Department of Forest & Wildlife Ecology University of Wisconsin Madison, WI 262-422-8533 bkhobart@gmail.com bkhobart.weebly.com ORCiD: 0000-0001-5868-2292

CURRICULUM VITAE

Education

Ph.D.	University of Colorado-Boulder Advisor: Dr. Val McKenzie. Dissertation: "I Leveraging field data to better understand th consequences of infection and invasion in di	he causes and	May 2024
M.S.	University of Wisconsin-Madison Advisor: Dr. Zach Peery. Thesis: "Patterns of California spotted owl population status in t	v	May 2019
B.S.	University of Wisconsin-Madison	Conservation Biology Minor: Env. Studies	May 2015

Professional Experience

Conservation Ecologist, U. of Wisconsin <i>Dept. of Forest & Wildlife Ecology</i> 2	024–present
Graduate Research Assistant, U. of Colorado Dept. of Ecology & Evolutionary Bio.	2021-2024
Research Fellow, U. of Colorado Dept. of Ecology & Evolutionary Bio.	2023
NSF Graduate Research Intern, USGS National Wildlife Health Center	2022
Graduate Teaching Assistant, U. of Colorado Dept. of Ecology & Evolutionary Bio.	2019-2022
Field Lead, U. of Colorado Dept. of Ecology & Evolutionary Bio.	2019-2021
Syllabus Coordinator, U. of Colorado Dept. of Ecology & Evolutionary Bio.	2020
Graduate Research Assistant, U. of Wisconsin Dept. of Forest & Wildlife Ecology	2017-2019
Graduate Teaching Assistant, U. of Wisconsin Dept. of Integrative Biology	2018
Field Technician, U. of Wisconsin Dept. of Forest & Wildlife Ecology	2017
Research Intern/Lab Manager, U. of Wisconsin Dept. of Forest & Wildlife Ecology	2016-2017
Biological Field Technician, U. of Delaware/National Park Service	2016
Laborer & Visitor Services Associate, Wisconsin Dept. of Natural Resources	2016
Biological Science Technician, U.S. Geological Survey	2015
Volunteer Field Assistant, U. of Wisconsin Dept. of Forest & Wildlife Ecology	2014-2015
Undergraduate Ind. Study, U. of Wisconsin Dept. of Forest & Wildlife Ecology	2014-2015

Peer-Reviewed Publications

- [9] Johnson, P.T.J., T. Stewart Merrill, D.M. Calhoun, T. McDevitt-Galles, Hobart, B.K. Into the danger zone: how the within-host distribution of parasites controls virulence. 2024. *Ecology Letters* 27. <u>http://doi.org/10.1111/ele.14352</u>
- [8] McGinn, Kate A., F.A. Atuo, G.M. Jones, B.K. Hobart, D.J. Tempel, S.A. Whitmore, W.J. Berigan, R.J. Gutiérrez, M.Z. Peery. Implications of non-ideal occupancy for the measurement of territory quality. 2022. *Global Ecology and Conservation*. https://doi.org/10.1016/j.gecco.2022.e02097
- [7] Tempel, D.J., H.A. Kramer, G.M. Jones, R.J. Gutiérrez, S.C. Sawyer, A. Koltunov, M. Slaton, R. Tanner, B.K. Hobart, M.Z. Peery. Population Decline in California Spotted Owls near their Southern Range Boundary. 2022. *Journal of Wildlife Management*. <u>http://doi.org/10.1002/jwmg.22168</u>. Erratum: <u>https://doi.org/10.1002/jwmg.22219</u>
- [6] Hobart, B.K., W.E. Moss, T. McDevitt-Galles, T. Stewart Merrill, P.T.J. Johnson. It's a worm-eat-worm world: Consumption of parasite free-living stages protects hosts and benefits predators. 2022. *Journal of Animal Ecology* 91. <u>https://doi.org/10.1111/1365-2656.13591</u>*

*Selected for coverage in a Journal of Animal Ecology Research Highlight: https://doi.org/10.1111/1365-2656.13625

