John C. Withey

Graduate Program on the Environment jwithey.weebly.com
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Olympia, WA 98505 witheyj@evergreen.edu

EDUCATION

- Ph.D. Forest Resources, (Urban Ecology certificate), College of Forest Resources, University of Washington. 2006.
- M.S. Wildlife Science, College of Forest Resources, University of Washington. 2002.
- B.A. Biology cum laude, Pomona College, Claremont, California. 1991.

PROFESSIONAL EXPERIENCE

- 2016- Member of the Faculty, **The Evergreen State College**, Master's of Environmental Studies Program, Olympia, WA
- 2012-16 Assistant Professor, **Florida International University**, Department of Biological Sciences, Miami, FL.
- 2009-11 Postdoctoral Research Associate, **University of Washington**, School of Environmental and Forest Sciences, Seattle, WA.
- 2008-09 Visiting Asst. Prof., Lewis & Clark College, Biology Department, Portland, OR.
- 2007-08 Postdoctoral Researcher, Smithsonian Tropical Research Institute, Panama.
- 2005-07 Capstone Instructor, **University of Washington**, Program on the Environment, Seattle, WA.

TEACHING EXPERIENCE: COURSES

The Evergreen State College

Research Design and Quantitative Methods (8 cr., spring 2017, 2018, 2019)

Landscape Ecology (4 cr., winter 2019)

Case Studies and Thesis Design (8 cr., fall 2017, 2018)

Urban Ecology (4 cr., winter 2018)

Restoration Ecology (4 cr., winter 2017)

graduate Conceptualizing our Regional Environment (8 cr., fall 2016)

Florida International University

Ecology (spring 2016, spring 2012)

Vertebrate Zoology (fall 2015, spring 2015, spring 2014, spring 2013)

Topics in Ecology: Urban Ecology (fall 2014)

Lewis & Clark College

Ecology with lab (spring 2009)

Genetics lab (spring 2009)

Perspectives in Biology with lab: The Evolution Explosion (fall 2008, summer 2009)

University of Washington

Pre-Capstone senior seminar (fall 2005, spring 2006, fall 2006)

Capstone Experience (winter 2006, summer 2006, winter 2007)

Post-Capstone senior seminar (fall 2005, spring 2006, fall 2006)

Humans & the Environment in the Northwest Bioregion (summer 2005-06, 2008-11)

Special Topics in Environmental Science: Urban Ecology (winter 2006)

Urban Ecology: Interdisciplinary Perspectives (winter 2005)

Teaching Publications

Withey, John C., and C. M. Kennedy. Does the Matrix Matter? Testing the influence of matrix type on bird responses to forest fragmentation, a case study. National Center for Case Study Teaching in Science, http://libweb1.lib.buffalo.edu/cs/collection/detail.asp?case_id=649&id=649

PUBLICATIONS

Refereed Journal Articles

- Runge, Claire A., **John C. Withey**, D. E. Naugle, J. E. Fargione, K. J. Helmstedt, A. E. Larsen, S. Martinuzzie, and J. D. Tack. 2019. Single species conservation as an umbrella for management of landscape threats. PLoS ONE 14(1): e0209619. DOI: 10.1371/journal.pone.0209619
- 2017 Michalak, Julia M., **John C. Withey**, J. J. Lawler, & M. Case. 2017. Future climate vulnerability evaluating multiple lines of evidence. Frontiers in Ecology and the Environment 15(7). DOI: 10.1002/fee.1516

Mayor, Stephen J., R. P. Guralnick, M. W. Tingley, J. Otegui, **John C. Withey**, S. C. Elmendorf, M. E. Andrew, S. Leyk, I. S. Pearse & D. C. Schneider. 2017. Increasing phenological asynchrony between spring green-up and arrival of migratory birds. Scientific Reports 7, Article number: 1902.

Stephen B. Hager, Bradley J. Cosentino, et al. (58 additional co-authors including **John C. Withey**). 2017. Continent-wide analysis of how urbanization affects bird-window collision mortality in North America, Biological Conservation 212: 209-215. https://doi.org/10.1016/j.biocon.2017.06.014.

