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#### a. Professional Preparation

Denison University, B.A., Environmental Studies, 2000 The Ohio State University, M.S./Ph.D., Natural Resource Management, 2006 The Ohio State University, Post-doc, Department of Horticulture and Crop Science, 2006

### **b.** Appointments

2014 – present	Associate Professor (by courtesy), School of Communication, The Ohio State University
2013 - present	Associate Professor of Risk Analysis and Decision Science, The Ohio State University
2007-2013	Assistant Professor of Risk Analysis and Decision Science, The Ohio State University
2007	Post-Doctoral Research Associate, The Ohio State University
2002-06	Graduate Fellow and Research Assistant, The Ohio State University

### ci. Peer Reviewed Scientific Publications (\*indicates student or post-doc as lead author)

- E. Burnett\*, **R.S. Wilson** and A. Heeren. In press. "Farmer adoption of cover crops in the western Lake Erie basin." *Journal of Soil and Water Conservation*.
- Smith, D.R., **R.S. Wilson**, K.W. King, M. Zwonitzer, J.M. McGrath, R.D. Harmel, R.L. Haney, and L.T. Johnson. 2018. "Lake Erie, phosphorus and microcystin: Is it really the farmer's fault?" *Journal of Soil and Water Conservation*, 73(1): 48-57.
- **R.S. Wilson**. 2017. "Accounting for behavioral responses to environmental cues in complex systems". *Environment Systems & Decisions*. https://doi.org/10.1007/s10669-017-9659-0
- S. McCaffrey, **R.S. Wilson** and A. Konar. 2017. "Should I stay or should I go now? Or should I wait and see? Influences on wildfire evacuation decisions". *Risk Analysis*. http://dx.doi.org/10.1111/risa.12944
- D. Bessette\*, **R.S. Wilson**, and S. Zwickle. 2017. "In the weeds: Distinguishing organic farmers who want information about ecological weed management from those who need it". *Renewable Agriculture and Food Systems*. https://doi.org/10.1017/S1742170518000042
- Weaver, C. P., Moss, R. H., Ebi, K. L., Gleick, P. H., Stern, P. C., Tebaldi, C., **R.S. Wilson** & Arvai, J. L. 2017. "Reframing climate change assessments around risk: recommendations for the US National Climate Assessment". *Environmental Research Letters*, *12*(8), 080201. http://iopscience.iop.org/article/10.1088/1748-9326/aa7494/meta
- E.H. Walpole\*, E. Toman, and **R.S. Wilson**. 2017. "Shared visions, future challenges: a case study of three Collaborative Forest Landscape Restoration Program locations". *Ecology & Society*, 22(2): 35. https://doi.org/10.5751/ES-09248-220235
- A. Singh\*, A. Zwickle, J.T. Bruskotter, and **R.S. Wilson**. 2017. "The perceived psychological distance of climate change impacts and its influence on support for adaptation policy". *Environmental Science and Policy*, 72:93-99.
- J.F. Obrycki\*, N.T. Basta, and **R.S. Wilson**. 2017. "Evaluating public and regulatory acceptance for urban soil management approaches". *Journal of Environmental Quality*, 46(1): 20-26.

- Heeren, A.\*, Karns, G., Bruskotter, J., Toman, E., **Wilson, R.**, & Szarek, H. 2017. "Expert judgment and uncertainty regarding the protection of imperiled species". *Conservation Biology*, *31*(3), 657-665.
- W. Zhang\*, **R.S. Wilson**, E. Burnett, E. Irwin, J. Martin. 2016. "What Motivates Farmers to Apply Phosphorus at the "Right" Time? Survey evidence from the Western Lake Erie Basin." *Journal of Great Lakes Research*, 42(6): 1343-1356.
- Irwin, E., J. Campbell, **R.S. Wilson**, A. Faggian, R. Moore and N. Irwin. 2016. "Human adaptations in food, energy and water systems". *Journal of Environmental Studies and Sciences*, 6(1): 127-139.
- K.A. George\*, K.M. Slagle, **R.S. Wilson**, S.J. Moeller, and J.T. Bruskotter. 2016. "Changes in attitudes toward animals in the United States from 1978 to 2014". *Biological Conservation*, 201: 237-242.
- S. Zwickle\*, **R.S. Wilson**, D. Bessette, C. Herms and D. Doohan. 2016. "Facilitating ecological weed management decisions by assessing risk-benefit tradeoffs." *Agroecology and Sustainable Food Systems*, 40(7): 635-659.
- **Wilson, R.S.**, D.J. Hardisty, R.S. Epanchin-Niell, M.C. Runge, K.L. Cottingham, D.L. Urban, L.A. Maguire, A. Hastings, P.J. Mumby, and D.P. Peters. 2015. "A typology of time-scale mismatches and behavioral interventions to diagnose and solve conservation problems". *Conservation Biology*, 30(1), 42-49.
- Slagle, K.\*, **R.S. Wilson** and A. Heeren. 2015. "Seeking, Thinking, Acting: Understanding suburban resident perceptions and behaviors related to stream quality." *Journal of the American Water Resources Association*, 51(3), 821-832.
- Yocco, V.S.\*, Bruskotter, J.T., **Wilson, R.S.**, & Heimlich, J.E. 2015. "Why Should I Care? Exploring the Use of Environmental Concern as a Frame of Communication in Zoos". *The Journal of Environmental Education*, 46(1), 56-71.
- **Wilson, R.S.**, G. Howard, and E. Burnett. 2014. "Improving nutrient management practices in agriculture: The role of risk-based beliefs in understanding farmers' attitudes toward taking additional action." *Water Resources Research*, 50(8): 6735-6746.
- Hersha, D.K.\* and **R.S. Wilson**. 2014. "What individuals know, do not know, and need to know about watershed health in an urbanizing USA Midwestern city: A mental model approach." *Urban Water Journal*, 11(6): 482-496.
- Jabbour, R.\*, E. Gallandt, S. Zwickle, **R.S. Wilson** and D. Doohan. 2014. "Organic farmer knowledge and perceptions are associated with on-farm weed seedbank densities in northern New England." *Weed Science*, 62(2): 338-349.
- Zwickle, S.\*, **R.S. Wilson** and D. Doohan. 2014. "Identifying the challenges of promoting Ecological Weed Management (EWM) in organic agroecosystems through the lens of behavioral decision making." *Agriculture and Human Values*, 31(3): 355-370.
- Bruskotter, J. and **R.S. Wilson**. 2013. "Determining where the wild things will be: Using psychological theory to find tolerance for large carnivores." *Conservation Letters*, 7(3): 158-165.
- Jabbour, R.\*, E. Gallandt, S. Zwickle, **R.S. Wilson** and D. Doohan. 2013. "Mental models of organic weed management: Comparison of New England U.S. farmer and expert models." *Renewable Agriculture and Food Systems*, 29(4): 319-333.
- Polivka, B.J; R. Chaudry, J.M. Crawford, et al. 2013. "Application and modification of the integrative model for environmental health." *Public Health Nursing*. Vol. 30, no. 2.: 167-176
- Slagle K.M.\*, Zajac R., Bruskotter J.T., **Wilson R.S.**, Prange S. 2013. "Building tolerance for bears: A communications experiment." *Journal of Wildlife Management and Wildlife Monographs*. 77(4): 863-869.

