

NOAH D. CHARNEY

DEPARTMENT OF WILDLIFE, FISHERIES, AND CONSERVATION BIOLOGY

UNIVERSITY OF MAINE, ORONO

NOAH.CHARNEY@MAINE.EDU**EDUCATION**

- 2011 Ph.D. Organismic and Evolutionary Biology, **University of Massachusetts Amherst**.
 2002 B.A. Physics, **Amherst College**, Magna Cum Laude.

ACADEMIC APPOINTMENTS

- 2021 – current Assistant Professor of Conservation Biology, **University of Maine**, Orono, ME.
 2013 – 2017 Research Associate, **University of Arizona**, Tucson, AZ.
 2012 – 2014 Visiting Assistant Professor, **Hampshire College**, Amherst, MA.
 2012 – 2013 Visiting Assistant Professor, **Mount Holyoke College**, South Hadley, MA.
 2010 – 2011 Adjunct Professor, **Hampshire College**, Amherst, MA.
 2003 – 2005 Teaching Fellow, **Amherst College**, Amherst, MA.

FELLOWSHIPS

- 2017 – 2018 Charles Bullard Fellow, Harvard Forest, Harvard University
 2010 – 2011 Switzer Environmental Fellowship
 2007 – 2010 National Science Foundation Graduate Research Fellowship
 2006 – 2008 Amherst College Lloyd I. Rosenblum Memorial Fellowship and John Woodruff Simpson Fellowship for Graduate Studies

PROFESSIONAL AFFILIATIONS

- 2020 – current Natural History Section Board Member, Ecological Society of America
 2015 – 2020 Researcher, Galapagos Conservancy.
 2015 – 2020 Advisory Board Member, American Turtle Observatory.
 2011 – current Executive Director, Radnor To River, Nashville, TN.
 2012 Visiting Researcher, University of Malaya, Kuala Lumpur, Malaysia.
 2006 – 2011 President, West Meade Conservancy, Nashville, TN.

MENTORING

Graduate Advises: Stevie Benson (MS, co-advised), Ecology and Environmental Science; Harrison Goldspiel (PhD), Ecology and Environmental Science; Agus Jati (PhD, co-advised) Wildlife, Fisheries and Conservation Biology.

Graduate Committees: Ivy Yen (PhD), Ecology and Environmental Science; Amy Bolinkjar (M.W.C.) Wildlife, Fisheries and Conservation Biology.

Research Assistants: Oluwadamilola Kolawole (Genetics); Heléna Gawlaoski (eDNA); Liberty Oko (Bird feeding study); Ece Yeldan (Bird feeding study); Andrea Ireland (Salamander Molecular

Techniques); Ethan Plunkett and Charles Eiseman (Vernal Pool Field Ecology).

Undergraduate Senior Theses: Jasmine Mirfattah (Mapping Invasive Species), Caitlin Lewis (Female Aggression in a Polygynous Mating System), Nuria Clodius (Reproduction and Survival of an Invasive Sea Anemone). Alessandro Bartolo (Dickcissel Territory Size), Joshua Reynolds (Sustainability Art).

Undergraduate Independent Studies: Maha Mapara (AI Remote Sensing); Samantha Oliveiras-Maija (Conservation Intern), Carol Bowe (Summer Conservation Intern), Alex Leff (Ecology and Film), Joshua Reynolds (Ecological Sustainability), Bryn Kelley (Animal Caretaking), Alessandro Bartolo (Ecology & Natural History), Lara Sagatov (Natural History), Hannah Libby (Animal Tracking), Peter Stuart (Mayan Birds), Kendall Meehl (Science & Art), Alexis Kriete, Alessandro Bartolo, and Cristina D’Ancona (Unisexual Salamander Models in R).

