology Instructor, University of Nebraska Omaha.
- Michelle C. Biodrowski. 2013. The Effects of Patch Burn Grazing on Breeding Grassland Birds. MS Thesis, University of Nebraska at Omaha. (Position after graduation: Pheasants Forever Wildlife Management Specialist at Iowa Department of Natural Resources).
- Heather D. Wills. 2013. Physiological Impacts of Wind Turbines on a Grassland Breeding Galliform, the Greater Prairie Chicken (*Tympanuchus cupido*). MS Thesis, University of Nebraska at Omaha. (Department of Biology's nominee for the university-wide 2014 Elton S. Carter Award for Excellence in a Master's Thesis. Position after graduation: Dual Enrollment Coordinator, Department of Biology)
- Jason E. Andersen. 2015. The Effects of the 2011 Missouri River Flood on the Populations of Breeding Grassland Birds at DeSoto and Boyer Chute National Wildlife Refuges. MS Thesis, University of Nebraska at Omaha. (Position after graduation: Pheasants Forever Wildlife Management Specialist at Iowa Department of Natural Resources).
- James Nooyen, Jr. 2016. The Effect of Arthropod Biomass on Post-fledging Survival and Movement of the Dickcissel (*Spiza americana*). MS Thesis, University of Nebraska at Omaha. (Position after graduation: Lab Technician, Iowa State University, Rangeland Monitoring Intern, Chicago Botanic Garden and Bureau of Land Management).
- Chase Wickard. 2017. Landscape effects on Brown-headed Cowbird (*Molothrus ater*) densisties and upland bird abundances in CRP patches. MS Thesis, University of Nebraska at Omaha. (Position after graduation: Environmental Consultant).
- Aaron Young. 2017. Seasonal fecundity and post-fledging survival and habitat selection of Henslow's Sparrow (*Ammodramus henslowii*). MS Thesis, University of Nebraska at Omaha. (Position after graduation: PhD Candidate, Natural Resources, University of Idaho).
- Emily Geest. 2017. Recruitment, survival, and parasitism of monarch butterflies (*Danaus plexippus*) in residential gardens and conservation areas. MS Thesis, University of Nebraska at Omaha. (Position after graduation: PhD Candidate, Integrative Biology Program, Oklahoma State University).
- Lindsay Brown. 2018. Landscape and local features that influence habitat use and behavior of shorebirds in agriculture fields during migration in the Rainwater Basin, Nebraska. MS Thesis, University of Nebraska at Omaha. (Position after graduation:

Conservation Biologist at Coastal Bend Bays and Estuaries Program, Corpus Christi, TX).

Conor Gearin. 2018. The effects of bobwhite and pollinator conservation on grassland songbirds in Nebraska. MS Thesis, University of Nebraska at Omaha. (Position after graduation: Digital and Social Media Specialist, Whitehead Institute, Massachusetts Institute of Technology (MIT), Cambridge, MA)

Chelsea Forehead. 2019. Habitat features affecting nest parasitism by the Brown-headed Cowbird: an investigation into the role of perching structures. MS Thesis, University of Nebraska at Omaha. (Position after graduation: Hubbard Conservation Fellow, The Nature Conservancy, Wood River, NE)

Administrative Experience

I have served as the Director of the Environmental Studies Program at UNO since 2001. My responsibilities include overseeing a program of over 130 students, reporting to the Dean of the College of Arts & Sciences on matters related to program development and performance, and coordinating among the faculty and departments that contribute to the multidisciplinary degree programs in environmental science.

Professional Service

Department Service

I regularly serve on a variety of standing departmental committees. Recent service includes: Biology Graduate Program Chair (2019-)

Chair, Water Quality Faculty Search Committee (2017-18)

Biology Graduate Program Chair (2014-17)

Chair, Introductory Biology Instructor Search Committee (2016)

Department of Biology Executive Committee (multiple years)

Chair, Curriculum and Scheduling Committee (multiple years)

Chair, Budget Committee (multiple years)

Glacier Creek Project – Allwine Prairie Committee

Chair, Plant Biodiversity Faculty Search Committee (2010-11)

Chair, Restoration Ecology Faculty Search Committee (2012, 2013)

Member, Terrestrial Vertebrate Biologist Faculty Search Committee (2008)

College and University Service

Director of the Environmental Studies Program (Chair of the Environmental Studies

Coordinating Committee) (2001-)

UNO Excellence in Teaching Award Committee (2019-)

Program Review Team, UNO Department of Chemistry (2018)

Chair, University Committee on Research and Creative Activity (2014-15)

University Committee on Research and Creative Activity, University of Nebraska at Omaha (2007-08, 2009-10, 2012-14)

College of Arts & Sciences Advisory Committee – elected position (2013-16)

Board of Chairs and Directors, College of Arts and Sciences (2001-)

University Council of Academic Chairs and Directors (2001-)

Organizer, UNO Public Forum on the Environment (2001-2006)

Professional Service

Extensive service as a reviewer of grants and papers

Board of Trustees, The Nature Conservancy, Nebraska Chapter (2004-2008, 2010-2019)

Board of Governors, Center for Great Plains Studies (2011-14)

- Member U.S. Environmental Protection Agency FIFRA Scientific Advisory Panel (2013: Scientific Issues Associated with the Proposed Endocrine Disruptor Screening Program (EDSP) Tier 2 Ecotoxicity Tests)
- Member of the Steering Committee and Scientific Program Committee, 2011 Joint Meeting of the Association of Field Ornithologists, Cooper Ornithological Society, and Wilson Ornithological Society.

