

Taylor S. Readyhough

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readyhoughcology.com

Education

PhD Candidate, **12.2024-present**
National Science Foundation Graduate Research Fellow, **08.2022-present**
Natural Resources and Environmental Studies, University of New Hampshire
Dissertation Topic: *Exploring the impacts of anthropogenic disturbance on urban wildlife*

Masters of Science in Environmental Biology, Regis University, Denver, CO **May 2018**
Graduate Honors: GPA 3.94

Bachelor of Science in Biology, Cum laude University of New Mexico **May 2016**
Minors: Honors-Interdisciplinary Studies, Italian

PhD Dissertation Research

Investigating the Influence of 200 Years of Changing Land Use and Human History on Biodiversity in Fragmented Urban Ecosystems **08.2022-present**

- Partnered with Cleveland Metroparks and Baldwin Wallace University to evaluate the influence of land-use history, urban development, and the modern landscapes in shaping biodiversity in urban parks

Assessing the Impacts of Fireworks on Urban Mammal Activity and Behavior **08.2022-present**

- Partnered with Cleveland Metroparks to explore the impacts of acute disturbance on urban mammals
- Employed data from 204 camera-traps to evaluate wildlife behavioral responses to fireworks using Bayesian hierarchical modeling

Evaluating COVID-19 Lockdown Effects on Urban Carnivore Interactions **08.2022-present**

- Partnered with Cleveland Metroparks to assess human impacts on coyote-red fox interactions
- Utilized spatial and temporal models, including activity pattern analyses and nonparametric approaches, to investigate data from 204 camera-traps across an urban gradient

Investigating Drivers of Urban White-tailed Deer Fecundity **08.2022-11.2024**

- Partnered with Cleveland Metroparks to assess data on a managed population of urban deer
- Employed structural equation modeling to improve understanding of causal relationships

Additional Research and Field Experience

Visitor Impacts on Cheetah in the Mara-Meru System, Kenya **12.2024-present**

- Collaborated with the Mara-Meru Cheetah Project to assess impacts of tour vehicles on cheetah behavior

Bull Asian Elephant Social Behaviors at Denver Zoo, Denver, CO **08.2018-present**

- Studied social dynamics in a bachelor herd of five bull Asian elephants
- Led behavioral data collection and statistical analyses

- Range Management Team Lead, *North Wind Group*, WY** **05.2022-09.2022**
- Coordinated state-wide rangeland health data collection for a Bureau of Land Management/National Resource Conservation Service contract
 - Trained field technicians on survey protocols, field safety, and landowner outreach
- Raptor Monitoring Volunteer, *Colorado Parks and Wildlife*, Denver, CO** **09.2021-07.2022**
- Conducted raptor surveys throughout Golden Gate Canyon State Park
 - Evaluated suitable locations for new survey sites and nest boxes
- Volunteer Field Assistant, *Colorado (Front Range) Pika Project*, Denver, CO** **06.2018-05.2022**
- Assessed pika presence/absence at high elevation sites
 - Measured habitat and environmental conditions for long-term monitoring
- Range Management Specialist, *North Wind Group*, WY** **06.2021-08.2021**
- Assessed rangeland health via vegetation and soil surveys
 - Contributed data to long-term monitoring programs with the Bureau of Land Management/National Resource Conservation Service
- Impacts of Zoo Lights on a Pair of Great Indian Hornbills, *M.S. Research*** **10.2017-05.2018**
- Collected behavioral data on a male-female pair of hornbills at Denver Zoo
 - Compared social behavior before, during, and after Zoo Lights event
- Senior Intern, *Wildcat Creek Wildlife Center*, Delphi, IN** **09.2016**
- Administered basic medical care and triage
 - Animal husbandry and public education
- Anthropogenic Resource Use in Urban Coyotes, *Undergraduate Research*** **08.2014-05.2016**
- Analyzed stable isotopes (C/N) in urban coyote whiskers
 - Compared diets of urban, suburban and rural resident coyotes
- UNM Student Intern, *Bosque Ecosystem Monitoring Program*, Albuquerque, NM** **01.2016-05.2016**
- Collected field data: rainfall, leaf litter, groundwater levels, invertebrate pitfall trapping
 - Engaged 50 local 4th grade students in data collection and educational activities
- Laboratory Technician, *UNM Center for Stable Isotopes*, Albuquerque, NM** **08.2014-08.2015**
- Prepared biological and geological samples
 - Maintained isotope ratio mass spectrometers