FUNDING

2024	National Park Service Regional Block Allocation. “Assess Amphibian Road Mortality and Develop Management Response in Acadia National Park.” Selected for funding.	\$74,701
2022	Northeastern States Research Cooperative. “Effects of timber harvesting on the aquatic ecology of northeastern lowland forests.” PI: C. Murphy, Co-PIs: N. Charney, S. Fraver, S. Eggert, L. Kenefic.	\$110,000
2022	Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife (MNHESP). “Blue-spotted salamander DNA analysis.” PI: N. Charney, co-PI: E. Grey.	\$11,772.
2022	Cooperative Forestry Research Unit. “Using eDNA for biodiversity and rare species monitoring.” PI: N Charney, Co-PIs: E. Grey, E. Blomberg, A. Weiskittel.	\$76,172.
2021	Association for the Study of Literature and the Environment Subvention Award.	\$1,000
2021	National Aeronautics and Space Administration “Scaling Forest Diversity Across Space and Time in a Non-Equilibrium World” (PI: S. Record, Co-I: N. Charney)	\$62,378
2020	Patagonia Foundation. Catalyzing Conservation.	\$12,000
2019	Clif Bar Family Foundation. Catalyzing Conservation.	\$4,000
2018	Beyond Ktaadn. Modeling Population of Federally Endangered <i>Potentilla robbinsiana</i> for US Forest Service.	\$1,200
2018	Clif Bar Family Foundation. Remote Sensing Invasive Species.	\$4,000
2016	Massachusetts Natural Heritage and Endangered Species Program (MNHESP). Studying unisexual salamanders.	\$48,153
2014	MNHESP. Prioritizing rare turtle habitats.	\$4,950
2013	MNHESP. Mapping four-toed salamander distributions.	\$4,400
2011	Nantucket Biodiversity Initiative. (PI. C. Eiseman)	\$500
2010	MNHESP. Genotyping the unisexual salamander complex.	\$5,000
2010 – 2011	Switzer Environmental Fellowship	\$15,000

2007 – 2010	National Science Foundation Graduate Research Fellowship	\$121,500
2010	University of Massachusetts Amherst Jane Hallenbeck Bemis Endowment for Research in Natural History Scholarship	\$3,000
2008 & 2009	MNHESP. Surveying for salamanders in the unisexual complex	\$16,500
2009	MNHESP. Sampling methods for marbled salamanders.	\$18,000
2007 & 2009	University of Massachusetts Amherst Organismic and Evolutionary Biology Travel Grants	\$600
2006 – 2008	Amherst College Lloyd I. Rosenblum Memorial Fellowship and John Woodruff Simpson Fellowship for Graduate Studies	\$12,000

PEER-REVIEWED PUBLICATIONS

- Charney, ND**, JA Tunstad, G Lattig, W Reason, S Ressel. 2022. *Ambystoma maculatum* (Spotted Salamander). Predation. *Herp Review* 53(2):274-275.
- Charney, ND**, G Bastille-Rousseau, CB Yackulic, S Blake, JP Gibbs. 2021. A Greener Future for the Galapagos: Finding Climate Analogs. *Ecosphere*.
- Charney ND**, Record S, Gerstner B, Merow C, Zarnetske P, Enquist BJ. 2021. A test of species distribution model transferability across environmental and geographic space for 108 western North American tree species. *Frontiers in Ecology and Evolution*.
- Charney, ND**, JE Kubel, CT Woodard, BI Carbajal-González, S Avis*, JA Blyth, CS Eiseman, J Castorino, JH Malone. 2019. Survival of Polyploid Hybrid Salamander Embryos. *BMC Developmental Biology*.
*Student Co-author
- Charney, ND**, JE Kubel, CS Eiseman, JA Blyth, J Castorino, JH Malone. 2019. Distinguishing Egg Masses of Unisexual and Jefferson Salamanders. *Herpetological Conservation and Biology*.
- Babst, F, P Bodesheim, **ND Charney**, AD Friend, MP Girardin, S Klesse, DJP Moore, K Seftigeni, J Björklund, O Bouriaud, A Dawson, RJ Derose, MC Ditze, AH Eckes, B Enquist, DC Frank, MD Mahecha, B Poulter, S Record, V Trouet, RH Turton, Z Zhang, MEK Evans. 2018. When tree rings go global: Challenges and opportunities for retro- and prospective insight. *Quaternary Science Reviews* 197(1): 1-20.
- Charney, ND**, F Babst, B Poulter, S Record, VM Trouet, D Frank, BJ Enquist, MEK Evans. 2016. Observed forest sensitivity to climate implies large changes in 21st century North American forest growth. *Ecology Letters* 19 (9), 1119-1128.
- Charney, ND** and S Record. 2016. Combining incidence and demographic modelling approaches to evaluate metapopulation parameters for an endangered riparian plant. *AOB Plants* 8 (1), plw044.
*Editor's Choice
- Record, S and **ND Charney**. 2016. Modeling species ranges. *Chance* 29 (2), 31-37.
- Jones, MT, LL Willey and **ND Charney**. 2015. Box turtles (*Terrapene bauri*) on anthropogenic shell work islands in the Ten Thousand Islands mangrove estuary, Florida, USA. *Journal of Herpetology* 50 (1), 94-101.
- Charney, ND**, JE Kubel, CS Eiseman. 2015. Temporally adaptive sampling: a case study in rare species survey design with marbled salamanders (*Ambystoma opacum*). *PLOS One* 10 (3),

