

Julie A Jedlicka

Curriculum Vitae

Missouri Western State University
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Research and Teaching Interests

Community ecology, ornithology, animal behavior, biology, agroecology, conservation biology

Appointments

2015-*present* Assistant Professor of Biology, Missouri Western State University, St. Joseph, MO
2014-2015 Adjunct Professor of Biology, Merritt College, Oakland, California
2014-2015 Visiting Researcher University of California, Berkeley, Host: Rodrigo Almeida
2011-2013 National Science Foundation Postdoctoral Fellow, University of California, Berkeley
(co-sponsors: Rodrigo Almeida, Wayne Getz, & Perry de Valpine)

Academic History

2011 Ph.D. Environmental Studies, University of California, Santa Cruz
Dissertation: Integrating avian conservation, community ecology, and insect pest management in California vineyards. (advisor: Deborah Letourneau)
2004 M.S. Ecology and Evolutionary Biology, University of Michigan, Ann Arbor
Thesis: Seasonal shift in the foraging niche of a tropical avian resident: resource competition at work? (advisor: John Vandermeer)
2000 B.S. Resource and Ecology Management, University of Michigan, Ann Arbor

Fellowships

2011-2013 National Science Foundation Postdoctoral Research Fellowship in Biology, Intersections of Biology and Mathematical Sciences (PI, \$123,000)
2009-2010 Chancellor's Dissertation-Year Fellowship (\$33,693)
2008 Annie's Sustainable Agriculture Graduate Research Fellowship (\$10,000)
2006 UCSC Doctoral Student Sabbatical Fellowship (\$8351)
2004 University of California Graduate Fellowship (\$15,000)

Awards and Grants

2016-2020 National Science Foundation IRES PI (*submitted* Co-written with M. Johnson (PI), T. Bean (Co-PI), \$191,908)
2016-2020 Missouri Department of Conservation, Ozark Glade Diversity (Co-PI, Co-written with T. Quedensley (Co-PI), M. Mills (Co-PI), \$250,000)
2016 Missouri Western Foundation Grants (\$5,080)
2016 Program of Research, Teaching, and Applied Learning (PORTAL) Research Award (\$3,500)
2016 National Science Foundation DEB (*not funded*, Co-written with M. Johnson, T. Bean)
2012-2013 American Viticulture Foundation (Co-written with A. Vo, R. Bowie, \$19,750)
2011 Travel Award, American Field Ornithologists, Cooper, and Wilson Ornithological Societies Joint Annual Meeting (\$500)
2011 Travel Award, Graduate Student Association, University of California SC (\$330)
2009 Outstanding Teaching Award in Environmental Studies (\$150)
2009 Paul A. Stewart Research Award from The Wilson Ornithological Society (\$500)
2009 David Gaines Award for Conservation Biology (\$667)
2008 Organic Farming Research Foundation Grant (\$15,000)
2008 E. O. Wilson Conservation Award from the Animal Behavior Society (\$2000)
2005 Alfred E. Heller Research Grant in Agroecology (\$4000)

2005-2010	UCSC Environmental Studies Research Award (\$7100)
2005	Center for Tropical Research in Ecology, Agriculture and Development Grant (\$500)
2002	Smithsonian Institute Research Grant (\$3300)
2002	University of Michigan's Horace Rackham Graduate Research Award (\$2000)

Publications

Peer Reviewed Publications:

- 2016 **Jedlicka, JA**, Vo, AE, and Almeida, RPP. *In Press*. Molecular scatology and high-throughput sequencing reveal predominately herbivorous insects in the diets of adult and nestling Western Bluebirds (*Sialia Mexicana*) in California vineyards. *The Auk: Ornithological Advances*.
- 2015 Letourneau, DK, Ando, AW, **Jedlicka, JA**, Narwanni, A Barbier E. 2015. Simple-but-sound methods for estimating the value of changes in biodiversity for biological pest control in agriculture. *Ecological Economics*. 120: 215-225.
- 2014 Vo, AE & **Jedlicka, JA**. 2014. Protocols for metagenomic DNA extraction and amplicon Illumina library preparation for fecal and swab samples. *Molecular Ecology Resources*. 14: 1183-1197.
- 2014 **Jedlicka, JA**, Letourneau, DK, Cornelisse, T. 2014. Establishing songbird nest boxes increased avian insectivores and reduced herbivorous arthropods in a California vineyard, USA. *Conservation Evidence*. 11: 34-38.
- 2014 **Jedlicka, JA**, Greenberg, R, Raimondi, P. 2014. Vineyard and riparian habitat, not nest box presence, alter avian community composition. *Wilson Journal of Ornithology*. 126(1):60-68.
- 2013 **Jedlicka, JA**, Sharma, AM, Almeida, RPP. 2013. Molecular tools reveal avian diets in agricultural landscapes. *Conservation Genetics Resources*. 5(3): 879-885.
- 2011 **Jedlicka, JA**, Greenberg, R, Letourneau, DK. 2011. Avian conservation practices strengthen ecosystem services in California vineyards. *PLoS ONE*. 6(11): e27347.
doi:10.1371/journal.pone.0027347 Available: <http://dx.plos.org/10.1371/journal.pone.0027347>
- 2011 Johnson, RJ, **Jedlicka, JA**, Quinn, JE, Brandle, JR. 2011. Global perspectives on birds in agricultural landscapes. *In* Campbell, W.B. and S.L. Ortiz (eds.) *Issues in agroecology: Present status and future prospectus*. Invited book chapter. Springer. 55-140.
- 2009 Letourneau, DK, **Jedlicka, JA**, Bothwell, SG, Moreno, CR. 2009. Effects of natural enemy biodiversity on the suppression of arthropod herbivores in terrestrial systems. *Annual Review of Ecology, Evolution, and Systematics*. 40: 573-592.
- 2006 **Jedlicka, JA**, Greenberg, R, Perfecto, I, Philpott, SM, Dietsch, TV. 2006. Seasonal shift in the foraging niche of a tropical avian resident: resource competition at work? *Journal of Tropical Ecology*. 22 (4): 385-395.
- 2004 **Jedlicka, JA**, Vandermeer, J, Aviles-Vazquez, K, Barros, O, Perfecto, I. 2004. Gypsy moth defoliation of oak trees and a positive response of red maple and black cherry: an example of indirect interaction. *American Midland Naturalist*. 152 (2): 231-236.

Book Reviews:

- 2007 The CentTREAD Working Group. 2007. Debunking myths, erecting others. *Book review* of 1491: new revelations of the Americas before Columbus. *Restoration Ecology*. 15 (1): 168-169.
- 2005 The CentTREAD Working Group. 2005. Farmers and the forest: can agroforestry actually conserve biodiversity? *Book review* of *Agroforestry and biodiversity conservation in tropical landscapes*. *Conservation Biology*. 19 (6): 2043-2044.

Non-Peer Reviewed Articles:

- 2012 **Jedlicka, JA**. (2012). Thoughts on bluebird management: Author Responds. *The Wildlife Professional*. Summer. 6 (2):8.
- 2007 Gliessman, S, Rosado-May, F, Guadarrama-Zugasti, C, **Jedlicka, JA**, Cohn, A, Mendez, VE, Cohen, R, Trujillo, L, Bacon, C, Jaffe, R. (2007). *Agroecología: promoviendo una transición*