Nelson, Erik J., **John C. Withey**, D. Pennington, and J. L. Lawler. 2017. Identifying the impacts of critical habitat designation on land cover change. Resources and Energy Economics 47:89-125.

Martinuzzi, Sebastián, **John C. Withey**, A. M. Pidgeon, A.J. Plantinga, A. J. McKerrow, S. G. Williams, D. P. Helmers, and V. C. Radeloff. Future land-use scenarios and the loss of wildlife habitats in the southeastern United States. Ecological Applications 25: 160-171.

Lawler, Joshua J., D. J. Lewis, E. Nelson, , A.J. Plantinga, S. Polasky, John C.
 Withey, D. P. Helmers, S. Martinuzzi, D. Pennington, and V. C. Radeloff.
 Projected land-use change impacts on ecosystem services in the U.S. Proceedings of the National Academy of Sciences 111:7492-7497.

- Withey, John C. Within-territory use of different land-cover types by tropical forest songbirds in fragmented landscapes. Biological Conservation 167: 405-413
- Withey, John C., J. J. Lawler, S. Polasky, , A.J. Plantinga, E. J. Nelson, P. Kareiva, C. B. Wilsey, C. A. Schloss, T. Nogeire, A. Ruesch, J. Ramos, and W. Reid. Maximizing return on conservation investment in the conterminous USA. Ecology Letters 15(11): 1249-1256.
- 2012 Polasky, S., K. Johnson, B. Keeler, K. Kovacs, E. Nelson, D. Pennington, A. J. Plantinga, and **J. Withey**. Are investments to promote biodiversity conservation and ecosystem services aligned? Oxford Rev. of Economic Policy 28(1):139-163.
- 2012 Radeloff, V., E. Nelson, A. J. Plantinga, D. J. Lewis, D. Helmers, J. J. Lawler, J. C. Withey, F. Beaudry, S. Martinuzzi, V. Butsic, E. Lonsdorf, D. White, and S. Polasky. Economic-based projections of future land use in the conterminous U.S. under alternative economic policy scenarios. Ecological Applications 22(3): 1036-1049.
- Marzluff, J.M., J. Walls, H. N. Cornell, **J. C. Withey**, and D. P. Craig. Lasting recognition of threatening people by wild American crows. Animal Behaviour 79(3): 699-707.
- Withey, J. C., and J. M. Marzluff. Multi-scale use of lands providing anthropogenic resources by American Crows in an urbanizing landscape. Landscape Ecology 24:281-93.
- Oleyar, D., A. Greve, **J. C. Withey**, and A. Bjorn. An integrated approach to evaluating urban forest functionality. Urban Ecosystems 11:289-308.
- Marzluff, John M., **J. C. Withey**, K. Whittaker, J. DeLap, D. Oleyar, T. Unfried, and S. Rullman. Consequences of habitat utilization by nest predators and breeding songbirds across multiple scales in an urbanizing landscape. Condor 109: 516-534.
- 2007 Pecoraro, H., H. Bost, R. Reineke, N. Stevens, **J. C. Withey**, J. M. Marzluff, and J. S. Meschke. Climatic and ecological correlates of West Nile virus vectors in the Seattle region. Journal of Vector Ecology 32: 22-28.
- Graybill, J. K., S. Dooling, V. Shandas, **J. Withey,** A. Greve, and G. Simon. A rough guide to interdisciplinarity: graduate student perspectives. BioScience 56(9): 757-764.
- Withey, J.C., and J. M. Marzluff. Dispersal by juvenile American Crows affects population dynamics across a gradient of urbanization. The Auk 122 (1): 205-221.

Marzluff, J.M., J.J. Millspaugh, K.R. Ceder, C.D. Oliver, **J. Withey**, J.B. McCarter, C.L. Mason, and J. Comnick. Modeling changes in wildlife habitat and timber revenues in response to forest management. Forest Science 48: 191-202.

Narayanan, A.S., **Withey, J.**, Souza, A., and Raghu, G. Effect of γ-interferon on collagen synthesis by normal and fibrotic human lung fibroblasts. Chest 101:1326-31.