Governing Council, Association of Field Ornithologists (2010-2013)

Board of Directors of the Ornithological Council (2010-2013)

Science Advisory Workgroup, Nebraska Bird Partnership (2002-2015)

Member, Advisory Committee for the Development of an Environmental Science Focus School, South Sarpy School District, Springfield, Nebraska (2010)

Member U.S. Environmental Protection Agency FIFRA Scientific Advisory Panel (2008: Scientific Issues Associated with the Agency's Proposed Action under FIFRA 6(b) Notice of Intent to Cancel Carbofuran)

Board Member, Friends of Boyer Chute and DeSoto National Wildlife Refuges (2007-08) Reviewer of Educational Materials for AAAS's *Science Books and Films* (1998-2008)

Research and Scholarship

I have established an externally funded research program that involves both graduate and undergraduate students. The current focus of my research is on understanding the ecology of birds and other organisms in landscapes dominated by agriculture. Ongoing projects involve questions about the role of natural areas in maintaining diverse and abundant bird communities, how changes in farming practices impact bird communities, and use of agricultural fields as stopover sites for migratory shorebirds.

Grants Submitted

Grants Received

Research Grants

- 2017-19 The Effects of Gamebird and Pollinator Conservation on Northern Bobwhite and Grassland Songbirds. \$15,680 from Nebraska Game and Parks Commission. Co-Principal Investigator with L. L. Wolfenbarger
- 2016-19 Monitoring population trends of the Buff-breasted Sandpiper in the eastern Rainwater Basin and testing models of habitat use during spring migration. \$13,630 from Nebraska Game and Parks Commission. Co-Principal Investigator with L. L. Wolfenbarger
- 2014-16 Seasonal fecundity and post-fledging survival and habitat selection of Henslow's Sparrow (*Ammodramus henslowii*). \$77.960 from U.S. Fish and Wildlife Service, Upper Mississippi and Great Lakes Regional Joint Venture Office. Co-Principal Investigator with L. L. Wolfenbarger and W. A. Cox.
- 2012-16 Persistent Effects of Wind-power Development on Prairie Grouse in Nebraska. \$598,000 from Nebraska Game and Parks Commission to UNL. L. A. Powell, J. J. Fontaine, and M. Bomberger Brown (Co-Primary Investigators) and E. J. Walsh, W. H. Schacht, L. L. Wolfenbarger, J. P. McCarty and C. Jezierski (Collaborators).
- 2012-14 The Potential of Collaborative Governance: The Platte River Recovery Implementation Program: request for continued funding. \$25,000 from University of Nebraska, Water for Food Institute. Co-Principal Investigator with C. Reed, D. Leuenberger, and D. Aiken.
- 2011-14 Population Trend of Buff-breasted Sandpipers in the Eastern Rainwater Basin. \$54,268 from U.S. Fish and Wildlife Service, Region 6, FWS-R6-MB-03 Migratory Bird Monitoring,

- Assessment and Conservation. Co-Principal Investigator with L. L. Wolfenbarger and J. G. Jorgensen
- 2011-12 The Potential of Collaborative Governance: The Platte River Recovery Implementation Program. \$25,000 from University of Nebraska, Water for Food Institute. Co-Principal Investigator with C. Reed and J. Bartle.
- 2006-09 Stopover Ecology of high-priority shorebirds in the Rainwater Basin, Nebraska. \$31,606 from the Nebraska State Wildlife Grants Program. Co-Principal Investigator with L. L. Wolfenbarger and J. G. Jorgensen.
- Grassland Ecology and Conservation in an Agricultural Landscape: Synthesizing and Scaling Up. \$4,500 from University Committee on Research (UCR), University of Nebraska at Omaha.
- 2006 Renewal of Cooperative Agreement with the US Fish and Wildlife Service for grassland bird research and Challenge Grant for research on visitor impacts on wildlife. \$4,600 from the U.S. Fish and Wildlife Service. Co-Principal Investigator with L. L. Wolfenbarger.
- Grassland Bird Conservation in Agricultural Landscapes: Are Working Lands and Conservation Lands Synergistic?
 \$132,864 from the Nebraska Research Initiative for 2004-06. Co-Principal Investigator with L. L. Wolfenbarger
- 2005 Renewal of Cooperative Agreement with the US Fish and Wildlife Service for grassland bird research and Challenge Grant for research on visitor impacts on wildlife. \$4,560 from the U.S. Fish and Wildlife Service. Co-Principal Investigator with L. L. Wolfenbarger.
- Non-game Bird Surveys: UNO/NGPC Inventory and Monitoring Partnership. \$27,654 from Nebraska Game and Parks Commission. Co-Principal Investigator with L. L. Wolfenbarger.
- 2004 Renewal of Cooperative Agreement with the US Fish and Wildlife Service for grassland bird research and Challenge Grant for research on nest predators and grassland bird fledgling ecology. \$17,200 from the U.S. Fish and Wildlife Service. Co-Principal Investigator with L. L. Wolfenbarger.
- Stopover Ecology of the Buff-breasted Sandpiper in the Rainwater Basin: a flagship species for shorebird conservation in Nebraska.
 \$12,750 from Nebraska State Wildlife Grants Program.
 Co-Principal Investigator with L. L. Wolfenbarger and J. Jorgensen
- U.S. Fish and Wildlife Service Challenge Grant Between USFWS Boyer Chute NWR and UNO: Postfledging Ecology of Dickcissels.
 \$7,560 from the U.S. Fish and Wildlife Service.
 Co-Principal Investigator with L. L. Wolfenbarger
- 2002-06 Large Scale Ecological Effects of Herbicide Tolerant Crops on Avian Communities and Reproduction.
 \$270,000 from the U.S. Department of Agriculture.
 Co-Principal Investigator with L. L. Wolfenbarger
- 2002-03 Cooperative Agreement with the US Fish and Wildlife Service for grassland bird research.
 \$11.500 from the U.S. Fish and Wildlife Service.
- 2002 Responses of breeding birds to differences in land-use and to climate variability. \$8,900 from University Committee on Research (UCR), University of Nebraska at Omaha.
- 1997-99 The importance of fleshy fruit as a food source for wildlife at the Savannah River Site, South Carolina.