e0120714.

Smith, D, C Eiseman, **N Charney**, and S Record. 2015. A new nearctic *Scolioneura* (Hymenoptera: Tenthredinidae) mining leaves of *Vaccinium*. *Journal of Hymenoptera Research* 43, 1-8.

Charney, ND, JJ Castorino, MJ Dobro, and SL Steely. 2014. Embryo development inside female salamander (*Ambystoma jeffersonianum-laterale*) prior to egg laying. *PLOS One* 9 (3), e91919.

Charney, ND, AT Ireland, and BR Bettencourt. 2014. Mapping genotype distributions in unisexual *Ambystoma* complex. *Journal of Herpetology* 48 (2), 210-219.

Charney, ND and S Record. 2013. Performing a population viability analysis from data students collect on a local plant. *Teaching Issues and Experiments in Ecology* 9.

Record, S, **ND Charney**, RM Zakaria, and AM Ellison. 2013. Projecting global mangrove species and community distributions under climate change. *Ecosphere* 4 (3), 1-23.

Charney, ND. 2012. Relating hybrid advantage and genome replacement in unisexual salamanders. *Evolution* 66 (5), 1387-1397.

Charney, ND. 2012. Evaluating expert opinion and spatial scale in an amphibian model. *Ecological Modeling* 242, 37-45.

Jones, MT, LL Willey & **ND Charney**. 2011. *Gopherus polyphemus* distribution note. *Herpetological Review* 42(3) 388.

Charney, ND, BH Letcher, A. Haro, and PS Warren. 2009. Terrestrial passive integrated transponder antennae for tracking small animal movements. *Journal of Wildlife Management* 73 (7), 1245-1250.

Ahern, J, L Jennings, B Fenstermacher, P Warren, **N Charney**, S Jackson, J Mullin, Z Kotval, S Brena, S Civjan, and E Carr. 2009. Issues & methods for transdisciplinary planning of combined wildlife and pedestrian highway crossings. *Transportation Research Record: Journal of the Transportation Research Board* 2123, 129-136.

Warren, PS, SB Lerman, and **ND Charney**. 2008. Plants of a feather: Spatial autocorrelation of gardening practices in suburban neighborhoods. *Biological Conservation* 141 (1), 3-4.

Heidenreich, BJ, OT Elliott, **ND Charney**, KA Virgien, AW Bridges, MA McKeon, SK Peck, D Krause, Jr, JE Gordon, LR Hunter and SK Lamoreaux. 2005. Limit on the Electron Electric Dipole Moment in Gadolinium-Iron Garnet. *Physical Review Letters* 95 (25), 253004.

Hunter, LR, SE Maxwell, KA Ulmer, **ND Charney**, SK Peck, D Krause, Jr, S Ter-Avetisyan and D DeMille. 2002. Detailed spectroscopy of the $a(1) [^3\Sigma^+]$ state of PbO. *Physical Review A* 65 (3), 030501.

BOOKS AND CHAPTERS

Charney, ND. 2023. *These Trees Tell a Story*. New Haven: Yale University Press. 416 Pages.

Charney, ND. 2021. Galapagos Tortoises in a Changing Climate. Pages 317 – 330 in J. Gibbs, L. Cayot, W. T. Aguilera ed. *Galapagos Giant Tortoises*. Elsevier.

Charney, ND and MT Jones. 2018. Alpine Fauna. Pages 79 – 98 in MT Jones and LL Willey, eds. *Eastern Alpine Guide: Natural History and Conservation of Mountain Tundra East of the Rockies*. University Press of New England.

Eiseman, CS and **ND Charney**. 2010. *Tracks and Sign of Insects and Other Invertebrates*.