- [5] Wood, C.M., N. Kryshak, M. Gustafson, D. Hofstadter, B.K. Hobart, S.A. Whitmore, B.P. Dotters, K.N. Roberts, J.J. Keane, S.C. Sawyer, R.J. Gutiérrez, M.Z. Peery. Density dependence influences competition and hybridization at an invasion front. 2021. *Diversity and Distributions* 27. <u>https://doi.org/10.1111/ddi.13240</u>
- [4] Hobart, B.K., H.A. Kramer, G.M. Jones, B.P. Dotters, S.A. Whitmore, J.J. Keane, M.Z. Peery. Stable isotopes reveal unexpected relationships between fire history and the diet of spotted owls. 2020. *Ibis* 163. <u>http://doi.org/10.1111/ibi.12832</u>
- [3] Jones, G.M., H.A. Kramer, S.A. Whitmore, W.J. Berigan, D.J. Tempel, C.M. Wood, B.K. Hobart, T. Erker, F.A. Atuo, N.F. Pietrunti, R. Kelsey, R.J. Gutiérrez, M.Z. Peery. Habitat selection by spotted owls after a megafire reflects their adaptation to historical frequent-fire regimes. 2020. *Landscape Ecology* 35. <u>http://doi.org/10.1007/s10980-020-01010-y</u>
- [2] Hobart, B.K., G.M. Jones, K.N. Roberts, B.P. Dotters, S.A. Whitmore, W.J. Berigan, M.G. Raphael, J.J. Keane, R. J. Gutiérrez, and M.Z. Peery. Trophic interactions mediate the response of predator populations to habitat change. 2019 *Biological Conservation* 238. http://doi:10.1016/j.biocon.2019.108217*

*Given the The Wildlife Society's 2022 Student Wildlife Publication Award

[1] Hobart, B.K., K.N. Roberts, B.P. Dotters, W.J. Berigan, S.A. Whitmore, M.G. Raphael, J.J. Keane, R.J. Gutiérrez, and M.Z. Peery. Site occupancy and reproductive dynamics of California spotted owls in a mixed-ownership landscape. 2019. *Forest Ecology and Management* 437. <u>http://doi:10.1016/j.foreco.2019.01.028</u>

Manuscripts In Review, Revision, or Preparation

- **Hobart, B.K.**, D.A. Grear, M.E. Winzeler, T. McDevitt-Galles, T.M. Korpita, E. Muths, V.J. McKenzie. Hosts, pathogens, & hot ponds: Thermal variability and heat contribute to spatial patterns of chytrid infection. In review.
- Hobart, B.K., W.E. Moss, M.C. Cook, D.C. Pavlacky, R.C. Nagy, V.J. McKenzie. Annual grass invasion is transforming the sagebrush biome's songbird communities. In prep.
- McDevitt-Galles, T., W.E. Moss, **B.K. Hobart**, D.M. Calhoun, P.T.J. Johnson. Regional weather patterns and local biotic factors modulate the strength of intensity-dependent pathology. In prep.
- McCaffrey, T., **B.K. Hobart**, T. Stewart Merrill, P.T.J. Johnson. Experimental drought affects freshwater snail survival and behavior but not infection by trematodes. In prep.
- Barnett, K.M., ..., **B.K. Hobart**, et al.. Prophylactic treatment for chytridiomycosis increases infection loads in natural amphibian populations: A possible consequence of increased host survival. In prep.

Other Articles & Reports (Non-Peer Reviewed)

Hobart, B.K., R.C. Nagy, M.C. Cook, C.E. Latimer, V.J. McKenzie. <u>How grass invasion and</u> fire affect songbirds of the sage. 2023. *CU Earth Lab Blog*.

Fisher, K., R.C. Nagy, N.T. Ilangakoon, W.E. Moss, **B.K. Hobart**, E.J. Fusco, E.M. Beaury. <u>Management Challenge: Invasion Potential</u>. 2023. *North Central Regional Invasive Species & Climate Change Network*.

Nagy, R.C., E. Woolner, W.E. Moss, C. Jenson, I. de Silva, K. Fisher, A.E. Evans, **B.K. Hobart**, J.K. Balch, M. Berger, N.T. Ilangakoon, N. Read. <u>Practitioner Survey Report</u>. 2023. *North Central Regional Invasive Species & Climate Change Network*.