\$73,078 from the Biodiversity Program, Savannah River Natural Resource Management and Research Institute, USDA Forest Service and Department of Energy

Co-Principal Investigator with D. J. Levey

1997-98 Supplement to: spatial and temporal abundance of hard mast and fleshy fruit in five habitats at the Savannah River Site, South Carolina.
\$21,284 from the Biodiversity Program, Savannah River Natural Resource Management and Research Institute, USDA Forest Service and Department of Energy
Co-Principal Investigator with D. J. Levey

1990-93 The Interaction of Environmental Conditions and Patterns of Nestling Energetic Requirements in Determining the Reproductive Success of the Tree Swallow (*Tachycineta bicolor*).

A total of \$4000 for dissertation research

Funding Sources: North American Bluebird Society; W. E. Benning Fund, Cornell Laboratory of Ornithology; A. W. Mellon Student Research Fund, Cornell University; F. M. Chapman Fund, American Museum of Natural History; Cornell Experimental Ponds Facility Oversight Committee; and Sigma Xi.

1990-91 Systematic Relationships in the Family Hirundinidae: A Molecular Study of the Swallows of Southern Africa.

\$1500 from the H. E. Moore Fund, Bailey Hortorium, Cornell University

1990 Wetlands Management and the Reproductive Success of Red-Winged Blackbirds. \$1000 from the Michigan Department of Natural Resources Co-Principal Investigator with Andrew M. Turner

Grants for Teaching and Instruction

- Funding to upgrade GPS technology for Biology and Environmental Studies. \$3745 from University-wide Technology Fee funding.
- 2007-08 Ecology of Urban Canada Geese: Searching for a Solution to Human Wildlife Conflicts. \$8,402 from NSF STEP Early Undergraduate Research Support Grant to UNO. Co-Principal Investigator with L. L. Wolfenbarger.
- Funding to upgrade GPS technology for Biology and Environmental Studies. \$8282 from University-wide Technology Fee funding.
- 2002-03 Support for the UNOmaha Environmental Studies Program, 1st and 2nd Annual Public Forum on the Environment. \$1,200 from the Nebraska Chapter of the Nature Conservancy.
- 2002-03 Cooperative Agreement with the Nebraska Game and Parks Commission for support of Undergraduate Interns.

\$13,755 from Nebraska Game and Parks Commission.

Co-Principal Investigator with W. S. Fairbanks

Publications

Peer-reviewed Publications and Chapters

- 56. Janousek, W. M., P. E. Klug, J. P. McCarty, W. A. Cox, L. I. Berkeley, and L. L. Wolfenbarger. *In Revision*. The Conservation Value of Marginal Grasslands in a High-Intensity Agricultural Landscape for an Obligate Grassland Bird, the Dickcissel (*Spiza americana*). Being revised for *Journal of Wildlife Management*.
- 55. McCarty, J. P., W. M. Janousek, L. I. Berkeley, P. E. Klug, and L. L. Wolfenbarger. *In Revision*. Implications of nest site selection for reproductive success in Dickcissels. Being revised for *Wilson Journal of Ornithology*.