Media Coverage

- 2016 Bohemian. Put a Bird on it: New research reveals birds' beneficial impact on Napa Valley vineyards. 13 July.
<http://www.bohemian.com/northbay/put-a-bird-on-it/Content?oid=2973082&showFullText=true>
- 2014 The Weekly Calistogan. Tech, Innovation grow at Rootstock. 18 November.
http://napavalleyregister.com/calistogan/news/local/tech-innovation-grow-at-rootstock/article_af93d2db-0d39-58a7-a8d3-1f5118a29991.html
- 2014 St. Helena Star. Tech, NVG's Rootstock sold out. 18 November.
http://napavalleyregister.com/star/business/nvg-s-rootstock-sold-out/article_0478f15c-7736-533e-be86-bb6aaa373ca2.html
- 2013 Audubon Magazine. What do birds do for us? Mar-April.
<http://www.audubonmagazine.org/articles/birds/what-do-birds-do-us>
- 2012 San Francisco Chronicle. Western bluebirds offer pest control on the fly. 8 Jan.
<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2012/01/06/HO9H1MJ6UG.DTL>
- 2012 The Wildlife Professional. The Wildlife Society Field Notes: The power of the bluebird. Spring. 6 (1): 76. http://store.wildlife.org/scriptcontent/Journal/twp_archive/Spring%202012.pdf
- 2012 Wines & Vines. A vineyard's feathered friend. 8 Nov.
<http://www.winesandvines.com/template.cfm?section=news&content=107318>
- 2012 Audubon Magazine. Pest Control: Birds, natural crop defenders, protect grapes and coffee in the field. Mar-April. <http://www.audubonmagazine.org/articles/birds/controlling-pests-birds>
- 2011 Science Update. AAAS. 24 Nov. <http://www.scienceupdate.com/2011/11/wine/>
- 2011 The New York Times. In a California vineyard, bluebirds earn their keep. Green blog. 14 Nov.
<http://green.blogs.nytimes.com/2011/11/14/in-a-california-vineyard-bluebirds-earn-their-keep/>
- 2011 The Guardian. Bird-friendly California vineyards may have fewer pests. Punctuated Equilibrium. 11 Nov. <http://www.guardian.co.uk/science/punctuated-equilibrium/2011/nov/11/5>
- 2011 Santa Cruz Weekly. UCSC grad finds bluebird-wine connection. 16 Nov.
http://www.santacruz.com/news/2011/11/16/ucsc_grad_finds_bluebirdwine_connection
- 2011 The Oregonian. Animal nature: winemakers get an avian assist. 16 Nov
http://www.oregonlive.com/environment/index.ssf/2011/11/animal_nature_washington_hawk.html
- 2008 Byron, J. 2008. Research News: Nest boxes can attract wildlife to vineyards. *California Agriculture*. 62 (4): 131-132.
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Conferences

- Jedlicka, JA** and Vo, AE. *Contributed talk*. 2016. Molecular scatology and high-throughput sequencing reveal bluebirds consuming predominately herbivorous insects in California vineyards. North American Ornithological Conference. August. Washington, DC.
- Jedlicka, JA**. *Contributed talk*. 2016. Avian foraging behavior and prey selection: Untangling critical links. Animal Behavior Conference. July. Columbia, Missouri
- Jedlicka, JA**. *Contributed talk*. 2016. Building conservation efforts within the university: Creating a bird-friendly campus. May. Annual Meeting of the New World Agriculture and Ecology Group. Ann Arbor, Michigan.
- Jedlicka, JA** and Johnson, JA. *Workshop*. 2014. Beneficial birds in the vineyard with bird box building demonstration. November. Rootstock Conference. Napa, California.
- Jedlicka, JA** and Vo, AE. *Contributed talk*. 2014. Ecosystem function of insectivorous birds in California vineyards. Ecological Society of America. August. Sacramento, California.