- Zajac, R.\*, J.T. Bruskotter, **R.S. Wilson**, and S. Prange. 2013. Learning to live with large carnivores: A psychological model of black bear acceptance. *Journal of Wildlife Management*. 76: 1331-1340.
- Ascher T.J.\*, **Wilson R.S.**, Toman E. 2012. "The importance of affect and perceived risk in understanding support for fuels management among wildland-urban interface residents." *International Journal of Wildland Fire*. 22(3): 267-276.
- **Wilson R.S.**, Ascher T.J., Toman E. 2012. "The importance of framing for communicating risk and managing forest health." *Journal of Forestry* 110, 337-341.
- Parker, J.\*, **R.S. Wilson**, J. LeJeune, and D. Doohan. 2012. "Including growers in the 'food safety' conversation: Enhancing the design and implementation of food safety programming based on farm and marketing needs of fresh fruit and vegetable producers." *Agriculture and Human Values*. 29(3): 303-319.
- Hersha, D.K., **R.S. Wilson** and A. Baird. 2012. "A conceptual model of the citizen stream stewardship decision process in an urbanizing midwestern United States watershed." *Journal of Environmental Planning and Management*. Vol. 2, no. 55: 253-270.
- Parker, J.\*, **R.S. Wilson**, J. LeJeune, L. Rivers III, and D. Doohan. 2012. "An expert guide to understanding grower decisions related to fresh fruit and vegetable contamination prevention and control." *Food Control*. Vol. 1, no. 26: 107-116.
- Pegues, A.H., D.S. Cohan, A. Digar, C. Douglass, and **R.S. Wilson**. 2012. "Efficacy of recent state implementation plans for 8-hour ozone." *Journal of the Air and Waste Management Association*. Vol. 2, no. 62: 252-261.
- Slagle, K.\*, J.T. Bruskotter, and **R.S. Wilson**. 2012. "The role of affect in public support and opposition to wolf management." *Human Dimensions of Wildlife*. Vol. 1, no. 17: 44-57.
- Hunter, C., C. Jones, N. Strachan, R.S. Wilson, O. Rotariu, D. Chadwick, P. Cross, A.P. Williams, and L.A. McCritchie. 2011. "The relationship between lay and technical understandings of E. coli O157 risk." *Philosophical Transactions of the Royal Society of London B Biological Sciences*. Vol. 1573, no. 366: 1999-2009.
- Syal, S.\*, **R.S. Wilson**, J. Crawford and J. Lutz. 2011. "Climate change and human health: What influences the adoption of adaptation programs in the United States public health system?." *Mitigation and Adaptation Strategies for Global Change*. Vol. 8, no. 16: 911-924.
- Doohan, D., **R.S. Wilson**, E. Canales, and J. Parker. 2010. "Investigating the human dimension of weed management: New tools of the trade." *Weed Science*, no. 58: 503-510.
- **Wilson, R.S.** and J.L. Arvai. 2010. "Why less is more: Exploring affect-based value neglect." *Journal of Risk Research*. Vol. 4, no. 13: 399-409.
- **Wilson, R.S.**, P.L. Winter, L.A. Maguire, T.J. Ascher. 2010. "Managing wildfire events: Risk-based decision making among a group of federal fire managers." *Risk Analysis*. Vol. 5, no. 31: 805-818.
- Cattaneo, A.A.\*, **R.S. Wilson**, D. Doohan, and J.T. LeJeune. 2009. "Bovine veterinarians' knowledge, beliefs, and practices regarding antibiotic resistance on Ohio dairy farms." *Journal of Dairy Science*. Vol. 92: 3494-3502.
- **Wilson, R.S.**, N. Hooker, M. Tucker, J. LeJeune, and D. Doohan. 2009. "Targeting the farmer decision making process: A pathway to increased adoption of integrated weed management." *Crop Protection*. Vol. 28: 756-764.
- **Wilson, R.S.**, J. Parker, D. Kovacs, D. Doohan, and J. LeJeune. 2009. "Contamination prevention and response related to fresh and fresh-cut produce: An expert perspective on the farmer decision making process." *Food Protection Trends*. Vol. 29, no. 8: 488-492.
- Wilson, R.S., D.M. Hix, P.C. Goebel, and R.G. Corace III. 2009. "Identifying land manager objectives