- 54. Young, A.C., W. A. Cox, J. P. McCarty, and L. L. Wolfenbarger. *In press*. Postfledging habitat selection and survival of Henslow's Sparrow: management implications for a critical life stage. *Avian Conservation and Ecology*
- 53. Geest, E. A., L. L. Wolfenbarger, and J. P. McCarty. *In press. Lespesia archippovora* (Diptera: Tachinidae) survival and sex ratios within monarch butterfly (Lepidoptera: Nymphalidae) hosts. *American Midland Naturalist*
- 52. Geest, E. A., L. L. Wolfenbarger, and J. P. McCarty. 2019. Recruitment, survival, and parasitism of monarch butterflies (*Danaus plexippus*) in milkweed gardens and conservation areas. *Journal of Insect Conservation 23:211-224* https://doi.org/10.1007/s10841-018-0102-8
- 51. Watt, D. J., J. P. McCarty, S. W. Kendrick, F. L. Newell and P. Pyle. 2017. Eastern Wood-Pewee (*Contopus virens*), version 2.0. In The Birds of North America (P. G. Rodewald, editor). Cornell Lab of Ornithology, Ithaca, New York, USA. https://doi.org/10.2173/bna.eawpew.02
- McCarty, J. P., L. L. Wolfenbarger, C. D. Laredo, P. Pyle and R. B. Lanctot. 2017. Buff-breasted Sandpiper (*Calidris subruficollis*), version 2.0. In The Birds of North America (P. G. Rodewald, editor). Cornell Lab of Ornithology, Ithaca, New York, USA. https://doi.org/10.2173/bna.bubsan.02
- 49. McCarty, J. P., L. L. Wolfenbarger, and J. A. Wilson. 2017. Biological Impacts of Climate Change. (Updated Version 2.0). In: eLS. John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0020480.pub2
- 48. McCarty, J. P., J. G. Jorgensen, J. M. Michaud, and L. L. Wolfenbarger. 2015. Buff-breasted Sandpiper stopover duration in the Rainwater Basin, Nebraska, in relation to the temporal and spatial migration patterns in the Great Plains of North America. *Wader Study* 122:243-254. doi: 10.18194/ws.00021
- 47. Reed, C., A. Campbell, M. George, D. Leuenberger, and J. P. McCarty. 2015. Social Capital in Large-Scale Environmental Collaboration: The Case of the Platte River Recovery Implementation Program. *Water Policy* 17:472-483. doi: 10.2166/wp.2014.099
- 46. McLaughlin, M. E., W. M. Janousek, J. P. McCarty, and L. L. Wolfenbarger. 2014. Effects of urbanization on site occupancy and abundance of grassland birds in tallgrass prairie fragments. *Journal of Field Ornithology* 85:258-273. DOI: 10.1111/jofo.12066
- 45. Farhat, Y., W. M. Janousek, J. P. McCarty, N. Rider, and L. L. Wolfenbarger. 2014. Comparison of butterfly communities and abundances between unmanaged marginal grasslands and conservation lands in the eastern Great Plains. *Journal of Insect Conservation*. DOI 10.1007/s10841-014-9635-7
- 44. Cox, W. A., L. L. Wolfenbarger, L. I. Berkeley, S. E. Engberg, W. M. Janousek, P. E. Klug, N. L. Rider, and J. P. McCarty. 2014. Densities and community structure of grassland birds on conservation and unmanaged marginal grasslands in an agricultural landscape. *Agriculture, Ecosystems, and Environment* 193, 53-59.
- 43. Greenberg, C. H., D.J. Levey, C. Kwit, J. P. McCarty, S. Pearson, S. Sargent, J. Kilgo. 2012. Long-term patterns of fruit production in five forest types of the South Carolina upper coastal plain. *Journal of Wildlife Management* 76:1036-1046.
- 42. Wolfenbarger, L. L. and J. P. McCarty. 2011. Agriculture Genetically Engineered Crops. In Berkshire Encyclopedia of Sustainability, Volume 4: Natural Resources and Sustainability. Berkshire Publishing Group, Great Barrington, MA.
- 41. Klug, P., L. L. Wolfenbarger, and J. P. McCarty. 2010. Snakes are important nest predators of Dickcissels in an agricultural landscape. *Wilson Journal of Ornithology* 122:799-803.
- 40. McCarty, J. P., J. G. Jorgensen, and L. L. Wolfenbarger. 2009. Behavior of Buff-breasted Sandpipers (*Tryngites subruficollis*) during migratory stopover in agricultural fields. *PLoS ONE 4(11)*: e8000. doi:10.1371/journal.pone.0008000.

- 39. Jorgensen, J.G., J. P. McCarty, and L. L. Wolfenbarger. 2009. Killdeer *Charadrius vociferous* breeding abundance and habitat use in the Eastern Rainwater Basin, Nebraska. *International Wader Study Group Bulletin* 116:65-68.
- 38. Klug, P., L. L. Wolfenbarger, and J. P. McCarty. 2009. The Nest Predator Community of Grassland Birds Responds to Agroecosystem Habitat at Multiple Scales. *Ecography*. [doi:10.1111/j.0906-7590.2009.05857.x]
- 37. McCarty, J. P., L. L. Wolfenbarger, and J. A. Wilson. 2009. Biological Impacts of Climate Change. *In* Encyclopedia of Life Sciences. John Wiley & Sons, Ltd: Chichester http://www.els.net/ [doi:10.1002/9780470015902.a0020480]
- 36. Jorgensen, J.G., J. P. McCarty, and L. L. Wolfenbarger. 2008. Buff-breasted Sandpiper density and numbers during migratory stopover in the Rainwater Basin, Nebraska. *Condor* 110:63-69.
- 35. Jorgensen, J.G., J. P. McCarty, and L. L. Wolfenbarger. 2007. Landscape and habitat variables affecting Buff-breasted Sandpiper *Tryngites subruficollis* distribution during migratory stopover in the Rainwater Basin, Nebraska. *International Wader Study Group Bulletin* 112:45-51.
- 34. Berkeley, L. I., J. P. McCarty, and L. L. Wolfenbarger. 2007. Postfledging Survival and Movement in Dickcissels (*Spiza americana*): Implications for Habitat Management and Conservation. *Auk* 124:396-409.
- 33. Jorgensen, J. G., J. P. McCarty, L. L. Wolfenbarger, M. Ealy, and B. Ortego. 2006. Buff-breasted Sandpiper abundance, distribution, and habitat use during migration in the Rainwater Basin, Nebraska (and Texas). [Published Abstract]. *Wader Study Group Bulletin* 109:21.
- 32. Echols, K. R., D. E. Tillitt, J. W. Nichols, A. L. Secord, J. P. McCarty. 2004. Accumulation of PCB congeners in nestling Tree Swallows (*Tachycineta bicolor*) on the Hudson River, NY. *Environmental Science and Technology* 38:6240-6246.
- 31. Nichols, J. W., K. R. Echols, D. E. Tillitt, A. L. Secord, J. P. McCarty. 2004. Bioenergetics-based modeling of individual PCB congeners in nestling Tree Swallows from two contaminated sites on the upper Hudson River, NY. *Environmental Science and Technology* 38:6234-6239.
- 30. Kwit, C., D. J. Levey, C. H. Greenberg, S. F. Pearson, J. P. McCarty, S. Sargent. 2004. Cold temperature increases winter fruit removal rate of a bird-dispersed shrub. *Oecologia*139:30-34.
- 29. Kwit, C., D. J. Levey, C. H. Greenberg, S. F. Pearson, J. P. McCarty, S. Sargent, and R. L. Mumme. 2004. Fruit Abundance and Local Distribution of Wintering Hermit Thrushes (*Catharus guttatus*) and Yellow-rumped Warblers (*Dendroica coronata*) in South Carolina. *Auk* 121:46-57.
- 28. Patz, J. A., A. K. Githeko, J. P. McCarty, S. Hussein, U. Confalonieri, and N. de Wet. 2003. Climate Change and Infectious Diseases. Chapter 6. Pp. 103-132 in A.J. McMichael, D. H. Campbell-Lendrum, C. F. Corvalan, K. L. Ebi, A. Githeko, J. D. Scheraga, and A. Woodward, eds. Climate change and Human Health: Risks and Responses. World Health Organization, Geneva.
- 27. McCarty, J. P. 2003. What are those birds doing in there? *Bluebird: Journal of the North American Bluebird Society* 25:10-11.
- 26. McCarty, J. P. 2003. The Hudson River PCB Case Study. Chapter 29. Pp. 813-831 in D. J. Hoffman; B. A. Rattner; G. A. Burton, Jr.; J. Cairns, Jr., eds. *Handbook of Ecotoxicology, 2nd Edition.* CRC Press, Boca Raton, FL.
- 25. McCarty, J. P. 2002. Use of Tree Swallows in Studies of Environmental Stress. *Reviews in Toxicology* 4:61-104.
- 24. McCarty, J. P. 2002. The number of visits to the nest by parents is an accurate measure of food delivered to nestlings in Tree Swallows. *Journal of Field Ornithology* 73:9-14.