- Jedlicka, JA** and Vo, AE. *Contributed talk*. 2014. Uncovering the diets of Western Bluebirds in California vineyards. Joint meeting of the Association of Field Ornithologists and Wilson Ornithological Society. May. Newport, Rhode Island.
- Jedlicka, JA**, Greenberg, R, Raimondi, P. *Poster presentation*. 2013. Avian use of habitat fragments in California oak-vineyard landscapes. Joint meeting of the American Ornithologists' Union and Cooper Ornithological Society. August. Chicago, Illinois.
- Jedlicka, JA**. *Contributed talk*. 2013. Avian predators of arthropod prey in California vineyards. University of California Vineology Conference. Oakville Experimental Vineyard. April. Napa, California.
- Jedlicka, JA**. *Poster presentation*. 2012. DNA extraction and next-generation Illumina sequencing of fecal samples from insectivorous birds. DOE Joint Genome Institute. September. Walnut Creek, California.
- Jedlicka, JA**. *Contributed talk*. 2012. Molecular tools reveal diets of insectivorous birds from predator fecal matter. North American Ornithological Conference. August. Vancouver, British Columbia.
- Jedlicka, JA**. *Poster presentation*. 2012. Molecular tools reveal diets of insectivorous birds from predator fecal matter. Ecological Society of America National Meeting. August. Portland, Oregon.
- Letourneau, DK, Cornelisse, T, **Jedlicka, JA**, Bothwell, SG, Stireman, J. *Symposium talk*. 2011. Build it and they will come: Resource provisioning for insects. Symposium entitled "Celebrating the Career of Pedro Barbosa: A Passion for Insects and Plants." Entomological Society of America National Meeting. November. Reno, Nevada.
- Jedlicka, JA**, Greenberg, R, Letourneau, DK. *Contributed talk*. 2011. Avian conservation practices strengthen ecosystem services in California vineyards. Ecological Society of America National Meeting. August. Austin, Texas.
- Jedlicka, J.A.** and Greenberg, R. *Contributed talk*. 2011. Conservation of avian species strengthens ecosystem services in California vineyards. In Symposium: Avian conservation and ecosystem services in agricultural landscapes. Annual Meeting of the American Field Ornithologists, Cooper, and Wilson Ornithological Societies. March. Kearney, Nebraska.
- Jedlicka, J.A.** *Table Presentation*. 2010. Bluebirds in vineyards. Napa Organic Winegrape Conference. July. Rutherford, CA.
- Heaton, E., Long, R. **Jedlicka, J.A.** *Contributed talk*. 2010. Songbird, bat, and owl nest boxes. Ecological Farming Association. January. Pacific Grove, California.
- Jedlicka, J.A.** *Contributed talk*. 2010. Conservation practices increase pest control in California vineyards. Napa Vineyard Technical Group. May. Napa, California.
- Jedlicka, J.A.** *Contributed talk*. 2009. Managing birds in vineyards: Pest control and conservation strategies. Wine and Wine Grape Research Conference. February. Davis, California.
- Jedlicka, J.A.** *Contributed talk*. 2007. Birds and biocontrol. Annual Meeting of the New World Agriculture and Ecology Group. August. Santa Cruz, California.
- Jedlicka, J.A.** *Contributed talk*. 2006. La diversidad de aves en agroecosistemas. Curso Internacional de Agroecología y Desarrollo Rural Sostenible. July. Universidad Nacional Autónoma de Nicaragua.
- Jedlicka, J.A.** *Contributed talk*. 2003. Foraging behavior seasonal niche shift of the Rufous-capped Warbler in a Chiapas, Mexico, coffee farm. American Ornithologists' Union National Meeting. August. Champaign-Urbana, Illinois.

Invited Lectures

- 2016 Amphibian Ecology. Herpetology. Missouri Western State University, St Joseph. March
- 2015 Ecosystem function of Western Bluebirds at Spring Mountain Vineyard. St. Helena, California. Jan.
- 2014 Benefitting from increased animal diversity in vineyards. Organic Winegrowing Conference. Rutherford, California. July.
- 2014 What does biodiversity do for us? Madrone Audubon Society. Santa Rosa, California. January.
- 2013 Avian predators of arthropod prey: Dissecting food webs in California vineyards. Wildlife and Conservation Biology Seminar. University of California, Berkeley. October.