- and alternatives for mixed-pine forest ecosystem management and restoration in eastern Upper Michigan." *Ecological Restoration*. Vol. 27, no. 4: 407-416.
- **Wilson, R.S.** and J.T. Bruskotter. 2009. "Assessing the impact of decision frame and existing attitudes on support for wolf restoration in the United States." *Human Dimensions of Wildlife*. Vol. 14, no. 5: 353-365.
- Gore, M.L., **R.S. Wilson**, W.F. Siemer, H. Wieczorek-Hudenko, C.E. Clarke, P.S. Hart, L.A. Maguire and B.A. Muter. 2009. "Application of risk concepts to wildlife management: Special issue introduction." *Human Dimensions of Wildlife*. Vol. 14, no. 5: 301-313.
- **Wilson, R.S.**, M.A. Tucker, N.H. Hooker, J.T. LeJeune, and D. Doohan. 2008. "Perceptions and beliefs about weed management: Perspectives of Ohio grain and produce farmers." *Weed Technology*. Vol. 22: 339-350.
- **Wilson, R.S.**, J.L. Arvai, and H.R. Arkes. 2008. "My loss is your loss...sometimes: Loss aversion and the effect of motivational biases." *Risk Analysis*. Vol. 28, no. 4: 929-938.
- **Wilson, R.S.** 2008. "Balancing emotion and cognition: A case for decision aiding in conservation efforts." *Conservation Biology*. Vol. 22: 1452-1460.
- **Wilson, R.S.** and J.L. Arvai. 2006. "When less is more: How affect influences preferences when comparing low and high-risk options." *Journal of Risk Research*. Vol. 9, no. 2: 165-178.
- **Wilson, R.S.** and J.L. Arvai. 2006. "Evaluating the quality of structured environmental management decisions." *Environmental Science & Technology*. Vol. 40, no. 16: 4831-4837.

## cii. Book Chapters

- V. Campbell-Arvai, D. Bessette, **R.S. Wilson** and J. Arvai. 2018. Decision-making about the Environment. In *The Sage Handbook of Nat*ure, Volume 2. Edited by Terry Marsden. Thousand Oaks, CA: Sage.
- **R.S. Wilson**, E. Toman and S. McCaffrey. 2017. "Wildfire communication and climate risk mitigation". In *Oxford Research Encyclopedia of Climate Science*. New York, NY: Oxford University Press. 31 p. https://doi.org/ 10.1093/acrefore/9780190228620.013.570
- Zwickle, A.\* and **R.S. Wilson**. 2012. "Construing Risk." In *Risk Communication Research and Practice*. Edited by J. Arvai and L. Rivers. New York: Routledge.
- Singh A.\*, **R.S. Wilson**, J. Bruskotter, J. Brooks, A. Zwickle, and E. Toman. 2012. "The human dimensions of environmental degradation and ecosystem services: Understanding and solving the commons dilemma." In *Carbon Sequestration and Ecosystem Services*. Edited by R. Lal. New York: Springer.
- J.T. Bruskotter, G.E. Hitzhusen, **Wilson, R.S.**, and A. Zwickle. 2012. "Understanding student environmental interests when designing multidisciplinary curriculum." In *Taking it to the next level: Strategies for adaptation across the sustainability curriculum*. Edited by L.F. Johnston. Winston-Salem: Wake Forest University.

### ciii. Technical Reports and Extension Publications

- K. Fussell, G. Hesse, L. Johnson, K. King, G. LaBarge, J. Martin, J. Reutter, **R. Wilson**, and C. Winslow. 2017. *Summary of findings and strategies to move toward a 40% phosphorus reduction*. Columbus, OH: The Ohio State University.
- **Wilson, R.S.**, Walpole, E., Carros, O.R., and Walpole, H. 2017. *Meeting in the Middle: Engaging the Next Wave of Cover Crop Adopters*. Columbus, OH: The Ohio State University, School of Environment and Natural Resources.

- Prokup, A.\*, **Wilson, R.S.**, Zubko, C., Heeren, A, and Roe, B. 2017. *4R Nutrient Stewardship in the Western Lake Erie Basin*. Columbus, OH: The Ohio State University, School of Environment & Natural Resources.
- National Academies of Sciences, Engineering, and Medicine (NAS). 2016. "Characterizing Risk in *Climate Change Assessments: Summary of A Workshop for the U.S. Global Change Research Program.*" [J.L. Arvai, K.L. Ebi, B. Fischhoff, P. Gleick, A. Hoffman, R.H. Moss, C. Tebaldi, C.P. Weaver, and **R.S. Wilson**, Planning Committee]. The National Academies Press, Washington, DC. doi: 10.17226/23569.
- Burnett, E.A.\*, **R. S. Wilson**, B. Roe, G. Howard, E. Irwin, W. Zhang, and J. Martin. 2015. *Farmers, phosphorus and water quality: Part II. A descriptive report of beliefs, attitudes and best management practices in the Maumee Watershed of the western Lake Erie Basin*. Columbus, OH: The Ohio State University, School of Environment & Natural Resources.
- Wilson, R.S., L. Burnett, T. Ritter, B. Roe and G. Howard. 2013. Farmers, phosphorus and water quality: A descriptive report of beliefs, attitudes and practices in the Maumee Watershed of northwest Ohio. Columbus, OH: The Ohio State University, School of Environment & Natural Resources.
- Zwickle, S.\*, **R.S. Wilson**, P. Lillard, and D. Doohan. 2012. *Organic weed management in Ohio and Indiana: A report on the knowledge, perceptions, and experiences of farmers and experts*. Columbus, OH: The Ohio State University, School of Environment & Natural Resources.
- Zwickle, A.\*, Ascher, T., J. Bennett, J. Bruskotter, J. Ferry, S. Fluke, D. Gupta, J. Heywood, T. Koontz,
  L. Majidzadeh, A. Rhodebeck, T. Ritter, A. Singh, D. Singh, J. Sherry, K. Slagle, P. Thompson, E.
  Toman, R. Wilson, R. Zajac, and S. Zwickle. *Environment in the Curriculum: A 2010 Survey of OSU Students*. Columbus: The Ohio State University.
- **Wilson, R.S.** and J.L. Arvai. 2011. *Structured decision making: Using decision research to improve stakeholder participation and results*. Edited by R. Cooper and J. Cone. Corvallis: Oregon Sea Grant. http://seagrant.oregonstate.edu/sgpubs/onlinepubs.html.
- Wilson, R.S., P.L. Winter, L. Maguire, T. Ascher. 2010. *Responding to wildfire events: Influences in fire manager decision-making*. Tucson: Wildland Fire Lessons Learned Center. http://www.wildfirelessons.net/Additional.aspx?Page=309.
- Winter, P.L. and **R.S. Wilson**. 2009. *Wildfire management and decision making*. no. 69. Riverside: USDA Forest Service Pacific Southwest Research Station. Report No. RWU-4902. http://www.fs.fed.us/psw/programs/recreation/update/u\_nov2009.shtml#article1.
- Rivers, L., **R.S. Wilson**, and J.L. Arvai. 2008. *More than just a message: Risk communication and the decision making process*. Edited by D.J. Chavez, J.D. Absher, and P.L. Winter. Albany: US Department of Agriculture Forest Service, Pacific Southwest Research Station. Report No. PSW-GTR-209.
- Arvai, J., **R.S. Wilson**, L. Rivers, A. Froschauer. 2004. *Environmental risk communication: A review and annotated bibliography*. Albany: USDA Forest Service and Decision Research.