Harrisburg, PA: Stackpole Books, 582 pages.

***American Library Association – Outstanding Academic Title**

***National Outdoor Book Award – Best Nature Guidebook**

SOFTWARE

Charney, N and S Record. 2009. Vegetarian: Jost Diversity Measures for Community Data. R package version 1.0. <http://CRAN.R-project.org/package=vegetarian>.

PUBLISHED CONFERENCE PROCEEDINGS

Rogers, L, D Stimson, K Holden, D Kay, D Kaye, R McAdow, B Metcalfe, B Windmiller and **N Charney**. 2009. Wildlife tunnels under a busy, suburban Boston roadway. Proceedings of the 2009 International Conference on Ecology and Transportation, P. J. Wagner, D. Nelson and E. Murray, eds., Center for Transportation and the Environment. North Carolina State University.

TECHNICAL REPORTS

Charney, ND and L. Willey. 2019. Analysis of previous census data and recommended sampling strategy for *Potentilla robbinsiana*. In Beyond Ktaadn. Conserving Alpine Vegetation along the Crawford Path during its 200th Anniversary. Report to the US Forest Service.

Charney, ND. 2017. Population-level Genetic Analysis and Reproductive Ecology of the *Ambystoma jeffersonianum* Complex in Massachusetts, 2016. Progress Report to the Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife.

Charney, ND, MT Jones, LL Willey. 2014. Prioritizing Habitats for Regulatory Review: Blanding's and Wood Turtle in Massachusetts. Report and Conceptual Framework to the Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife.

Charney, ND, & CS Eiseman. 2013. Four-toed Salamander Surveys in Western Massachusetts, 2013 Northern Region. Report to the Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife.

Charney, ND, & AT Ireland. 2011. Jefferson/blue-spotted salamander complex genetic study 2009 – 2010. Report to the Massachusetts Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife.

Charney, ND, & CS Eiseman. 2010. Marbled Salamander (*Ambystoma opacum*) larval surveys in the Connecticut River Valley and Surrounding Areas, 2009 and 2010. Report to the Massachusetts Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife.

Charney, ND, & EB Plunkett. 2009. Jefferson salamander (*Ambystoma jeffersonianum*) and Vernal Pool Survey in the Housatonic River Watershed, 2009. Report to the Massachusetts Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife.

Charney, N. D., & C. S. Eiseman. 2008. Jefferson salamander (*Ambystoma jeffersonianum*) and Vernal Pool Survey in the Housatonic River Watershed. Report to the Massachusetts Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife.