- 2013 Avian conservation and insect pest control: Constructing food webs in California vineyards. Biology Department Seminar. State University of New York, New Paltz, NY. March.
- 2012 Avian conservation practices strengthen ecosystem services in California vineyards. Environmental Studies Seminar. Gettysburg College, Pennsylvania. November.
- 2012 Promoting beneficial bird populations in North Coast vineyards. Napa Viticulture Fair. Napa, California. November.
- 2012 Owl boxes for rodent control and bluebird boxes for insect control. Napa Farm Bureau. Napa, California. November.
- 2012 Birds in wine country: How to enhance avian presence in your own backyard. Peregrine Audubon Society. Ukiah, California. October.
- 2012 Los pájaros beneficiosos: El uso de aves depredadoras como herramienta IPM. Field day presentation in Spanish to vineyard technical staff. Napa, California. June.
- 2012 Birds in California vineyards. Presentation to third grade classroom at Park Day School, Oakland, California. March.
- 2012 Ecosystem function of insectivorous birds in California vineyards. Ecosystem Science Seminar, University of California, Berkeley. February.
- 2011 Sustainable Wine Forum. *Panelist*. The Goldman School of Public Policy. University of California, Berkeley. December.
- 2011 Birds in California Vineyards. Point Blue Conservation Science. July.
- 2011 Avian agroecology. University of California, Santa Cruz. Delivered to Agroecosystem Analysis undergraduate class of 50 students. May.
- 2011 Pest management theory and a case study of avian natural predators. University of California, Santa Cruz. Delivered to Integrated Pest Management undergraduate class of 70 students. April.
- 2011 Avian conservation practices strengthen ecosystem services in California vineyards. April. Environmental Studies Seminar, University of California, Santa Cruz.
- 2010 Fish ecology. University of California, Santa Cruz. Delivered to Freshwater Ecology undergraduate class of 60 students. November.
- 2009 Coffee, history, and conscious consumption. University of California, Santa Cruz. Delivered to Principles of Sustainable Agriculture undergraduate class of 80 students. March.
- 2007 Faunal restoration. University of California, Santa Cruz. Delivered to Restoration Ecology undergraduate class of 80 students. October.
- 2006 Birds in agricultural landscapes: Humans and conservation. University of California, Santa Cruz. Delivered to Agroecology undergraduate class of 80 students. October.
- 2006 Tropical dinosaurs of the late Holocene. University of California, Santa Cruz. Delivered to Tropical Ecology and Conservation undergraduate class of 50 students. January.

Teaching Experience

Assistant Professor, Missouri Western State University, St. Joseph, MO 2015-present
Biology for non-science majors (BIO 101)– Fall 2015, Spring 2016, Fall 2016
Animal Behavior (cross-listed in Biology and Psychology; BIO 419/PSY 419)– Fall 2015, Fall 2016
Ornithology (BIO 318)– Spring 2016

Adjunct Professor, Merritt College, Oakland, CA 2014-2015
General Biology (2-semester course)
Biology for non-science majors – Energy, Food, and the Environment.
Human Biology

Mentoring Activities

- 2015- present *Mentor*. I lead a team of three undergraduate research assistants and volunteers in two separate research projects: (1) avian nest site selection and reproductive success, and (2) entomological community variability between habitats
- 2012 - 2014 *Undergraduate Mentor*. For my postdoctoral research, I lead a team of seven undergraduate research assistants and volunteers in three separate research projects: (1) DNA extraction

- and PCR techniques in the lab, (2) entomological identification and behavior, and (3) ecological experimentation via collecting avian and arthropod samples from the field.
- 2008 *Field Intern Mentor*. During my dissertation field research (March-July) I instructed and advised one Biology undergraduate and one recent Environmental Studies graduate at University of California's Hopland Research and Extension Center. While working together identifying birds and arthropods, my interns learned about ecological experimental design and data collection techniques in the context of conservation biology, ornithology, and sustainable agriculture.
- 2007 - 2011 *ENVS Intern Advisor*. Served as an advisor for nine undergraduate Environmental Studies students. Trained five students in entomological identification techniques and data collection. Mentored four students in experimental design for animal behavior studies.