Peer-reviewed Publications

Schreier, A.L., Davis, M., Joseph, S., Moresco, A., **Readyhough, T.S. (2025)** Bull Asian elephant welfare improves through social housing. *CABI Animal Behaviour and Welfare Cases*. DOI: 10.1079/abwcases.2025.0027

Readyhough, T.S., Cepek, J.D., Shaffer, E.E., Dennis, P.M., Byer, N.W., Hausman, C.E., Montgomery, R.A., & Moll, R.J. (2025) Unveiling drivers of fecundity in an urban white-tailed deer population over 20 years of active management. *Urban Ecosystems*. DOI: 10.1007/s11252-024-01633-y

Readyhough, T.S., Davis, M., Joseph, S., Moresco, A., Schreier, A.L. (2024) Intervention by a mature male Asian elephant (*Elephas maximus*) during an agonistic interaction between adolescents. *In&Vertebrates*. DOI: 10.52732/OLJZ7840

Readyhough, T.S., Butler, A.R., Stephen, R.B., Hall, L., Heit, D., Poisson, M.K.P., Moll, R.J. (2024) Status and trends in United States terrestrial mammal research since 1900. *Mammal Review*. DOI: 10.1111/mam.12367

Readyhough, T.S., Davis, M., Joseph, S., Moresco, A., Schreier, A.L. (2023) Age and social history influence interactions between bull Asian elephants (*Elephas maximus*). *Journal of Zoological and Botanical Gardens*. DOI: 10.3390/jzbg4010018

Moresco, A., Prado, N., Davis, M., Schreier, A.L., **Readyhough, T.S.,** Joseph, S., Gray, C., Brown, J.L. (2022) Immunoglobulin A and physiologic correlates of well-being in Asian elephants. *Journal of Zoological and Botanical Gardens*. DOI: 10.3390/jzbg3040050

Readyhough, T.S., Joseph, S., Davis, M., Moresco, A., Schreier, A.L. (2022) Impacts of socialization on bull Asian elephant (*Elephas maximus*) stereotypical behavior. *Journal of Zoological and Biological Gardens*. DOI: 10.3390/jzbg3010010

Readyhough, T.S., Joseph, S., Schreier, A.L. (2022) The effects of Zoo Lights on animal welfare: a case study of great Indian hornbills at Denver Zoo. *Zoo Biology*. DOI: 10.1002/zoo.21681

Thevarajah, S., **Readyhough, T.S.,** Davis, M., Moresco, A., Joseph, S., Schreier, A.L. (2021) Nighttime behavior and the length of social relationships in male Asian elephants. *Journal of Applied Animal Welfare Science*. DOI: 10.1080/10888705.2021.1998777

Schreier, A.L., **Readyhough, T.S.,** Moresco, A., Davis, M., Joseph, S. (2021) Social dynamics of a newly integrated bachelor herd of Asian elephants (*Elephas maximus*): welfare implications. *Journal of Applied Animal Welfare Science*. DOI: 10.1080/10888705.2021.1908141

Schreier, A.L., Bolt, L.M., Russell, D.G., **Readyhough, T.S.,** Jacobson, Z.S., Merrigan-Johnson, C., Coggeshall, E.M.C. (2021) Mantled howler monkeys (*Alouatta palliata*) in a Costa Rican forest fragment do not modify activity budgets or spatial cohesion in response to anthropogenic edges. *Folia Primatologica*. DOI: 10.1159/000511974

Manuscripts Under Review

Readyhough, T.S., Cepek, J.D., Dennis, P., Byer, N., Hausman, C., Moll, R.J. (under review) A dynamic human shield: COVID-19 lockdown alters the spatio-temporal interactions of competing urban carnivores. *Proceedings of the Royal Society B: Biological Sciences*.

Hall, L.M., Sullivan, F.B., **Readyhough, T.S.,** Burke, S.A., Palace, M.W., Jones, H., Moll, R.J. (under review) Using Unpiloted Aerial System (UAS) surveys to predict spatially explicit densities of moose at a landscape scale. *Journal of Wildlife Management*.

Savage, C.E., **Readyhough, T.S.,** Cepek, J.D., Moll, R.J. (under review) Carnivore Interactions at an Urban Den Site Used by at Least Eleven Mammal Species in Cleveland, Ohio, USA. *Urban Naturalist*.

Schreier, A.L., **Readyhough, T.S.**, Ortega, S.K., Joseph, S., Moresco A.M., Davis, M. (**under review**) The impact of musth and social housing on male Asian elephant (*Elephas maximus*) activity budgets. *Applied Animal Behaviour Science*.