# civ. Popular Press Articles and Research Coverage

- M. Reese. "Hot and Cold on the Paris Accord". Ohio Country Journal Podcast. http://ocj.com/2017/06/ohio-ag-net-podcast-episode-13-hot-cold-on-the-paris-accord-helping-young-farmers-succeed/
- K. Holzapple. "Trump on Earth podcast". Meet the scientist standing up to Scott Pruitt. https://www.npr.org/podcasts/512656404/trump-on-earth
- C. Roth. WOSU. Ohio State scientist joins lawsuit against EPA over advisory board.

- http://radio.wosu.org/post/ohio-state-scientist-joins-lawsuit-against-epa-over-advisory-board#stream/0
- T. Henry. Agricultural practices key to Lake Erie algae problem. The Toledo Blade. http://www.toledoblade.com/local/2017/08/17/Science-writers-workshop-kicks-off.html
- H. Northey. Pruitt forced her out. Now she's suing. E&E News. https://www.eenews.net/stories/1060071443
- S. Kaplan and B. Dennis. In 'defense of science', researchers sue EPA over move to overhaul advisory boards. Washington Post. https://www.washingtonpost.com/news/speaking-of-science/wp/2017/12/21/in-defense-of-science-researchers-sue-epa-over-move-to-overhaul-advisory-boards/?utm\_term=.2055b9d37f5a
- B. Dennis and J. Eilperin. Scott Pruitt blocks scientists with EPA funding from serving as agency advisers. https://www.washingtonpost.com/national/health-science/scott-pruitt-blocks-scientists-with-epa-funding-from-serving-as-agency-advisers/2017/10/31/959d91ac-be5a-11e7-959c-fe2b598d8c00\_story.html?utm\_term=.6b86471bd7b0
- B. Dennis and J. Eilperin. 'Mr. Pruitt is welcome to officially fire me' as EPA carries out controversial policy one scientist balks. Washington Post. https://www.washingtonpost.com/news/energy-environment/wp/2017/11/10/epa-extends-controversial-conflict-of-interest-policy-to-nearly-two-dozen-advisory-boards/?utm\_term=.02f4bfcfb449
- M. Renault. Ohio State associate professor among scientists pushing back against EPA ban. Columbus Dispatch.
- S. Cartwright. OSU State professors question merits, prominence of politics within EPA. The Lantern. <a href="https://www.thelantern.com/2018/01/ohio-state-professors-question-merits-prominence-of-politics-within-epa/">https://www.thelantern.com/2018/01/ohio-state-professors-question-merits-prominence-of-politics-within-epa/</a>
- R. Twigg. Ohio State researcher defies EPA advisory board policy, refuses to resign. https://www.thelantern.com/2017/11/ohio-state-researcher-defies-epa-advisory-board-policy-refuses-to-resign/
- R. Twigg. Ohio state professor sues EPA after it enacts a "blatant attack on science-informed policy". https://www.thelantern.com/2018/01/ohio-state-professor-sues-epa-after-it-enacts-a-blatant-attack-on-science-informed-policy/
- J.T. Bruskotter, J.A. Vucetich, and R.S. Wilson. 2016. "Of bears and biases: Scientific judgment and the fate of Yellowstone's grizzlies". *The Conversation*. Also featured in The Huffington Post and The Wildlife Society Daily Brief. Retrieved from: <a href="http://theconversation.com/of-bears-and-biases-scientific-judgment-and-the-fate-of-yellowstones-grizzlies-59570">http://theconversation.com/of-bears-and-biases-scientific-judgment-and-the-fate-of-yellowstones-grizzlies-59570</a>
- J. Arvai. 2016. "Psychology can help us understand why people will vote for a candidate who appears less qualified." *Policy Options*. Retrieved from: <a href="http://policyoptions.irpp.org/magazines/november-2016/do-people-vote-with-their-hearts-or-their-minds/">http://policyoptions.irpp.org/magazines/november-2016/do-people-vote-with-their-hearts-or-their-minds/</a>
- M. Renault. 2016. "Ohio State researchers team up to fight algae blooms." *Columbus Dispatch*. Retrieved from: <a href="http://www.dispatch.com/content/stories/local/2016/12/18/ohio-state-researchers-team-up-to-fight-algae-blooms.html">http://www.dispatch.com/content/stories/local/2016/12/18/ohio-state-researchers-team-up-to-fight-algae-blooms.html</a>
- T. Henry. 2016. "Scientists tie climate change to extreme global events." *Toledo Blade*. Retrieved from: <a href="http://www.toledoblade.com/World/2016/12/16/Scientists-tie-climate-change-to-extreme-global-events.html">http://www.toledoblade.com/World/2016/12/16/Scientists-tie-climate-change-to-extreme-global-events.html</a>
- K. Brulliard. 2016. "Americans love animals more than they used to even 'scary' ones." *Washington Post*. Retrieved from: https://www.washingtonpost.com/news/animalia/wp/2016/09/20/americanslove-animals-more-than-they-used-to-even-scary-ones/?utm\_term=.20d7982f07ea