Refereed Book Chapters

- 2019 Littlefield, C., E. Nelson, B. Dittbrenner, K. Arkema, **J. Withey**, and J. Lawler. 2019. Ecosystem-based Adaptation to Climate Change. In *Climate Change and Biodiversity*, 2nd edition, Thomas Lovejoy & Lee Hannah, eds. Yale University Press.
- Withey, J.C., T. Bloxton, and J. M. Marzluff. Effects of tagging and location error in wildlife radiotelemetry studies. Chapter 3 in Millspaugh, J.J., and J.M. Marzluff, eds. *Radio Tracking and Animal Populations*. Academic Press, San Diego.

Technical Reports

- Nelson, E. J., **J. C. Withey,** D. Pennington, and J. J. Lawler. Identifying the Impacts of Critical Habitat Designation on Land Cover Change. Discussion Paper RFF EP 15-27, Resources for the Future, Washington D.C.
- Withey, John C., J. L. Michalak, J. J. Lawler, and M. J. Case. Pioneer Mountains Craters of the Moon (ID) Climate Change Adaptation Workshop Report.

 Prepared for the Great Northern Landscape Conservation Cooperative. Published in Seattle, WA. DOI: 10.13140/2.1.3755.8720
- Michalak, Julia L., **John C. Withey**, J. J. Lawler, S. Hall and T. Nogeire. Climate Vulnerability and Adaptation in the Columbia Plateau, WA. Prepared for the Great Northern Landscape Conservation Cooperative. Published in Seattle, WA. DOI: 10.13140/2.1.1920.8647
- Withey, John C. Avian inventory of the Moses Coulee, Washington. Report prepared for The Nature Conservancy in Washington, Seattle, WA. 14 pp.

Other Publications

Withey, John and K. Whittaker. 2006. Beginner's guide to using the "resource utilization function" (RUF) package in R. University of Washington, Seattle, WA.

GRANTS AWARDED

- Adapting the 'Evolutionary Distinct and Globally Endangered' Prioritization Approach for Regional Conservation. **Evergreen Sponsored Research** (PI).
- Modeling Wildlife Responses to Land-use and Climate Change in the Pacific Northwest. **Evergreen Sponsored Research** award (PI).

Causes, consequences, and cross-scale linkages of phenological mismatch across three trophic levels. **National Science Foundation** MacroSystems Biology and early NEON Science Program (Sr. Personnel).

- Assessing the Cost of the Critical Habitat Rule under the Endangered Species Act: A Retrospective Study of Regulatory Performance. **Resources for the Future** (\$38,668, role: Co-PI).
- Applying Vulnerability Assessment Tools to Plan for Climate Adaptation: Case Studies in the Great Northern and North Pacific Landscape Conservation Cooperatives. **U.S. Fish & Wildlife Service** funding in support of the Great Northern (\$97,000) and North Pacific (\$90,000) LCC's (role: Co-PI).
- 2007-08 Tropical Forest Songbird Movements and Behavior in Human-dominated Landscapes. **National Science Foundation International Research Fellowship** (\$70,000, and Supplemental Funding Request of \$16,800, role: PI)

PROFESSIONAL DEVELOPMENT

- 2018-19 Planning Institute for MES Core Faculty, TESC, Olympia, WA
- Team-Based Learning reading group, FIU Center for the Advancement of Teaching.
- Test Design Institute, FIU Center for the Advancement of Teaching, Miami, FL.
- NSF CAREER Proposal Development Workshop, Quality Education for Minorities (QEM) Network, Baltimore, MD.
- Scaling Up: Population and Community Ecology. Ecological Society of America workshop for early career scientists (invited participant).
- 2013 Developing Measureable Objectives for your Courses, Dept. of Biology, Miami, FL.
- 2012 Strategies and Tactics for Recruiting to Improve Diversity and Excellence (STRIDE) Faculty Training, Miami, FL.
- 2012 Stereotype Threat seminar by Joshua Aronson, FIU Center for the Advancement of Teaching, & Safe Zone Training, FIU Diversity Task Force, Miami, FL.
- Mentoring the Undergraduate Research Experience, UW Undergraduate Research Program Workshop/Roundtable, Seattle, WA.
- Development of decision support tools for species, populations and their habitats, Yellowstone Ecological Research Center, Boise, ID.
- Faculty Technology Initiative Workshop, Lewis & Clark College, Portland, OR.
- Teaching of Evolution Forum, UW Program on the Environment, Seattle, WA.
- Helping Students Help Themselves Workshop with Marilla Svinicki, The Quarterly Forum on Teaching and Learning, Seattle, WA.
- Teaching and Learning in Higher Education, Preparing Future Faculty seminar by the UW Center for Instructional Development & Research, Seattle, WA.