CONFERENCE ABSTRACTS

- Charney, ND**, G Bastille-Rousseau, CB Yackulic, S Blake, JP Gibbs 2020. Forecasts in the Galapagos: Finding analogs in time to project plant productivity and giant tortoise futures. *Ecological Society of America Annual Meeting, Virtual.*
- Charney, ND**. 2019. Teaching ecology through field naturalist lessons - a course and a new book. *Ecological Society of America Annual Meeting, Louisville, Kentucky.*
- Jones, MT, LJ Willey, C Mahnk, T Persons, RM Rios, **ND Charney**, A Chenevert-Steffler, C Jones, JB Iverson, D Hall, J Mays. 2019. Ecology of the Arizona Mud Turtle (*Kinosternon arizonense*) on the Arizona-Sonora Border. *17th Annual Symposium on the Conservation and Biology of Turtles and Freshwater Turtles, Tucson, Arizona.*
- Charney, ND**. Mortality and Morphology in Egg Masses of Unisexual and Jefferson Salamanders. 2018. *Northeast Natural History Conference, Burlington, Vermont.*
- Charney, ND**, The Field Naturalist Approach as a Book. 2018. Northeast Natural History Conference, Burlington, Vermont.
- Charney, ND**, F Babst, B Poulter, S Record, V Trouet, B Enquist, MK Evans. 2015. North American forest growth potentials reduced by climate change in the 21st century. *Ecological Society of America Annual Meeting, Baltimore, MD.*
- Evans, MEK, **ND Charney**, F Babst, B Poulter, S Record, V Trouet, B Enquist. 2015. A tree-ring perspective on the impact of climate change on North American tree growth. *International Congress for Conservation Biology, Montpellier, France.*
- Charney, ND**, F Babst, V Trouet, B Poulter, MK Evans. 2015. Altered forest growth rates predicted for North America with regionally variable climatic response regimes. *North American Carbon Program & AmeriFlux Joint Meeting.* Washington, D.C.
- Charney, ND**. 2014. Unisexual salamanders: known knowns, known unknowns, unknown unknowns. *Northeast Partners in Amphibian and Reptile Conservation Annual Meeting.* Salamanca, NY.
- Evans, MK, **ND Charney**, S Record, A Gray, S McMahon, B Enquist. 2014. Demography-based models of the geographic ranges of nine dominant tree species in western North America: Does a process-based approach improve models of distributions? *Ecological Society of America Annual Meeting.* Sacramento, CA.
- Charney, ND**. 2013. Spatial scale and expert opinion in modeling pond-breeding amphibian habitat. *Northeast Natural History Conference.* Springfield, MA.
- Charney, ND**. 2012. On expert opinion and spatial scale: parameterizing an amphibian model. *Ecological Society of America Annual Meeting.* Portland, OR.
- Rogers, L and **ND Charney**. 2012. The wild side of suburban Boston: a volunteer study of wildlife underpasses in Concord, MA. *Northeastern Transportation & Wildlife Conference.* Portland, ME.
- Record, S, **ND Charney**, MZ Rozainah and AM Ellison. 2012. Potential geographic distribution of *Rhizophora apiculata* Blume under different future climate change and sea level rise scenarios. *Meeting on Mangrove Ecology, Functioning and Management.* Galle, Sri Lanka.
- Charney, ND**. 2010. Tracks and Sign of Insects, *Northeast Wildlife Trackers Conference.* Leominster, MA.
- Charney, ND**. 2010. Wildlife cameras for small animals: monitoring an underpass (poster).

Northeastern Transportation and Wildlife Conference. Amherst, MA.

Record, S and **ND Charney**. 2010. Projecting from the past to test the effects of informative priors on forecasts of extinction risk made by Bayesian demographic models. *Ecological Society of America Annual Meeting*. Pittsburgh, PA.

Record, S and **ND Charney**. 2010. Projecting from the past to test the effects of informative priors on forecasts of extinction risk made by Bayesian demographic models. *International Society for Conservation Biologists Annual Meeting*. Edmonton, Alberta, Canada.

Charney, ND. 2009. Frogs and salamanders in a fragmented landscape: defining relevant scales. *International Symposium on Urban Wildlife and the Environment*. Amherst, MA.

Charney, ND. 2007. New technique for studying small salamander movement using PIT tags (poster). Fifth Conference on the Biology of Plethodontid Salamanders. San Cristóbal de las Casas, Mexico.

COLLOQUIA, INVITED SEMINARS, PUBLIC EVENTS AND WORKSHOPS

Turtles, Climate Change, & The Galapagos

Orbridge, Galápagos Archipelago, Ecuador (2020)

The Forest's Perspective, Talks and Field Walks

Warner Parks Nature Center, Nashville, TN (talk and walk 2019)

Radnor To River, Nashville, TN (six hikes 2011 – 2015)

Changing Landscapes: Global Models & Local Action

Environmental Science Colloquium Series, Antioch New England, Keene, NH (2019)

Unisexual Salamanders

Mount Holyoke College Biology Series (2014)

Hampshire College Natural Sciences Seminar Series, Amherst, MA (2013)

Harvard Forest Seminar Series, Petersham, MA (2013)

Four College Biomathematics Consortium, Hampshire College, Amherst, MA (2012)

National Taiwan Normal University Department of Life Science, Taipei, Taiwan (2012)

Guest Lecture, Natural History

Photography, Observation, Landscape: Portrait of a Place, Hampshire College, MA (2013)

Vernal Pond Natural History Workshop

Town of Pelham Conservation Commission, Pelham, MA (2011, 2013)

Panel on Applied Careers in Animal Behavior

School of Cognitive Sciences Wednesday Talks, Hampshire College, Amherst, MA (2011)

Urban Conservation Vision for Nashville

League of Women Voters Nashville (2020)

Friends of Warner Parks Annual Board Meeting (2015)

Conference of Nashville NGO and agency representatives (2006, 2012, 2015, 2018, 2019)