- E. Bolstad. 2016. "How to talk global warming in plain English." *Scientific American*. Retrieved from: https://www.scientificamerican.com/article/how-to-talk-global-warming-in-plain-english/
- **<u>cv. Publications Under Review</u>** (\*indicates student or post-doc as lead author)
- **R.S. Wilson**. In revision. "Using models of farmer behavior to inform eutrophication policy in the Great Lakes". Submitted to: *Water Research*.
- J.F. Obrycki\*, **R.S. Wilson**, and N.T. Basta. In revision. "Expert and public perspectives of sediment beneficial reuse in the Cleveland, OH area". Submitted to: *Journal of Great Lakes Research*.
- D.L. Bessette\*, **R.S. Wilson**, and J.L. Arvai. In revision. "Do people disagree with themselves? On the internal consistency of everyday and complex decisions." Submitted to: *Risk Analysis*.
- K. Slagle\*, J.T. Bruskotter, **R.S. Wilson** and E. Toman. In revision. "The symbolic wolf: A construal level theory analysis of the perceptions of wolves in the United States". Submitted to: *Society & Natural Resources*. 2017.
- J. Bruskotter, J. Vucetich, K. Slagle, R. Berardo, A. Singh, and **R.S. Wilson**. In review. "United States residents' support for the U.S. Endangered Species Act over time and space". Submitted to: *Conservation Letters*.
- A.S. Singh\*, A. Zwickle, **R.S. Wilson**, and J.T. Bruskotter. In review. "Climate change mitigation policy and temporal distance: An examination of support for municipal level approaches to reducing greenhouse gas emissions". Submitted to: *Environmental Science and Policy*.
- L.R. Gerber, M.C. Runge, R.F. Maloney, C.A. Drew, G.D. Iacona, S. Avery-Gomm, J. Brazil-Boast, R. Epanchin-Niell, L.A. Maguire, L. Rumpff, H. Possingham, T. Male, K.C.B. Weiss, and **R.S. Wilson**. In review. "Explicit resource allocation promotes recovery under the Endangered Species Act". Submitted to: *Science (Policy Forum)*.
- **R.S. Wilson**, A. Zwickle and H. Walpole. In review. "Developing a broadly applicable measure of risk perception". Submitted to: *Risk Analysis*.
- K.A. George\*, S.J. Moeller, **R.S. Wilson** and J.T. Bruskotter. In review. "Understanding concern for animal welfare: An empirical investigation". Submitted to: *Journal of Animal Welfare*.
- H. Walpole, **R.S. Wilson** and S. McCaffrey. In review. "If you love it, let it go: The role of home attachment in delaying evacuation decision making." Submitted to: *Environment, Systems and Decisions*.
- A. Heeren, **R.S. Wilson**, E. Toman and J. Martin. In review. "Preventing nutrient runoff through farmer adoption of best management practices: An application of the Theory of Planned Behavior". Submitted to: *Water Resources Research*.

# **<u>civ.</u>** Scholarly Presentations (last 3 years) (\*indicates student or post-doc as presenter)

- R.S. Wilson and P. Stern. 2017. "Characterizing risks in climate change assessments: Key takeaways from a National Academies workshop for the US Global Change Research Program". Invited presenter at the National Climate Assessment Authors Meeting, Washington, DC, United States.
- R.S. Wilson. 2017. "Farmer decision making". Invited presenter at the Ohio Ecological Food and Farming Association Brownbag, Columbus, OH, United States.
- R.S. Wilson. 2017. "Best management practices and the efficacy gap". Invited presenter at the BMPs for P Losses from Cropland: State of Science Conference, Tiffin, OH, United States.
- R.S. Wilson. 2017. "Farmers, nutrients, and water quality: Possible future and the efficacy gap". Invited presenter at the Consumer Science Seminar Series, Columbus, OH, United States.