AWARDS, HONORS & FELLOWSHIPS

2015	Working Group award for "Better Land-Use Decisions: land-use change and conservation policy in Brazil and the US for biodiversity, ecosystem services and economic returns." Science for Nature and People (SNAPP), Santa Barbara, CA. http://www.snap.is/groups/better-land-use-decisions/
2007	Brotman Award for Instructional Excellence (team award to UW Program on the Environment)
2005	Cooper Ornithological Society Board of Directors' Student Paper Award
2005	Helen Riaboff Whiteley Center Scholar, UW Friday Harbor Laboratories
2004	Student Poster Award, 6 th Annual CAP LTER Poster Symposium
2003-05	National Science Foundation Integrative Graduate Education & Research Traineeship (IGERT) Fellow in Urban Ecology
2000-03	National Science Foundation Graduate Research Fellowship
2000	Xi Sigma Pi (Forestry Honor Society)
2000	Riffe Family Endowed Fellowship
1999-00	UW Graduate School Fund for Excellence and Innovation Fellowship
1999-00	NASA Space Grant Graduate Fellowship
1991	Phi Beta Kappa; Sigma Xi

INVITED SEMINARS

INVITED	SEMINARS
2016	Climate-driven Phenological Shifts and their Consequences. UW School of Environmental and Forest Sciences seminar, Seattle, WA.
2014	Modeling changes in wildlife habitat and conservation return on investment in the conterminous USA. Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL
2013	Integrated economic and ecological modeling to estimate changes in carbon storage and vertebrate habitats due to projected land-use change in the conterminous U.S.A. Southeast Ecological Science Center, Davie, FL
2012	Crows in the City: behavior, population dynamics and species interactions across the urban gradient. Biology Department, University of Miami, Miami, FL.
2012	Tropical songbird use of forested and non-forested land cover in fragmented landscapes, Fairchild Tropical Botanic Garden, Miami, FL
2010	Vertebrate responses to land-use change on private lands. Conservation Colloquium, University of Washington, Seattle, WA.
2009	Curiosities of Crows: dynamics of an adaptable bird in urbanizing environments. Biology Department, Willamette University, Willamette, OR.
2009	Curiosities of Crows: dynamics of an adaptable bird in urbanizing environments. Biology Department, Pacific University, Forest Grove, OR.
2010 2009	Tropical songbird use of forested and non-forested land cover in fragmented landscapes, Fairchild Tropical Botanic Garden, Miami, FL Vertebrate responses to land-use change on private lands. Conservation Colloquium, University of Washington, Seattle, WA. Curiosities of Crows: dynamics of an adaptable bird in urbanizing environments. Biology Department, Willamette University, Willamette, OR. Curiosities of Crows: dynamics of an adaptable bird in urbanizing

