
Department of Forest and Wildlife Ecology
University of Wisconsin
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EDUCATION

- Ph.D. University of Wisconsin-Madison *2017 - present*
Dissertation: "Evaluating mechanisms behind species recovery: American marten on the Apostle Islands"
Advisor: Dr. Jonathan N. Pauli
Anticipated completion: Fall 2022
- M.S. Washington State University *2015 - 2017*
Thesis: "Multi-scale occupancy and species interactions of a desert amphibian"
Advisor: Dr. Caren S. Goldberg
- B.S. University of Wisconsin-Madison *2005 - 2009*
Zoology and Conservation Biology

PEER-REVIEWED PUBLICATIONS

Smith, M.M., Erb, J.D., and Pauli, J.N. Seasonal heterogeneity drives survival of a forest carnivore. *Conservation Letters*. *In review*.

*Knife, C.G., **Smith, M.M.**, Eklund, D., Heeringa, B., and Pauli, J.N. Assessing genetic diversity and population structure of a translocated population of sharp-tailed grouse. *Wildlife Society Bulletin*. *In review*.

*Mentored undergraduate research

Smith, M.M. and Goldberg C.S. Facilitative interaction promotes occupancy of a desert amphibian across a climate gradient. *Oecologia*. *In revision*.

Moss, W.E., Harper, L.R., Davis, M.A., Goldberg, C.S., **Smith, M.M.**, and Johnson P.T.J. (2021) Navigating the tradeoffs between environmental DNA and conventional field surveys for improved amphibian monitoring. *Ecosphere*. *In press*.

Smith, M.M., Gilbert, J.H., Olson, E.R., Scribner K.T., Van Deelen, T.R., Van Stappen, J.F., Williams, B.W., Woodford, J.E., and Pauli, J.N. (2021) A recovery network leads to the natural recolonization of an archipelago and a potential trailing edge refuge. *Ecological Applications* e02416. Doi: 10.1002/eap.2416

Farwell, L.S, Gudex-Cross, D., Anise, I.E., Bosch, M.J., Olah, A.M., Radeloff, V.C., Razenkova, E., Rogova, N., Silveira, E.M.O., **Smith, M.M.**, and Pidgeon, A.M. (2020) Satellite image textures capture multiple features of vegetation heterogeneity important for predicting patterns of bird richness. *Remote Sensing of Environment* 253. Doi: 10.1016/j.rse.2020.112175.

Smith, M.M. and Goldberg C.S. (2020) Occupancy in dynamic systems: accounting for multiple scales and false positives using environmental DNA to inform monitoring. *Ecography*, 43:376-386. Doi: 10.1111/ecog.04743.

Pauli, J.N., Manlick, P.J., Dharampal, P.S., Takizawa, Y., Chikaraishi, Y., Niccolai, L.J., Grauer, J.A., Black, K.L., Garces Restrepo, M., Perrig, P.L., Wilson, E.C., Martin, M.E., Rodriguez Curras, M., Bougie, T.A., Thompson, K.L., **Smith, M.M.**, and Steffan, S.A. (2019) Quantifying niche partitioning and multichannel feeding among tree squirrels. *Food Webs*, 21. Doi: 10.1016/j.fooweb.2019.e00124.

Moyer-Horner, L., **Smith, M.M.**, and Belt, J. (2012) Citizen science and observer variability during American pika surveys. *The Journal of Wildlife Management*, 76:1472-1479.

INVITED PRESENTATIONS

Apostle Islands Resource Stewardship Symposium 2021
Are the Apostle Islands a refugia for a recently recolonized forest carnivore?

Wisconsin Chapter of The Wildlife Society 2021
Symposium: Winter-Adapted Species in a Warming World
Are the Apostle Islands a refugia for a recently recolonized winter-adapted species?

PROFESSIONAL PRESENTATIONS

American Society of Mammalogists Annual Meeting 2021
Oral: Does functional heterogeneity or habitat drive seasonal differences in survival of a forest carnivore.

American Society of Mammalogists Annual Meeting 2019
Oral: Reconstructing an unexpected carnivore recolonization: American marten on the Apostle Islands of Lake Superior.

International Martes Symposium 2018
Oral: American marten colonization and genetic structure on the Apostle Islands, WI, USA

Wisconsin American marten advisory and stakeholder committee meeting 2017, 2019, 2021

The Wildlife Society Annual Conference 2016
Oral: Using environmental DNA to model occupancy and detection of the Columbia spotted frog in the Great Basin, USA

Society of Northwestern Vertebrate Biology 2015
Oral: Mapping the distribution of the Columbia spotted frog in the Great Basin using environmental DNA

TEACHING

Teaching Assistant, Wildlife techniques, University of Wisconsin Fall 2020, 2021
Mentor for undergraduate research, University of Wisconsin Fall 2021 - present
Mentor for undergraduate research, University of Wisconsin 2018 – 2021

Instructor, Workshop, Conservation Genetics and Applications, UW-Madison 2020
Instructor, Workshop, Monitoring aquatic biodiversity with molecular tools, Pittsburgh, PA 2016

AWARDS

American Society of Mammalogists – Grants-in-aid of Research (\$1500)	2021
Martes Working Group Travel Award (\$500)	2018
The Wildlife Society Student Travel Grant (\$1000)	2016
The Society of Northwestern Vertebrate Biology- 3 Sigma Institute Award (\$300)	2015

PROFESSIONAL AFFILIATIONS

American Society of Mammalogists, Martes Working Group, The Society for Conservation Biology