- R.S. Wilson. 2017. "Current trends in farmer decision making." Invited presenter at the Greene County Soil and Water Conservation District Field Day, Xenia, OH, United States.
- R.S. Wilson. 2017. "Research findings: Interest in 4R Nutrient Stewardship and Certification." Invited presenter at the 4R Tech Review Day, London, OH, United States.
- R.S. Wilson. 2017. "Western Lake Erie basin farmer survey". Invited presenter at the 4R Summit, Minneapolis, MN, United States.
- R.S. Wilson. 2017. "Reducing phosphorus loading to Lake Erie: Understanding farmer behavior". Invited presenter at the Ohio Sea Grant Science Writers Event, Put-In-Bay, OH, United States.
- R.S. Wilson, W. Zhang, E. Irwin, N. Aloysius, and J. Martin. 2017. "The role of farmer efficacy in improving water quality." Presented at the International Association for Great Lakes Research Annual Meeting, Detroi, MI, United States.
- R.S. Wilson. 2017. "Reducing phosphorus loading to Lake Erie: Closing the efficacy gap among future adopters." Presented at the Soil and Water Conservation Society Annual Conference, Madison, WI, United States.
- R.S. Wilson, A. Zwickle, H. Walpole. 2017. "Measuring risk perception: Is there a right way"? Presented at the Society for Risk Analysis Annual Meeting, Crystal City, VA, United States.
- H. Walpole\* and R.S. Wilson. 2017. "Fighting risk with risk: An exploration of attitudes toward interdomain risk tradeoffs." Presented at the Society for Risk Analysis Annual Meeting, Crystal City, VA, United States.
- E. Walpole\* and R.S. Wilson. 2017. "The effects of construal level on perceptions of climate-exacerbated hazards". Presented at the Society for Risk Analysis Annual Meeting, Crystal City, VA, United States.
- R.S. Wilson, A. Zwickle, H. Walpole. 2017. "Measuring risk perception: What is the best way?" Presented at the Society for Risk Analysis Europe Annual Meeting, Lisbon, Portugal, Europe.
- R.S. Wilson. 2017. "The role of risk communication in integrated systems research". Invited presenter at the Mallorca Risk Communication Workshop, Mallorca, Spain, United States.
- R.S. Wilson. 2017. "Using models of farmer behavior to inform water quality policy in the Great Lakes." Invited presenter at the Byrd Polar Climate Research Center seminar series, Columbus, OH, United States.
- J. Bielicki. 2017. "Deglobalization and Its Discontents in Interconnected Regional Food, Energy, and Water Systems". Presented at the American Geophysical Union Meeting, New Orleans, LA, United States.
- K. George\*, K. Slagle, R.S. Wilson, S. Moeller, and J.T. Bruskotter. 2017. "Changes in American attitudes toward animals?" Presented at the Pathways Meeting, Estes Park, CO, United States.
- R.S. Wilson. 2016. "Modeling the effectiveness of outreach as a risk management tool". Presented at the Society for Risk Analysis Annual Meeting, San Diego, California, United States.
- D. Bessette\*, R.S. Wilson and C. Beaudrie. 2016. "Structured decision support for organic farmers: Lowering barriers, clarifying trade-offs and linking risk management strategy performance to farmers' values". Presented at the Society for Risk Analysis Annual Meeting, San Diego, California, United States.
- R.S. Wilson. 2016. "Farmer BMP adoption: Possible futures and the efficacy gap". Presented at Understanding HABs: State of the Science Conference, Toledo, Ohio, United States.
- R.S. Wilson. 2016. Invited Panelist for panel discussion on "U.S. public opinion about nuclear energy: Current attitudes and key predictors". University of Michigan Energy Symposium on Combating

- climate change: The role of nuclear power. Ann Arbor, MI, United States.
- R.S. Wilson. 2016. "Identifying the right "fix" for more sustainable behavior." Invited speaker at COMPAS Spring Conference on Realizing Sustainability. Columbus, OH, United States.
- R.S. Wilson. 2016. "What motivates farmers to apply phosphorus at the "right" time? Survey evidence from the western Lake Erie basin." Presented at the Stone Lab Guest Lecture Series, Put-in-Bay, Ohio, United States.
- R.S. Wilson. 2016. "Framing climate change risks to enhance effective communications". Invited talk at the National Academies of Sciences workshop for the U.S. Global Change Research Program on methods for characterizing risk in climate change assessments, Washington, D.C., United States.
- R.S. Wilson. 2016. "Designing environmental policy that works: Accounting for the role of human behavior". Invited seminar at the University of Nebraska-Lincoln.
- R.S. Wilson. 2016. "Community-based social marketing: Best practices." Presented at the Franklin County Soil and Water Conservation District Public Education Outreach and Involvement Workshop. Columbus, Ohio, United States.
- J. Martin, N. Aloysius, G. Howard, M. Kalcic, R.S. Wilson, D. Scavia, and B. Roe. 2016. "Reducing Lake Erie's harmful algal blooms: Projection and adoption of management plans." Presented at the American Geophysical Union Annual Meeting. San Francisco, CA, United States.
- J. Bruskotter, A. Heeren, H. Szarek, E. Toman, R. Wilson. 2016. "Expert judgment under uncertainty: Listing the greater yellowstone grizzly bears under the Endangered Species Act." Presented at the International Symposium on Society and Resource Management, Houghton, MI, United States.
- J. Bruskotter, K. George, K. Slagle, and R. Wilson. 2016. "Americans' attitudes toward predators and predator control." Presented at the North American Congress for Conservation Biology, Madison, WI, United States.
- J.T. Bruskotter, A. Heeren, G. Karns, E. Toman, H. Szarek, and R. Wilson. 2016. "Factors influencing expert's judgments concerning the appropriate status of grizzly bears under the Endangered Species Act." Presented at The Wildlife Society Annual Conference, Raleigh, North Carolina, United States.
- A. Heeren\*, E. Toman, R.S. Wilson and J. Martin. 2016. "Nutrient application and algal blooms: Farmer decisions regarding the use of best management practices in Lake Erie's Maumee river watershed." Presented at the American Geophysical Union Annual Meeting. San Francisco, CA, United States.
- K. Slagle\*, J. Bruskotter, and R. Wilson. 2016. "Psychological drivers of public tolerance for large carnivore conservation in the U.S." Presented at the North American Congress for Conservation Biology, Madison, WI, United States.
- H. Walpole\* and R.S. Wilson. 2015. "Risk attitudes and perceptions in household evacuation decision-making in wildfire." Presented at Society for Risk Analysis Annual Meeting, Washington, D.C., United States.
- R.S. Wilson and A. Konar. 2015. "Wildland fire manager choices: Addressing short-term risk aversion and intertemporal tradeoffs." Presented at Society for Risk Analysis Annual Meeting, Washington, D.C., United States.
- A. Heeren\*, E. Toman, R. Wilson, E. Burnett, and J. Martin. 2015. "Slime, sludge and society: How social science research can address Lake Erie's algal blooms." Presented at International Association for Great Lakes Research Annual Conference.
- R.S. Wilson and S. McCaffrey. 2015. "Do I stay or do I go? The role of risk tolerance in evacuation decisions during a wildfire event." Presented at 4th Human Dimensions of Wildland Fire. Boise, Idaho, United States.

- R.S. Wilson. 2015. "Using survey data in the Maumee watershed to improve water quality." Presented at Conservation Tillage Conference. Ada, Ohio, United States.
- R.S. Wilson. 2015. "Evaluating sustainability innovations within the human context." Keynote Address presented at US Environmental Sustainability Fellowship Forum. Pittsburgh, Pennsylvania, United States.