Contributed Presentations

Hobart, B.K., T.M. Korpita, M.E. Winzeler, D.A. Grear, T. McDevitt-Galles, V.J. McKenzie. Host–parasite interactions in hot ponds: Linking temperature to local and landscape patterns of amphibian chytrid fungus infection. Amphibian Disease Conference. Nashville, TN. 11 November 2023.

- **Hobart, B.K.,** T.M. Korpita, M.E. Winzeler, D.A. Grear, T. McDevitt-Galles, V.J. McKenzie. Host–parasite interactions in hot ponds: Linking temperature to local and landscape patterns of amphibian chytrid fungus infection. Ecological Society of America Annual Meeting. Portland, OR. 10 August 2023.
- Stewart Merrill, T.E., B.K. Hobart, A. Fenton, A.D. Dean, P.T.J. Johnson. Toward resolution in diversity-disease theory: an empirical investigation of mechanism and scale, and a wholeecosystem manipulation. Ecological Society of America Annual Meeting. Portland, OR. 10 August 2023.
- Hobart, B.K., K.N. Roberts, B.P. Dotters, W.J. Berigan, S.A. Whitmore, M.G. Raphael, J.J. Keane, R.J. Gutiérrez, M.Z. Peery. Diet as a mechanism of California spotted owl population status. The Wildlife Society-Western Section Annual Conference. Fish Camp, CA. 7 February 2019.
- Hobart, B.K., K.N. Roberts, B.P. Dotters, W.J. Berigan, S.A. Whitmore, M.G. Raphael, J.J. Keane, R.J. Gutiérrez, M.Z. Peery. Site occupancy and reproductive dynamics of California spotted owls in a mixed-ownership landscape. Society of American Foresters National Convention. Portland, OR. 5 October 2018.

Other Presentations

- **Hobart, B.K.** From snails to sagebrush: Leveraging field data to better understand the causes and consequences of infection and invasion in diverse systems. EBIO Colloquium (PhD exit talk). Boulder, CO. 19 April, 2024
- Hobart, B.K., T.M. Korpita, M.E. Winzeler, D.A. Grear, T. McDevitt Galles, V.J. McKenzie. Host–parasite interactions in hot ponds: Linking temperature to local and landscape patterns of amphibian chytrid fungus infection. USGS National Wildlife Health Center Seminar. Madison, WI (remote). 2 August 2023.
- **Hobart, B.K.**, R.C. Nagy, M.C. Cook, C.E. Latimer, V.J. McKenzie. Songbirds of the sage: How does annual grass invasion affect avian community structure across the sagebrush biome? CU Earth Lab Environmental Data Science Seminar Series. 1 August 2023.
- **Hobart, B.K.** Disentangling how the drivers of sagebrush ecosystem transformation affect avian diversity. CU Earth Lab Open House. Boulder, CO. 4 April 2023.
- **Hobart, B.K.** Prey consumption mediates spotted owl response to land management. Univ. of Colorado EBIO, Lunch and Learn Seminar Series. Boulder, CO. 4 March 2020.
- Peery, M.Z., **B.K. Hobart**, et al. Recent California Spotted Owl Research: Update to the U.S. Forest Service Region 5. Sacramento, CA. 3 February 2020.

- **Hobart, B.K.** Trophic interactions as a missing link in spotted owl ecology and conservation. Wisconsin Ecology Flash Talk Session. Madison, WI. 1 May 2019.
- Atuo, F., B.K. Hobart, G.M. Jones, K. Kelly, A. Kramer, M.Z. Peery, C.M. Wood. Spotted and barred owl research update. US Forest Service and US Fish & Wildlife Service. Madison, WI. 6 March 2019. *All authors presented*.
- Peery, M.Z., Atuo, F., Dotters, B.P., Roberts, K.N., and Hobart, B.K. Spotted owl habitat use during the early fledgling period, 2017. Society of American Foresters National Convention. Portland, OR. 4 October 2018.
- Peery, M.Z., Atuo, F., and Hobart, B.K. Resource selection and occupancy dynamics of California spotted owls in a mixed-ownership landscape. US Fish & Wildlife Service. Madison, WI. 5 July 2018. All authors presented.