CONFERENCE PRESENTATIONS

2017	Forest Lands, Climate Change and Wildlife. Ecological Society of America annual meeting, August 6-11, Portland, OR.
2015	Identifying the Incremental Impacts of Designating Critical Habitat on Land Cover Change. Ecological Society of America annual meeting, August 9-14, Baltimore, MD.
2014	Mismatches and traps: human impacts on migratory birds at local to continental scales. Early Career Professional Mini-Talk symposium, AOU/COS/SCO annual meeting, September 23-27, Estes Park, CO.
2014	Breeding and migratory landbird responses to hammock size and landscape context in South Florida. AOU/COS/SCO annual meeting, September 23-27, Estes Park, CO.
2012	Integrated economic and ecological modeling to estimate changes in carbon storage and vertebrate habitats due to projected land-use change in the conterminous U.S.A. Ecological Society of America annual meeting, August 5-10, Portland, OR.
2011	Maximizing return on conservation investment in the conterminous U.S. Ecological Society of America annual meeting, August 7-12, Austin, TX.
2011	Within-territory use of different land-cover types by tropical forest songbirds in fragmented landscapes. US-IALE (Landscape Ecology) annual symposium, April 3-7, Portland, OR.
2008	Tropical songbird behavior and movements in human-dominated landscapes. AOU/COS/SCO joint annual meeting, August 4-9, Portland, OR.
2006	Do nest predators influence habitat selection and nest productivity in an urbanizing environment? Soc.for Cons. Biology annual meeting, June 25-28, San Jose, CA.
2005	Modeling dispersal behavior and urban population growth of American Crows in the Seattle area. Cooper Orn. Society annual meeting, June 15-18, Arcata, CA.
2004	Evaluating function of urban forest patches: a three-dimensional approach. Ecological Society of America annual meeting, August 1-6, Portland, OR.
2004	Survival probability of American Crows across a gradient of urbanization. AOU/SCO annual meeting, August 16-21. Quebec City, Canada
2003	As the Crow Flies: demographic consequences of crow movements in wildlands and cities. The Oregon Chapter of The Wildlife Soc., February 2003, Eugene, OR.
2002	Do adolescent crows become young urban crows? Juvenile dispersal of American Crows across a gradient of urbanization Third North American Ornithological Conference, September 24-28, New Orleans, LA.
2001	What does a Christmas Bird Count say about population trends for a mobile species? AOU/SCO annual meeting, August 15-18, Seattle, WA.

DEPARTMENTAL TALKS

2018	Potential Implications of Climate Change Mitigation Policy for Wildlife in the
	Pacific Northwest. TESC Sponsored Research talk, Olympia, WA.

- Bird diversity and habitat relationships in a subtropical urban area. FIU Southeast Environmental Research Center seminar, Miami, FL
- 2010 Tropical songbird use of forested and non-forested land cover in fragmented landscapes. University of Washington, School of Forest Resources, Wildlife Science seminar, Seattle, WA
- Tropical songbird behavior and movements in human-dominated landscapes. Research Seminar, Biology Department, Lewis & Clark, OR.
- Discovering the value of urban ecosystems. Seattle Urban Ecology Symposium, October 2006, Seattle, WA.
- An Experiment in Interdisciplinary Team Teaching. University of Washington Teaching and Learning Symposium, April 2006. Seattle, WA.

OTHER PROFESSIONAL EXPERIENCE

- 2005-11 Instructor, University of Washington, Educational Outreach Program, Seattle, WA
- 1998 Contractor to The Nature Conservancy of Washington, Seattle, WA.
- 1997 Conservation Specialist, The Nature Conservancy, Washington D.C.
- 1997 Avian Research Assistant, Smithsonian Tropical Research Institute, Panama.
- 1994-96 Environmental Education Trainer, U.S. Peace Corps, Panama.
- Bird Banding Intern, Point Reves Bird Observatory, Bolinas, CA.
- 1992-93 Wildlife Biologist, U.S. Bureau of Land Management (North Bend, OR) and U.S. Forest Service (Cloudcroft, NM).

RESEARCH FEATURED IN MEDIA

- 2015 Expert for Oxford Scientific Films, BBC wildlife series including segment on gift-giving crows (filmed in central Florida 12/13/15).
- 'Urban ecologist conducts research for the birds,' profile and summary of research on bird-window collisions, FIU News (11/4/2014) and video (http://youtu.be/ne9-lHSsJUw).
- Editor's Choice in Ecology featured ROI paper, *Science* vol 337 p. 1584 (9/28/12).
- 2012 Biodiversity Bargain, ROI paper featured in *Conservation Magazine* (8/31/12).
- Northwest Cable News, Seattle, WA (story on crow populations aired 8/25/06).
- 2005 KING-TV, Evening Magazine, Seattle (story on crows at UW aired 11/17/05).
- 2005 *In the Company of Crows and Ravens* by J. M. Marzluff and T. Angell (Yale University Press), research featured on pp. 94-107.
- 2005 *The Street-Smart Naturalist* by D. B. Williams (WestWinds Press: Portland, OR), research featured in Chapter 12.