#### d. Grants

- 2018-2020. Building a sustainable and resilient agroecosystem through an understanding of climate and farmer behavioral variability. National Institutes of Food and Agriculture. (\$1,199,396). Principal Investigator.
- 2017-2018. Investigating and quantifying household food-energy-water footprints (FEWprints). SRE Seed grant program. (\$50,000). Co-Investigator.
- 2017-2019. Researching Effectiveness of Agricultural Programs (REAP). US EPA Great Lakes Restoration Initiative. (\$750,000). Co-Principal investigator.
- 2017-2020. INFEWS: Integrated Modeling of Regional Food, Energy and Water Systems. NSF FEWS. (\$2,995,000). Co-Principal investigator.
- 2017-2019. SESYNC Pursuits Proposal: Risk Perception in Provision of Aquatic Ecosystem Services. Socio-Ecological Synthesis Center (SESYNC) Pursuits Program. Co-Principal investigator.
- 2017- 2022. Reducing Embodied-energy and Decreasing Emissions (REMADE) Institute. Department of Energy National Network for Manufacturing Innovation. (\$70,000,000). Collaborator.
- 2016-2017. Energy transitions and bridges: Does what we emphasize take us where we want to be? Sustainable and Resilient Economy (SRE) Seed Grant Program. (\$42,000). Co-investigator.
- 2016-2019. Meeting the Middle: Developing and Implementing Outreach Strategies to Engage Middle and Late Adopter Farmers on Cover Crops. National Wildlife Federation (via Great Lakes Protection Fund). (\$59,983). Research Contract.
- 2016-2018. Quantifying and predicting the effects of ecological weed management strategies on organic agroecosystems to inform farmer decision making. National Institute of Food & Agriculture. (\$498,658). Principal investigator.
- 2016-2018. Wildland fire managers' use of fire weather data in strategic and tactical decision making across the United States: a combined fire modeling and social science-based analysis. The Joint Fire Sciences Program. (\$398.984). Co-investigator.
- 2014-2019. Evaluating the 4R nutrient stewardship concept and certification program assessment in the Western Lake Erie Basin. International Plant Nutrient Institute. (\$1,497,744). Co-investigator.
- 2014-2015. Cost benefit analysis of the 4R nutrient stewardship certification program in the Western Lake Erie Basin. The Nature Conservancy. (\$100,000). Co-investigator.
- 2011 2016. CNH: Co evolution of upstream human behavior and downstream ecosystem services in a changing climate. National Science Foundation Coupled Human and Natural Systems. (\$1,499,995.00) Co-Principal Investigator.
- 2014 -2015. Integrating One Health and Coupled Systems approaches to target rabies risk mitigation efforts among high-risk youth populations in northern Gondar, Ethiopia. The Behavioral Decision Making Initiative. (\$1,900). Co-investigator (with PhD student).
- 2013 OSU-Ethiopia Outreach and Needs Assessment on Rabies Elimination: 'One Health' Prototype for Zoonotic Diseases Control. The Ohio State University Outreach Engagement Grant. (\$30,000.00). Collaborator.

- 2008 2013. Designing effective land management policies for the 21st century Ohio River Basin: Managing the carbon and nutrient cycles to maintain and restore water quantity and quality. The Ohio State University Climate Water and Carbon Targeted Investment in Excellence. (\$1,299,911.00) Principal Investigator.
- 2011 2013. Understanding the role of risk perception and risk attitudes in shaping public response during a wildfire. USDA Forest Service. (\$25,657.00) Principal Investigator.
- 2012 2013. Doctoral Dissertation Research in DRMS: Integrating construal level theory into risk communication. National Science Foundation Decision, Risk and Management Science. (\$11,108.00) Principal Investigator.
- 2008 2012. Designing watershed-based education and extension efforts through a mental models research approach. USDA Cooperative State Research Education & Extension Service National Integrated Water Quality Program. (\$390,000.00) Principal Investigator.
- 2008 2009. Assessing the impact of positive and negative outcomes on the acceptability of wildfire management strategies among USFS personnel. USDA Forest Service. (\$39,377.00) Principal Investigator.
- 2011 2014. Restoring landscapes in the context of environmental change: a mental models analysis. USDA Forest Service. (\$92,837.00) Co-Principal Investigator.
- 2009 2013. Mental models and participatory research to redesign extension programming for organic weed management. US Department of Agriculture Cooperative State Research, Education and Extension Service Organic Agriculture Research and Extension Initiative. (\$2,252,008.00) Co-Principal Investigator.
- 2010 2012. Fire-science network and delivery system for fire-dependent ecosystems of the northern Lake States. US Fish and Wildlife Service Joint Fire Sciences Program. (\$397,827.00) Co-Principal Investigator.
- 2007 2011. Minimizing microbial food safety hazards of fresh and fresh-cut fruits and vegetables. US Department of Agriculture Cooperative State Research, Education and Extension Service National Integrated Food Safety Initiative. (\$2,500,000.00) Co-Principal Investigator.
- 2009 2011. Fuel treatments in mixed-pine forests in the Great Lakes Region: A comprehensive guide to planning and implementation. US Fish and Wildlife Service Joint Fire Sciences Program. (\$151,363.00) Co-Principal Investigator.
- 2010 2010. Building environmental public health literacy with an urban community: A pilot study. OSU Center for Clinical and Translational Science Community Engagement in Health-related Research Program. (\$29,994.00) Co-Principal Investigator.
- 2008 2010. Engaging the public health system in reducing the societal carbon footprint. The Ohio State University Climate Water Carbon and Public Health Preparedness and Infectious Disease Targeted Investments in Excellence Programs. (\$100,000.00) Co-Principal Investigator.
- 2009 2010. Developing a fire science network and delivery system for the northern Lake States. US Fish and Wildlife Service Joint Fire Sciences Program. (\$20,079.00) Co-Principal Investigator.
- 2005 2008. Restoration-based fuel reduction recommendations for mixed-pine forests of upper Michigan. US Fish and Wildlife Service Joint Fire Sciences Program. (\$299,411.00) Co-Principal Investigator.
- 2005 2006. Doctoral Dissertation Research in Decision Risk and Management Science: Revisiting prospect theory under conditions of chronic loss and the attribution of value. National Science Foundation. (\$19,000.00) Co-investigator.