- 23. McCarty, J. P., D. J. Levey, C. H. Greenberg, and S. Sargent. 2002. Spatial and temporal variation in fruit use by wildlife in a forested landscape. *Forest Ecology and Management* 164:277-291.
- 22. Herrod-Julius, S. and J. P. McCarty. 2002. Ecosystems in Danger: An Ecological Perspective on Climate Change. Pp. 59-80, *In Exploring Environmental Challenges: A Multidisciplinary Approach. Global Climate Change*. S. L. Spray and K. L. McGlothlin, eds. Rowman & Littlefield Publishers, Inc, New York.
- 21. Stapleton, M., P. O. Dunn, J. P. McCarty, A. L. Secord, and L. A. Whittingham. 2001. Polychlorinated biphenyl contamination and minisatellite DNA mutation rates of Tree Swallows. *Environmental Toxicology and Chemistry* 20:2263-2267.
- 20. McCarty, J. P. 2001. Ecological consequences of recent climate change. *Conservation Biology 15:320-331.*
- 19. McCarty, J. P. 2001. Variation in the growth of nestling Tree Swallows across multiple temporal and spatial scales. *Auk* 118:179-193.
- 18. McCarty, J. P. and J. B. Zedler. 2001. Ecological restoration. In: *Encyclopedia of Global Environmental Change. Volume 2. The Earth system: biological and ecological dimensions of global environmental change.* R. E. Munn, H. A. Mooney and J. Canadell, editors. John Wiley & Sons, Ltd, London.
- 17. McCarty, J. P. and A. L. Secord. 2000. Possible effects of PCB contamination on female plumage color and reproductive success in Hudson River Tree Swallows. *Auk* 117:987-995
- 16. Rogers, C. E. and J. P. McCarty. 2000. Climate change and ecosystems of the Mid-Atlantic region. *Climate Research* 14:235-244.
- 15. Rogers, C. E. and J. P. McCarty. 2000. Ecosystems. pp 31-33 in Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change Mid-Atlantic Overview. Mid-Atlantic Regional Assessment, Penn State University, University Park, PA and U.S. Environmental Protection Agency, Washington, DC.
- 14. McCarty, J. P. and A. L. Secord. 1999. Reproductive ecology of Tree Swallows (*Tachycineta bicolor*) with high levels of polychlorinated biphenyl contamination. *Environmental Toxicology and Chemistry* 18:1433-1439.
- 13. McCarty, J. P. and A. L. Secord. 1999. Nest-building behavior in PCB-contaminated Tree Swallows. *Auk* 116:55-63.
- 12. McCarty, J. P. and D. W. Winkler. 1999. Foraging ecology and diet selectivity of Tree Swallows feeding nestlings. *Condor* 101:246-254.
- 11. McCarty, J. P. and D. W. Winkler. 1999. Relative importance of environmental variables in determining the growth of nestling Tree Swallows *Tachycineta bicolor*. *Ibis* 141:286-296.
- Secord, A. L., J. P. McCarty, K. R. Echols, J. C. Meadows, R. W. Gale, and D. E. Tillitt. 1999. Polychlorinated biphenyls and 2,3,7,8-tetrachlorodibenzo-p-dioxin equivalents in Tree Swallows from the upper Hudson River, New York State, USA. *Environmental Toxicology and Chemistry* 18:2519-2525.
- 09. Turner, A. M. and J. P. McCarty. 1998. Resource availability, site selection, and reproductive success of Red-winged Blackbirds. *Oecologia* 113:140-146.
- 08. McCarty, J. P. 1997. Aquatic community characteristics influence the foraging patterns of Tree Swallows. *Condor* 99:210-213.
- 07. McCarty, J. P. 1997. The role of energetic costs in the evolution of begging behavior of nestling passerines. *Auk* 114:135-137.
- 06. McCarty, J. P. 1996. Eastern Wood-Pewee. In *The Birds of North America*. (A. Poole, P. Stettenheim, and F. Gill, editors). Philadelphia: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.
- 05. McCarty, J. P. 1996. The energetic cost of begging in nestling Passerines. *Auk* 113:178-188.