Save the Waterfall/Radnor to River kickoff event (2013)

West Meade neighborhood gathering (2006, 2007, 2008, 2016)

Movin' and Groovin' Salamanders

University of Massachusetts Lowell Biology Department, Lowell, MA (2010)

Animal Tracking: An Old Tool for Modern Biologists

School of Cognitive Sciences Wednesday Talks, Hampshire College, Amherst, MA (2009)

Guest Lecture, Animal Tracking

Animal Behavior, and *Ecology*, Hampshire College, Amherst, MA (2009, 2009, 2010)

Guest Lecture, Navigation

Harvard Forest Research Experiences for Undergraduates Summer Program, Petersham, MA (2009, 2010)

Guest Instructor, Animal Tracking Field Walk

Deerfield Academy, Deerfield, MA (2010, 2011)

Spiders Talk and Field Walk

Friends of Fresh Pond Reservation, Cambridge, MA (2011)

Insect Tracking Book Talk

Westborough Land Trust, Westborough, MA (2012)

Connecticut Entomological Society, New Haven, CT (2011)

New England Botanical Club, Framingham, MA (2011)

Grace Grossman Environmental Center, Nantucket, MA (2011)

Great Falls Discovery Center, Turners Falls, MA (2011)

University of Massachusetts Dept. of Environmental Conservation, Amherst, MA (2011)

GoodWorks, Lieper's Fork, TN (2011)

Bone Room, Berkeley, CA (2011)

Museum of Comparative Zoology at Harvard University, Cambridge, MA (2010)

Yale University School of Forestry, New Haven, MA (2010)

Hitchcock Center for the Environment, Amherst, MA (2010)

Warner Park Nature Center, Nashville, TN (2010)

American Museum of Science and Energy, Oak Ridge, TN (2010)

Victor Wooten's Bass/Nature Camp, Centerville, TN (2010)

Leslie Science and Nature Center, Ann Arbor, MI (2010)

Taber Art Gallery, Holyoke Community College, Holyoke, MA (2010)

Insect Tracking Field Walk

Fort River Celebration, Rushing Rivers Institute, Amherst, MA (2012)

Project Native, Housatonic, MA (2011)

Riekes Center, Menlo Park, CA (2011)

Four Winds Nature Institute, Norwich, VT (2011)

Berkshire Environmental Action Team, Lenox, MA (2011)

Athol Bird and Nature Club, Athol, MA (2010)

Forest Park BioBlitz, Springfield, MA (2010)

Vermont Coverts Program, Grafton, VT (2010)

Earthwork Programs, Montague, MA (2010)

Insect Tracking Talk and Field Walk

Arcadia Wildlife Sanctuary, Easthampton, MA (2011)

Winter Tracking Workshop

Hampshire College (2014)

University of Massachusetts Amherst, MA (2006, 2007, 2009)

Amherst College, Amherst, MA (2004, 2005)

Public Educator

Cumberland Science Museum, Nashville, TN (1993-1999)

OTHER SYNERGISTIC ACTIVITIES

Delivered over 70 public talks and field walks

Popular Media Coverage: *New York Times*, *Newsweek*, *The Boston Globe* (5 articles), *Reuters*, *Bloomberg*, *The Tennessean* (10 articles), *The Wall Street Journal*, *The Washington Post*, *Arizona Public Media*, *Jefferson Public Radio*, *KJZZ*, *Yale Climate Connections*, *Nashville Public Radio*, *WSMV News*, *Courthouse News Service*, *ClimateWire*, *Courthouse News Service*, *Tech Times*, *Daily Green*, *The Conversation*, *Buisness Insider*, *Science World Report*, *International Business Times*, *Science News*, *Orion Magazine*, *Northern Woodlands*, *The Buffalo News*, *The Daily Hampshire Gazette*, *The Berkshire Eagle*, *Tucson Sentinel*, *Summit County Citizens Voice*, *The Green Hills News* (10 articles), *Masslive*, *EurasiaReview*, *Earth and the Environment*.

Subject of chapter for NY Times Bestseller & Science Friday Best Science Book of the Year: *Being a Dog* by Alexandra Horowitz (2016).

Subject of children's book about conservation: *Noah and the Arc* (2010).

Certified Level III Tracker: North American Wildlife Tracker Evaluation, MA (2007).