Other Publications

Poisson, M.K.P., Butler, A.R., Dawson, C.R., Ford, A.T., **Readyhough, T.S.**, Scherger, J.K. and Moll, R.J. (**in press**) Lethal effects of roads on large carnivores. In R.A. Montgomery and R.J. Moll (Eds), *Apex predators in the Anthropocene: How humans shape large carnivore populations*. Oxford University Press.

Invited Talks

Readyhough, T.S., Flinn, K.M., Cepek, J.D., Hausman, C.E., Byer, N.W., Moll, R.J. Investigating Impacts of 200 Years of Changing Land-Use and Socioeconomics on Modern Biodiversity in Fragmented Urban Ecosystems. Cleveland Metroparks Natural Resources Symposium, December 2025, Cleveland, OH, USA.

Readyhough, T.S. and Cepek, J. Wildlife Camera Volunteer Update: Urban Carnivore Coexistence. Invited Talk. Cleveland Metroparks, August 2025, Cleveland, OH, USA.

Readyhough, T.S. and Cepek, J. Wildlife Camera Volunteer Update: Research Partnerships. Invited Talk. Cleveland Metroparks, September 2024, Cleveland, OH, USA.

Readyhough, T.S. and Cepek, J. Wildlife Camera Volunteer Update: Future Research. Invited Talk. Cleveland Metroparks, August 2023, Cleveland, OH, USA.

Readyhough, T.S. Investigating Drivers of White-tailed Deer Fecundity in an Actively Managed Urban Population. Invited Talk. Cleveland Metroparks Natural Resources, July 2023, Cleveland, OH, USA.

Readyhough, T.S. Socialization of a New Bachelor Herd of Asian Elephants. Invited Talk. Regis University Biology Department Seminar, September 2020, Denver, CO, USA.

Presentations to Professional Meetings

Readyhough, T.S., Flinn, K.M., Cepek, J.D., Hausman, C.E., Byer, N.W., Moll, R.J. Investigating Impacts of 200 Years of Changing Land-Use and Socioeconomics on Modern Biodiversity in Fragmented Urban Ecosystems. Oral Presentation. 32nd Annual Conference of the Wildlife Society, October 2025, Edmonton, AB, Canada.

Readyhough, T.S., Cepek, J., Dennis, P., Byer, N., Hausman, C., Moll, R.J. A dynamic human shield? Evaluating COVID-19 lockdown effects on urban carnivore coexistence. Oral Presentation. International Urban Wildlife Conference, June 2025, Atlanta, GA, USA.

Readyhough, T.S., Cepek, J., Dennis, P., Byer, N., Hausman, C., Moll, R.J. A dynamic human shield? Evaluating COVID-19 lockdown effects on urban carnivore coexistence. Oral Presentation. Ohio Wildlife Managers Association Conference, January 2025, Columbus, OH, USA.

Readyhough, T.S., Cepek, J., Dennis, P., Byer, N., Hausman, C., Moll, R.J. A dynamic human shield? Evaluating COVID-19 lockdown effects on urban carnivore coexistence. Oral Presentation. 31st Annual Conference of The Wildlife Society, October 2024, Baltimore, MD, USA.

Readyhough, T.S., Ortega, S.K., Joseph, S., Davis, M., Moresco, A., Schreier, A.L. The impact of musth on bull Asian elephant (*Elephas maximus*) activity budgets. Oral Presentation. 61st Annual Meeting of the Animal Behavior Society, June 2024, London, ON, Canada.

Readyhough, T.S., Butler, A.R., Stephen, R.B., Hall, L., Heit, D., Poisson, M.K.P., Moll, R.J. A meta-analysis of the trends and biases in United States terrestrial mammal research since 1900. Oral Presentation. 103rd Annual Meeting of the American Society of Mammalogists, June 2024, Boulder, CO, USA.

Readyhough, T.S., Cepek, J., Dennis, P., Byer, N., Hausman, C., Montgomery, R.A., Moll, R.J. Unveiling drivers of fecundity in an urban deer (*Odocoileus virginianus*) herd over 20 years of active management. Oral Presentation. Ohio Wildlife Managers Association Conference, January 2024, Columbus, OH, USA.

Readyhough, T.S., Joseph, S., Davis, M., Moresco, A., Schreier, A.L. Developing research partnerships to improve bull elephant welfare with data-based management. Oral Presentation. Annual Conference of the Elephant Managers Association, October 2023, Dallas/Fort Worth, TX, USA.

Readyhough, T.S., Cepek, J., Dennis, P., Byer, N., Hausman, C., Montgomery, R.A., Moll, R.J. Evaluating limiting factors for fecundity in an actively managed urban white-tailed deer population. Oral Presentation. International Urban Wildlife Conference, June 2023, Washington, DC, USA.