- 04. McCarty, J. P. 1993. The effect of predation by insectivorous birds on populations and communities of insects: a possible role for birds in pest management? *Sialia* 15:123-125.
- 03. McCarty, J.P. and D.W. Winkler. 1991. Use of an artificial nestling for determining the diet of nestling Tree Swallows. *Journal of Field Ornithology* 62:211-217.
- 02. McCarty, J. P. 1990. Diel Periodicity of Movement and Feeding of Yellow Perch (*Perca flavescens*) in Lake Mendota, Wisconsin. *Trans. Wisconsin Acad. Sci. Arts Lett.* 78:65-76.
- 01. Winkler, D.W. and J. P. McCarty. 1990. A method for transplanting nests of Barn Swallows. *Journal of Field Ornithology* 61:426-430.

Reports and Dissertation

- U.S. EPA FIFRA Scientific Advisory Panel. 2013. A Set of Scientific Issues Being Considered by the Environmental Protection Agency Regarding: Proposed Endocrine Disruptor Screen Program (EDSP) Tier 2 Ecotoxicity Tests. Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel, EPA-HQ-OPP-2013-0182, U. S Environmental Protection Agency, Washington D.C. (member of the authorship team)
- U.S. EPA FIFRA Scientific Advisory Panel. 2008. A Set of Scientific Issues Being Considered by the Environmental Protection Agency Regarding: The Agency's Proposed Action Under FIFRA 6(b) Notice of Intent to Cancel Carbofuran. Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel, SAP No. 2008-02, U. S Environmental Protection Agency, Washington D.C. (member of the authorship team)
- Secord, A. L. and J. P. McCarty. 1997. Polychlorinated Biphenyl Contamination of Tree Swallows in the Upper Hudson River Valley, New York. U.S. Fish and Wildlife Service, Cortland, NY.
- McCarty, J.P. 1995. Effects of Short-term Changes in Environmental Conditions on the Foraging Ecology and Reproductive Success of Tree Swallows, *Tachycineta bicolor*. Ph.D. Dissertation, Cornell University, Ithaca, NY.

Reviews

- McCarty, J. P. 2018. The Lion in the Living Room [REVIEW]. Science Books & Films 54:124.
- McCarty, J. P. 2017. Listening to a Continent Sing [REVIEW]. Science Books & Films 53:113.
- McCarty, J. P. 2013. Bird Homes and Habitats. [REVIEW]. Science Books & Films 49:268-269.
- McCarty, J. P. 2013. Owls of the World: A Photographic Guide. [REVIEW]. *Science Books & Films* 49:112.
- McCarty, J. P. 2013. Hawks in Flight: Second Edition. [REVIEW]. *Science Books & Films* 49:112.
- McCarty, J. P. 2006. Kingbird Highway: The Biggest Year in the Life of an Extreme Birder. [REVIEW]. Science Books & Films 42:218.
- McCarty, J.P. 2006. Birds and Climate Change. Advances in Ecological Research. [REVIEW]. *Condor* 108:244-245.
- McCarty, J. P. 2005. Birds, Birds, Birds! An Indoor Birdwatching Field Trip. [REVIEW]. *Science Books & Films* 41:181.
- McCarty, J. P. 2005. Prairie: A Natural History. [REVIEW]. Science Books & Films 41:72.
- McCarty, J. P. 2002. The Sibley Guide to Bird Life and Behavior [REVIEW]. *Science Books & Films* 38:512.
- McCarty, J. P. 1999. From Chechnya to Chernobyl [REVIEW]. Science Books & Films 35:225-226.

Recent Invited Seminars and Lectures

November 2011 Audubon Society of Omaha – invited talk on sustainability

October 2011	UNOrthodox Series – Invited talk as part of the university-wide speaker series organized by UNO Student Government.
March 2011	The Nature Conservancy of Nebraska and Film Steams at the Ruth Sokolof
	Theater – panel discussion and question session following screening of the documentary <i>Ghost Bird</i> .
February 2009	Evanstad Forestry and Wildlife Management Program, Hedmark University
	College, Norway
January 2009	Department of Zoology, Cambridge University, Cambridge, United Kingdom
September 2008	Centre for Ecological and Evolutionary Synthesis, University of Oslo, Norway
April 2004	Natural Resource Ecology and Management, Iowa State University
December 2003	Department of Biology, Skidmore College, Saratoga Springs, NY
February 2003	Environmental Sciences, Creighton University, Omaha, NE
September 2002	Department of Biology, University of Nebraska at Omaha
April 2002	Annual Conference, Bluebirds Across Nebraska, Nebraska City, NE
April 2002	Department of Biology, University of South Dakota, Vermillion, SD
November 2001	Nebraska Behavioral Biology Group, Lincoln, NE

Invited Presentations at National and International Meetings

USDA Forest Service, North Central Research Station

Department of Animal Ecology, Iowa State University, Ames, IA

Invited symposium presentation at an international ornithological meeting.