Graduate Student Instructor, University of California, Santa Cruz

- 2011 Integrated Pest Management
 2010 Freshwater Ecology
 2009 Principles of Sustainable Agriculture
 2008 Ecology and Society
 2007 Restoration Ecology
 2006 Introduction to Environmental Field Methods
 2006-08, '11 Environmental Studies Capstone
 2005-07 Agroecology
 2005 Political Economy and the Environment

Instructor, International Agroecology Course, Nicaragua

- 2006 Instructor of annual training course for international students focusing on field excursions and action education drawing from ecology, agriculture, conservation biology, and sustainable development. <http://www.agroecology.org/shortcourse.htm>

Faculty Leader, International Student Volunteers, New Zealand

- 2004 Lead two groups of 20 undergraduate volunteers on conservation projects throughout the North Island of New Zealand. We planted native species, removed invasive species and learned from Maori teachers, combining conservation, education, and recreation.

Graduate Student Instructor, University of Michigan, Ann Arbor

- 2004 Practical Botany
 2003 Introduction to Biology
 2002 General Ecology
 2001-03 Biology and Human Affairs

Lecturer II, University of Michigan Biological Station

- 2000 Taught *Biology of Birds* field course with Dr. Francesca Cuthbert. Utilized the University's diverse collection to train students in identification skills.

Service Positions

- 2016-present *Co-coordinator*. Biology 101 Introduction to Biology: Lecture and Laboratory. Biology Department, Missouri Western State University.
- 2013-2019 *Committee Chair*. Student Travel Awards Committee. Association of Field Ornithologists.
- 2012-2019 *Governing Council*. Association of Field Ornithologists.
- 2016-present *Grinnell Awards Committee Member*. Association of Field Ornithologists.
- 2016 *Judge*. Mid-America Regional Science and Engineering Fair
- 2012-2013 *Awards Committee Member*. Association of Field Ornithologists.
- 2004-present *Manuscript reviewer*. Bird Study/Ringing & Migration, Bulletin of Entomological Research, Ecography, Ecological Economics, Ecological Research, Ecology and Evolution, Environmental Pollution, Frontiers in Ecology and the Environment, Journal of Applied Ecology, Journal of Field Ornithology (2), Journal of Landscape Ecology, Marine Ecology

- Progress Series, Molecular Ecology (2), Molecular Ecology Resources, PeerJ, Scientific Reports, Wilson Journal of Ornithology, Book chapter in *Insect Outbreaks Revisited*.
- 2012 *Session Chair*. Physiology/Hormones. North American Ornithological Conference. August 2012. Vancouver, British Columbia.
- 2011 *Symposium Co-organizer* (with Quinn, JE). Avian conservation and ecosystem services in agricultural landscapes. Annual Meeting of the American Field Ornithologists, Cooper, and Wilson Ornithological Societies. March 2011. Kearney, Nebraska.
- 2007 *Organizer and Program Chair*. Annual Meeting of the New World Agriculture and Ecology Group. August 2007. Santa Cruz, California.
- 2005-07 *Co-chair*. Environmental Studies Graduate Steering Committee. Responsibilities included requesting proposals and dispersing travel grant money, organizing annual retreats and appointing graduate student representatives on departmental committees.
- 2005 *Organizer*. Environmental Studies Brownbag Lunch. Initiated and organized a weekly departmental forum where graduate students and faculty members participated in presentations and discussions centered around controversial interdisciplinary issues and current research.
- 2003-04 *Graduate Student Mentor*. Lead departmental pedagogical course for first-year graduate students in Biology at University of Michigan. Organized and advertised teaching improvement seminars and workshops.
- 2003 *Session Chair*. Foraging Behavior. American Ornithologists' Union. August 2003. Champaign-Urbana, Illinois.
- 2000-04 *Volunteer*. Rouge River Bird Observatory, Dearborn, MI. Banded birds for long-term migratory bird monitoring during fall and spring migration.
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Professional Affiliations

Association of Field Ornithologists; American Ornithology Society; Ecological Society of America; Wilson Ornithological Society