Departmental Fellowship	EBIO, CU-Boulder	-	2023
Graduate Research Grant	EBIO, CU-Boulder	\$2,500	2023
INTERN Supplemental Funding	NSF	\$55,000	2022
Student Wildlife Publication Award	The Wildlife Society	-	2022
Excellence in Teaching Award	EBIO, CU-Boulder	\$200	2022
Graduate Research Grant	EBIO, CU-Boulder	\$2,500	2022
Graduate Research Grant	EBIO, CU-Boulder	\$2,500	2020
Aldo Leopold Memorial Scholarship	TWS, WI Chapter	\$1,000	2019
Dean's List	U. of Wisconsin	-	2012-2015
Becker Conservation Scholarship	U. of Wisconsin	\$500	2015
Silverthorn Academic Scholarship	U. of Wisconsin	\$3,000	2015

Awards, Grants, and Fellowships

Teaching Experience

Teaching Assistantships

EBIO 2040: General Ecology Lab. S20	020; F2020; F2021; S2022
U. of Colorado. Department of Ecology and Evolutionary Biology	ogy. ~30 student
enrollment.	
EBIO 1230: General Biology Lab.	F2019
U. of Colorado. Department of Ecology and Evolutionary Biology	ogy. ~60 student
enrollment.	
Integrative Biology 360: Extinction of Species.	F2018
U. of Wisconsin. Department of Forest & Wildlife Ecology. ~6	0 student
enrollment.	

Guest lectures

EBIO 2040: Principles of Ecology	2022
U. of Colorado. Department of Ecology & Evolutionary Biology. "Antagonistic	
ecological interactions"	
EBIO 2040: Principles of Ecology	2020
U. of Colorado. Department of Ecology & Evolutionary Biology. "Ecological	
Competition"	
Forest & Wildlife Ecology 875: Demographic Methods in Wildlife Conservation.	2018
U. of Wisconsin. Department of Forest & Wildlife Ecology. "Multistate	
occupancy data, models, and analysis."	

Other teaching experiences

Syllabus Coordinator: EBIO 2040: General Ecology	2020
U. of Colorado. Department of Ecology and Evolutionary Biology	

Student Mentorship

Olivia Milloway	NSF REU	U. of Colorado	Bullfrogs and <i>Bd</i>	2021
Wyatt Brammer	<u>UROP</u>	U. of Colorado	Ecology & study of CA ponds	2021
Anya Weiss	<u>UROP</u>	U. of Colorado	Ecology & study of CA ponds	2020
Paige Paulsen	NSF REU	U. of Colorado	Chytrid fungus infection patterns	2020
Claire Viellieux	Ind. Study	U. of Wisconsin	Spotted owl trophic ecology 2017	7–2018
Abby Achtenhagen	Ind. Study	U. of Wisconsin	Spotted owl isotope analysis	2018
Kristina Kennedy	Ind. Study	U. of Wisconsin	Spotted owl isotope analysis	2018
Kendall Krombach	Ind. Study	U. of Wisconsin	Spotted owl isotope analysis	2018
Carter Czerwinski	Ind. Study	U. of Wisconsin	Spotted owl pellet analysis	2017
Daniel Erickson	Ind. Study	U. of Wisconsin	Spotted owl pellet analysis	2017

Professional Membership, Working Groups, & Service

٠	Member, The Wildlife Society (TWS)	2018-present
٠	Chair, Colloquium Comm., EBIO, CU Boulder	2019-2023
٠	Member, Social Comm. Dept. of Forest & Wildlife Ecology, U. of Wiscon	isin 2018
٠	Leadership team, North Central Regional Invasive Species & Climate Char	nge Network
		2022-present
٠	Reviewer, Journal of Mammalogy, Landscape Ecology, Diversity and Dist	tributions,
	Global Ecology and Biogeography, Ecological Applications, Society for Conservation	
	Biology, Biological Invasions, Oecologia, The Journal of Wildlife Manage	ement