November 2001

February 2001

Wolfenbarger, L. L., J. P. McCarty, and J. G. Jorgensen. 2015. Monitoring population trends of Buff-breasted Sandpipers during spring migration in the eastern Rainwater Basin, Nebraska, USA. Symposium on Conservation of Shorebirds in Productive Landscapes. Sixt Meeting of the Western Hemisphere Shorebird Group (WHSG), Wallops Island, VA. Invited symposium presentation at an international ornithological meeting.

Wolfenbarger, L. L., J. G. Jorgensen, and J. P. McCarty. 2013. Population trends and stopover ecology of Buff-breasted Sandpipers and other shorebirds in agricultural fields in Central Nebraska. Symposium on Conservation of Shorebirds in Productive Landscapes. Fifth Meeting of the Western Hemisphere Shorebird Group (WHSG), Santa Marta, Colombia

Invited symposium presentation at an international ornithological meeting.

McCarty, J. P., J. G. Jorgensen, and L. L. Wolfenbarger. 2011. Buff-breasted Sandpiper (*Tryngites subruficollis*) use of agricultural fields in the Rainwater Basin, Nebraska, and implications for conservation. Symposium on Avian conservation and ecosystem services in agricultural landscapes. Joint meeting of the Association of Field Ornithologicsts, Cooper Ornithological Society, and Wilson Ornithological Society. Invited symposium presentation at an international meeting on shorebird science and conservation.

Jorgensen, J. G., J. P. McCarty, and L. L. Wolfenbarger. 2006. Buff-breasted Sandpiper abundance, distribution, and habitat use during migration in the Rainwater Basin, Nebraska. Shorebird Science in the Western Hemisphere Symposium. Invited symposium presentation at the Annual Meeting of the Society for Conservation Biology, Symposium on Biotechnology and Biodiversity.

Wolfenbarger, L. L., J. P. McCarty, P. E. Klug, and L. I. Berkeley. 2004 The role of conservation science in assessing non-target effects of transgenic crops on communities and ecosystems.

Invited presentation for the U.S. Environmental Protection Agency's Office of Research and Development Symposium on Contributions of Field Studies Towards Biotechnology Assessments.

- Wolfenbarger, L. L. and J. P. McCarty. 2004. Ecological effects of large-scale adoption of transgenic crops.
- Invited Speaker at a symposium on Ecological Risks and Global Climate Change at the annual meeting of the Society for Risk Analysis
 - McCarty, J. P. 2000. Potential effects of climate change on ecosystems: mechanisms of action, complex interactions, and sources of uncertainty.
- Invited participant in a round-table discussion Restoring Large Wetlands Systems, at Building on Leopold's Legacy: Conservation for a New Century. October 1999.
- Two talks given at a special platform session on the effects of environmental contaminants on swallows at the annual meeting of the Society of Environmental Toxicology and Chemistry.
 - McCarty, J. P., A. Secord, and D. Tillitt. 1996. Reproductive and behavioral abnormalities in Tree Swallows with high levels of PCB contamination.
 - Secord, A., J. P. McCarty, D. Tillitt, J. C. Meadows, K. R. Echols, and R. W. Gales. 1996. The Tree Swallow as a sentinel for PCB exposure in the Upper Hudson River, New York.

Recent Presentations at Professional Meeting

- Gearin, C. J., L. L. Wolfenbarger, and J. P. McCarty. 2018. The effects of bobwhite and pollinator conservation on grassland birds in Nebraska. Sigma Xi Annual Meeting, San Francisco, CA.
- Young, A. C., L. L. Wolfenbarger, J. P. McCarty, and A.W. Cox, 2018. Post-fledging habitat use and seasonal productivity of Henslow's Sparrow (*Ammodramus henslowii*), Annual Meeting of the Society for Range Management, Sprarks, NV.
- Brown, L. A., J. P. McCarty, and L.L. Wolfenbarger. 2017. Site occupancy and behavior of migratory shorebirds in agriculture fields in the Rainwater Basin, NE. Western Hemispheric Shorebird Group, Paracas, Peru.
- Brown, L. A., J. P. McCarty, and L.L. Wolfenbarger. 2017. Site occupancy and behavior of migratory shorebirds in agriculture fields in the Rainwater Basin, NE. International Wader Study Group Annual Conference, Prague, Czech Republic.
- Gearin, C. J., L. L. Wolfenbarger, and J. P. McCarty. 2017. The effects of bobwhite and pollinator conservation on grassland songbirds in Nebraska. 7th Nebraska Natural Legacy Conference, Nebraska City, NE.
- Brown, L. A., J.G. Jorgensen, J. P. McCarty, and L.L. Wolfenbarger. 2017. Site occupancy and behavior of migratory shorebirds in agriculture fields in the Rainwater Basin, NE. 7th Nebraska Natural Legacy Conference, Nebraska City, NE.
- Geest, E. A., J. P. McCarty, and L. L. Wolfenbarger. 2017. Recruitment, survival, and parasitism of monarchs in residential gardens and conservation areas. 7th Nebraska Natural Legacy Conference, Nebraska City, NE.
- Brown, L. A., J. P. McCarty, and L.L. Wolfenbarger. 2017. Site occupancy and behavior of migratory shorebirds in agriculture fields in the Rainwater Basin, NE. American Ornithological Society Conference, East Lansing, MI.
- Janousek, W., P. Klug, J. P. McCarty, W. A. Cox, L. Berkeley, and L. L. Wolfenbarger. 2014. Survival and parasitism of Dickcissel (*Spiza americana*) nests on conservation and unmanaged marginal lands in the eastern Great Plains. North American Congress for Conservation Biology, Missoula, MT.
- Cox W.A., W. Janousek, L.L. Wolfenbarger, and J.P. McCarty. 2013. Grassland birds in conservation and unmanaged marginal lands. 131st stated meeting of the American Ornithologists' Union, Chicago, IL.
- Powell, L., M. Bomberger Brown, J. Smith, C. Jezierski, J. Lusk, J. McCarty, J. McGee, J. Fontaine, J. Olney, W. Schacht, B. Vodehnal, E. Walsh, C. Whalen, H. Wills, and L. L.