2002	KUOW Radio. Invited studio guest on call-in radio program on crows $(1/18/02)$.
2001	NPR Radio, All Things Considered, program by Sam Eaton (8/5/01).
2001	Rare Encounters with Ordinary Birds by Lyanda Lynn Haupt (Sasquatch Books: Seattle, WA), featured in Chapter 16: Crow Stories.
2001	Why are there so many crows around? Be-caws. Tacoma News Trib. (6/12/01).
2001	KTBW-TV, Public Report on the Environment. Seattle-Tacoma, WA. (9/7/01).
2000	Oregon Public Broadcasting Television, Oregon Field Guide program, Portland.

UNIVERSITY SERVICE

MES Admissions Committee, TESC, 2018.

Search Committee participant, Environmental Social Scientist, TESC, fall 2016.

Education Committee, FIU Department of Biological Sciences, 2014-2016.

FIU GLADES (Ecology, ESA SEEDS-affiliated student club) informal mentor and WINGS (Ornithology student club) faculty advisor, 2013-2016.

Search Committee member, Human Anatomy Instructor, FIU Dept. of Biol. Scis. 2012-2013.

Ecological Society of America Student Section Orientation Event, mentor, August 6, 2012.

University of Washington Postdoctoral Association, 2010-11.

Undergraduate Curriculum Redesign, UW Program on the Environment, 2005-2006.

Workgroup Participant, Curriculum for the Bioregion. 2005. Washington Center for Improving the Quality of Undergraduate Education curricular initiative.

Board Member, College of Forest Resources Graduate Student Association, 2004-2005.

Planning Committee Member, College of Forest Resources, 2000-2001.

REVIEWER

Animal Conservation, Biodiversity & Conservation, Biological Conservation, Conservation Biology, Ecological Applications (guest editor), Frontiers in Ecology & the Environment, Landscape Ecology, Environmental Management, Journal of Landscape and Urb. Planning, Journal of Avian Biology, Journal of Field Ornithology, Journal of Raptor Research, Northwestern Naturalist, Polar Biology, PLoS ONE.

COMMUNITY SERVICE

Vizcaya BioBlitz participating scientist, Vizcaya Museum & Gardens, May 2016, Miami, FL.

Exploring the Environmental Sciences Day Mentor, Fairchild Tropical Botanic Garden, 2012-2016, Miami, FL.

Ornithology expert at Smithsonian Institute's Q?RIUS webcast to Richmond Heights Middle School, December 11, 2014, Miami, FL.

Birds and Color discussion and presentation at South Miami K-8 Center, November 15, 2012, Miami, FL.

- Volunteer Instructor, Balboa Academy (H.S.) field trip, "How tropical songbirds use regenerating forests." October 2007.
- Instructor, Seattle Audubon Society course, "Seattle's Crows". Half-day instruction and field observation course. 2001-2006.
- Volunteer Instructor, Seattle Audubon Society BirdWatch program for high school students. May 2002, January 2005.
- Guest Instructor, Seattle Audubon Society Master Birder Program. March 2004.
- Volunteer Instructor, Wildlife conservation extension course for Washington State Youth Ecological Corps, February 2002.
- Volunteer Instructor, Introduction to Wildlife Biology for Gear Up! on University of Washington campus. Summer 2000.

Foster Program Volunteer, Seattle Animal Shelter Dog Foster Program. 1999-2005.

PROFESSIONAL SOCIETIES

Ecological Society of America International Association of Landscape Ecology Society of Conservation Biology American Ornithologists' Union Cooper Ornithological Society Sigma Xi

LANGUAGES

Spanish