Readyhough, T.S., Joseph, S., Davis, M., Moresco, A., Schreier, A.L. Socialization impacts stereotypical behavior in bull Asian elephants (*Elephas maximus*). 58th Annual Meeting of the Animal Behavior Society, August 2021, online.

Readyhough, T.S., Joseph, S., Davis, M., Moresco, A., Schreier, A.L. Bull elephant social behaviors at Denver Zoo. Annual Conference of the Elephant Managers Association, October 2019, Denver, CO, USA.

Grants, Fellowship, and Scholarship Funding

Graduate School Travel Grant , University of New Hampshire	\$400	2025
Graduate Student Travel Grant , Animal Behavior Society	\$500	2024
NRESS Program Student Support Fund , University of New Hampshire	\$500	2023
National Science Foundation Graduate Research Fellowship	\$147,000	2022
Presidential Scholarship , University of New Mexico	\$6,000	2012-2016
Legacy Lottery Scholarship , University of New Mexico	\$21,000	2012-2016
Joseph Gaudin Scholarship , University of New Mexico Biology Department	\$1,000	2015

Mentorship

Graduate Student Theses- Moose in New Hampshire	05.2023-present
Assisted with graduate (MS) student field data collection and data processing and supported students throughout data analyses by providing statistical guidance with Bayesian hierarchical modeling	
Undergraduate Research Project- Urban Ecology and Wildlife	08.2022-present
Guided an undergraduate through a summer research program including field experience and site visits, study conception, data processing and analyses, poster presentation, and a written natural history note in preparation for publication	
Graduate Student Projects- Bull Asian Elephants at Denver Zoo	08.2018-present
Mentored three graduate (masters) students through independent research projects involving data analyses and writing resulting in two scientific publications (Zoo Biology)	

Elementary School Student Experiences- BEMP**01.2016-05.2016**

As a University of New Mexico student intern, led field experiences for 50 local 4th grade students to collect ecological data in riparian systems along the Rio Grande in Albuquerque, NM with the Bosque Ecosystem Monitoring Program

Honors College Peer Advisor- University of New Mexico**06.2015-05.2016**

Acted as the primary academic advisor for students in the UNM Honors College. Advised students on course registration, monitored student progress towards graduation requirements, and provided programming to increase community within the Honors College

Teaching Experience**Laboratory/Field Course Assistant**

University of New Hampshire

2023-2024*Inventory and Monitoring of Ecological Communities NR740/840 (Fall 2023/2024)***Guest Lectures**

University of New Hampshire

2022-2024*Wildlife Population Ecology NR640 (Spring 2023/2024)**Inventory and Monitoring of Ecological Communities NR740/840 (Fall 2023)**National Science Foundation Graduate Research Fellowship Preparation GRAD891 (Fall 2022)***Full-Time Affiliate Faculty**

Regis University

2018-2022

Developed and taught undergraduate and graduate-level courses including: *Graduate Conservation and Restoration Seminar BL664 (1CR)*, *Seminar in Evolutionary Biology BL495 (1CR)*, *Principles of Ecology BL402 (3CR)*, *Conservation Biology BL428 (3CR)*, *Introduction to Environmental Science BL250 (3CR)*, *Environmental Science Laboratory BL251 (1CR)*, *Organismic Biology Lab BL259 (1CR)*, *Cell and Molecular Biology Lab BL261 (1CR)*

Adjunct Faculty

Santa Fe Community College

2017

Lead chemistry laboratory courses including: *Introductory Chemistry 111 Laboratory (2 sections)*, *General Chemistry 122 Laboratory (1 section)*

Professional Service

Manuscript Peer Review,

2024-present*Basic and Applied Ecology, Scientific Reports*

Event Coordinator,

08.2024-present*Seacoast Sips of Science, Durham, NH*Invited Judge, 34th College of Life Sciences and Agriculture Undergraduate Research Conference**04.2025***University of New Hampshire, Durham, NH*

Committee Member, Diversity, Equity, and Inclusion Committee,

08.2022-05.2024*Department of Natural Resources and the Environment, University of New Hampshire, Durham, NH*Invited Judge, 33rd College of Life Sciences and Agriculture Undergraduate Research Conference**04.2024***University of New Hampshire, Durham, NH*Invited Judge, 32nd College of Life Sciences and Agriculture Undergraduate Research Conference**04.2023***University of New Hampshire, Durham, NH***Memberships in Professional Societies**

- American Society of Mammalogists
- Animal Behavior Society
- The Wildlife Society including the Urban Wildlife Working Group
- Elephant Managers Association
- Association for Women in Science