- Wolfenbarger. 2013. Wildlife Avoidance Studies: the Need to Evaluate Mechanisms. 6th Annual Nebraska Wind Energy Conference, Lincoln, NE.
- Reinarz, L. T., C. R. Allen, L. L. Wolfenbarger, C. Helzer, and J. P. McCarty. 2006. The relationship between plant diversity and herbivory rates in tallgrass prairie. 67th Midwest Fish and Wildlife Conference.
- Jorgensen, J.G., J.P. McCarty, and L.L. Wolfenbarger. 2006. Buff-breasted Sandpiper migration and stopover in the Rainwater Basin, Nebraska. Invited presentation, Rivers and Wildlife Celebration presented by Audubon Nebraska, Audubon's Rowe Sanctuary, and the Nebraska Partnership for All-Bird Conservation. Kearney, Nebraska.
- Simmons, K. E., L. L. Wolfenbarger, and J. P. McCarty. 2005. Effects of human disturbance on passerine diversity and abundance. 2005 Natural Areas Conference.
- Jorgensen, J. G., J. P. McCarty, L. L. Wolfenbarger. 2005. Buff-breasted Sandpiper (*Tryngites subruficollis*) stopover in the Rainwater Basin, Nebraska. 2005 Natural Areas Conference.
- Klug, P. E., L. L. Wolfenbarger, and J. P. McCarty. 2005. Predator communities in agroecosystems and the impact on avian nesting. 2005 Natural Areas Conference.
- Rider, N. L., L. Wolfenbarger, and J. P. McCarty. 2005. Effects of transgenic herbicide-tolerant soybeans on plant and butterfly diversity. 2005 Natural Areas Conference.
- Jorgensen, J. G., J. P. McCarty, L. L. Wolfenbarger. 2005. A habitat suitability model for the Buff-breasted Sandpiper during migration in an agricultural landscape. Annual Meeting of the American Ornithologists' Union.
- Jorgensen, J. G., J. P. McCarty, L. L. Wolfenbarger. 2005. Migration, stopover, survival, conservation: the case of the Buff-breasted Sandpiper and the Rainwater Basin. Nebraska Ornithologists' Union Fall Meeting.
- Jorgensen, J. G., J. P. McCarty, L. L. Wolfenbarger. 2005. The Buff-breasted Sandpiper and the Rainwater Basin. Rainwater Basin Joint Venture 10th Annual Informational Seminar.
- Klug, P. E., L. L. Wolfenbarger, and J. P. McCarty. 2004. The effects of grassland patch characteristics on predators of grassland bird nests. Annual Meeting of the Ecological Society of America.
- Berkeley, L. I., J. P. McCarty, and L. L. Wolfenbarger. 2004. The importance of the post-fledging period to the conservation of Dickcissels (*Spiza americana*). Annual Meeting of the Ecological Society of America.
- Klug, P. E., L. L. Wolfenbarger, and J. P. McCarty. 2004. The effects of grassland patch characteristics on predators of grassland bird nests. Annual Meeting of the Cooper Ornithological Society.
- Berkeley, L. I., J. P. McCarty, and L. L. Wolfenbarger. 2004. The importance of the post-fledging period to the conservation of Dickcissels (*Spiza americana*). Annual Meeting of the Cooper Ornithological Society.
- Engberg, S., J. P. McCarty, and L. L. Wolfenbarger. 2003. Area and Landscape Sensitivity of Grassland Birds to Breeding Habitat Fragmentation in the Missouri River Valley. 64th Midwest Fish and Wildlife Conference.
- McCarty, J. P., M. F. Ortega, and L. L. Wolfenbarger. 2003. Dickcissel Nest Habitat: Selectivity and Consequences for Reproductive Success. Annual Meeting of the American Ornithologists' Union.
- Wolfenbarger, L. L., P. E. Klug, L. I. Berkeley, and J. P. McCarty. 2003. Ecological effects of herbicide-tolerant crops on avian communities and reproduction in the midwestern agricultural landscape: a framework for post-commercialization testing and monitoring. Annual Meeting of the American Ornithologists' Union.
- Wolfenbarger, L. L., P. E. Klug, L. I. Berkeley, and J. P. McCarty. 2003. Ecological effects of herbicide-tolerant crops on avian communities and reproduction in the midwestern agricultural landscape: a framework for post-commercialization testing and monitoring. Biotechnology Risk Assessment Research Grants Program Stakeholder Workshop: Future

Directions and Research Priorities for the USDA Biotechnology Risk Assessment Research Grants Program, Washington, DC.