### e. Synergistic Activities

- i. **Reviewer**: Reviewer for both disciplinary (e.g., Journal of Risk Research; Risk Analysis; Environment & Behavior; Environmental Communication) and interdisciplinary journal outlets (e.g., Proceedings of the National Academy of Sciences; Environmental Research Letters; Plos One; Water Resources Research; Climatic Change), as well as competitive grants programs (e.g., National Science Foundation).
- ii. Member: National Academies Board on Environmental Change and Society; National Socio-Ecological Synthesis Center Foundations Group on Water, Risk, Policy; National Socio-Ecological Synthesis Center Group on Decision Support for Recovery Planning under the ESA; Society for Risk Analysis Risk Communication Specialty Group (past Chair); Society for Risk Analysis Communications Committee (past Councilor); Environment, Systems & Decisions Editorial Board.
- iii. University and Community Service: Unit: Member of the Promotion and Tenure Oversight Committee, Regular presenter at undergraduate recruitment events, Panelist at the EPN Environmental Film Series. College: Member of the FAES Environmental Fellowship Selection Committee. University: Member of the Sustainable and Resilient Economy Program Leadership Team, SRE Mentor to two SRE faculty, Speaker at the Defend our Future Science Policy Press Conference.
- iv. Undergraduate and Graduate Education: Instructor of graduate and undergraduate courses on decision making and risk communication related to the environment (The Psychology of Environmental Problems; Communicating Environmental Risk; and Environment, Risk and Decision Making). Regular guest lecturer in courses across campus (namely Psychology, City and Regional Planning, Public Health and Business). Advisor for ~15 Environmental Policy and Decision Making undergraduate majors per year, committee member on ~40 graduate research committees within and outside the University.
- v. Awards and Recognition: Chauncey Starr Young Risk Analyst Award, Society for Risk Analysis (2017). Science Defender, Union of Concerned Scientists (2017). CFAES Leadership Program (2017), Award for Extraordinary Efforts in Mentoring, 26th Annual Faculty and Staff Recognition Reception for Mortar Board Senior Honor Society and Sphinx Senior Class Honorary (2015). Best Reviewer Award, Risk Analysis Journal, Society for Risk Analysis (2015). OARDC Multidisciplinary Team Research Award, Ohio Agricultural Research and Development Center, The Ohio State University (2013).

### f<sub>i</sub>. Post-doctoral Advising

- 2018 present. Mary Doidge. Farmer behavior at the food-energy-water nexus.
- 2016 2017. Douglas Bessette. Decision support in organic agriculture for weed management.
- 2008 2011. Deborah Hersha. Perceptions of local water quality in an urbanizing watershed.

#### f<sub>ii</sub>. Doctoral Advising

- 2017 present. Emily Walpole. Climate adaptation decisions and natural hazards.
- 2017 present. Maggie Beetstra. Farmer decision making and water quality.
- 2017 present. Claire Rapp. Wildfire decision making.
- 2016 present. Hugh Walpole. Risk tradeoffs and perception development.
- 2011 2016. Kristina Slagle. Developing a model of public support for carnivore conservation.
- 2009 2014. Adam Zwickle. Integrating construal level theory and risk communication.

# fiii. Masters Advising

- 2014 2016. Hugh Walpole (MS). Household evacuation decisions during a wildfire event.
- 2014 2015. Brooke Roman (MENR). Campus sustainability behavior.
- 2012 2014. Elizabeth Burnett (MS). Farmer behavior, nutrient management and water quality.
- 2010 2012. Tara Ritter (MS). Developing a model of farmer nutrient management behavior. Current position: Climate and agriculture specialist at the Institute for Agriculture and Trade Policy.
- 2010 2011. Sarah Zwickle (MS). Understanding weeds and organic weed management: A mental models approach. Current position: Research Assistant on my federally funded organic ag project.
- 2010 2011. Gina Hnytka (MENR). Social risk perceptions, attitudes, and farmer integrated weed management decisions: An analysis. Current position: Undergraduate Program Coordinator in the Department of Agricultural, Environmental and Development Economics.
- 2009 2011. Josh Ferry (MS). Phosphorus Management in the Agroecosystem: A mental models analysis of knowledge and perceived risk. Current Position: Environmental Scientist 1/Risk Assessor for Arcadis U.S., Inc..
- 2008 2010. Timothy Ascher (MS). Factors influencing support for prescribed burning and mechanical thinning among wildland-urban interface residents in the Lake Tahoe Basin. Current Position: Owner of small business and arborist in Columbus, OH.
- 2008 2010. Kristina Slagle (MS). Hispanics and parks: Managing for human diversity. Current Position: Ph.D. Student.

# fiv. Honors Advising

- 2017 present. Emma Tippett. Behavioral spillover in health and environmental contexts.
- 2015 present. Olivia Carros. Promoting cover crop adoption to improve water quality in agricultural landscapes. Recipient of Honors Proposal Scholarship & Honors and Scholars Enrichment Grant.
- 2013 2015. Katherine Connolly. Modeling climate mitigation behavior. Recipient of Honors Proposal Scholarship.
- 2013 2015. Miranda McClendon. Climate change communication.
- 2013 2014. Karam Sheban. Understanding environmental behaviors: A modification of value-beliefnorm theory applied to nutrient management decisions in the Maumee watershed. Recipient of Honors Proposal Scholarship.
- 2010 2012. Katie Waller. Understanding nursing directors' attitudes, beliefs and knowledge about climate change and predicted human health impacts.
- 2008 2010. Sana Syal, The role of public health agencies in addressing climate change as a human health concern.