Kristen Y. Heroy, Ph.D.

Department of Biological Sciences
1 W Packer Ave, STEPS 444
Bethlehem, PA 18015

Office: 610-758-2673

www.researchgate.net/profile/Kristen_Heroy
www.linkedin.com/in/kheroy/

Education

Jan 2014 – July 2017 **Utah State University**
Doctor of Philosophy, Wildlife Ecology
Logan, United States

Jan 2010 – Dec 2013 **Angelo State University**
Master of Science, Animal Science
San Angelo, United States

Aug 2004 – May 2008 **University of Delaware**
Bachelor of Science, Animal Science
Newark, United States

Teaching Experience

Aug 2020-Present **Visiting Assistant Professor**
Lehigh University, Bethlehem, PA, United States

Responsibilities: Develop and deliver lecture and lab course materials for online and in-person platforms, develop and administer quizzes and exams in lecture and labs, maintain gradebooks, address student questions and concerns, hold weekly office hours, manage TAs, and monitor and assist with student progress.

Classes: *Fall 2021*: Integrative & Comparative Biology (lecture, lab [6 sections], and recitation [4 sections]), Special Topics in Biological Sciences (Independent study, writing intensive [3 students])

Summer 2021: Biological surveys and field work (lab), Integrative and Comparative Biology (lecture)

Spring 2021 and 2022: Behavioral Ecology (lecture), Microbiology (two lab sections), and Plants, People, and Agriculture (new non-majors lecture).

Fall 2020: Evolution (two lecture sections), Writing in the Biological Sciences (discussion/project-based lecture).

Aug 2019-Dec 2019 **Instructor**
Cedar Crest College, Allentown, PA, United States

Responsibilities: Develop and deliver lecture course materials, develop and administer quizzes and exams in lecture and labs, lead labs, maintain gradebooks, address student questions and concerns, hold weekly office hours, and monitor and assist with student progress.

Classes: Concepts in Ecology and Environmental Issues (lecture), Animal Ecology and Evolution (labs), and Introductory Biology (labs) for majors and non-majors.

Reason for leaving: Only hired as a temporary adjunct for the fall 2019 semester to teach specific classes related to my areas of expertise.

July 2018-Aug 2019 **Instructor** (Extension)

Independent teaching, various locations, United States

Responsibilities: Develop and teach classes that engage the general public, integrating ecology, environmental science, and spirituality (in some cases) in order to bring awareness to the environment, to increase awareness of human impacts, our role within the ecosystem, and to understand the interconnectedness of nature.

Classes: Becoming custodians of our world; Ethical harvesting of natural resources; Plant healing with every day plants: integrating ecology, chemistry, and spirituality; Finding your place in the natural world; Animal and plants: guides for development.

Jan 2016-May 2017 **Teaching Assistant**

Utah State University, Logan, UT, United States

Responsibilities: Lecture, lead lab, upload necessary documents to Canvas, administer quizzes and lab exams, maintain gradebook, address student questions and concerns, and hold weekly office hours, monitor and assist with student progress.

Classes: Introductory Biology Labs for majors and non-majors; teach three 3 hr sections of 30 students each week.

Reason for Leaving: Graduating.

Committees

April 2021 – present **Master's thesis committee,** Mariah Matias

Lehigh University

Using Calibrated Enhanced-Resolution Brightness Temperature (CETB) to investigate snow and its impact on caribou (Rangifer tarandus) migration in the Northwest Territories of Canada

Research Experience

Jan 2014 – July 2017 **Research Assistant**

Utah State University, Department of Wildland Resources

Logan, United States

Responsibilities: Develop and execute research plan, collect and analyze data, publish and disseminate results, advise private landowners of optimal management strategies, supervise/manage research technicians.

Project focus: Identification of nutritional and secondary chemical thresholds driving preference for or against aspen (*Populus tremuloides*) using sheep in pen

trials followed by the creation of a spatio-temporal herbivory risk-map and the identification of ecological markers for aspen stands on a small-scale area using information on preference gained from pen trials coupled with primary and secondary chemistry of aspen leaves, nutrition of surrounding understory, and animal use via pellet counts collected with vegetation sampling and belt transects.

Jan 2010 – Jan 2011 **Research Assistant**
Angelo State University, Department of Agriculture
San Angelo, United States

Responsibilities: Conduct research, disseminate results, feed and care for research and resident animals on entire ranch (including vet care, breeding and pregnancy checks, branding, vaccinations, move and conduct daily wellness checks, etc.), maintain facilities (mow, construct and fix fencing, maintain water systems, mix bulk feed rations, etc.)

Project focus: Effects of preconditioning and protein supplementation on forages containing plant secondary compounds.

Jan 2008 – May 2008 **Undergraduate Research Assistant**
University of Delaware, Department of Animal and Food Sciences
Newark, United States

Responsibilities: Assist PI with execution of research by setting up research areas, implanting EEG electrodes into brains of anesthetized chickens the day before research was to be conducted, care and maintenance of animals and facilities, cleanup of facilities after research was completed.

Project focus: Broiler house depopulation, comparing CO_2, Ar, and foam.

Awards & Grants

Jan 2021 **Andrew W. Mellon Foundation**
Cross-disciplinary humanities-science teaching grant award winner

Feb 2017 **Scholarship**
Tuition Scholarship nomination: Elizabeth Bullock Harderlie Scholarship

Spring 2015 and 2016 **Grant Writing Workshop participation**
One grant writing workshop each year that covered how to apply for funding in each of the various government departments (i.e., NIH, USDA, etc.), and what to include and/or stress for each group to maximize success

Jun 2015 **Award**
USU Ecology Center Graduate Award, Research Funding

Jan 2014 **Graduate Assistantship**
USU Wildland Department

Skills & Activities

Skills/Areas of expertise Wildlife Ecology, Animal Science, Natural Resource and Range Management, Ruminant Nutrition, Plant Secondary Metabolism, Aspen (*Populus tremuloides*), R, SAS, GIS, Employee management, Mentor, Veterinary tech, Livestock handling, Horse training

Languages English; Intermediate French

Scientific Memberships Utah Chapter of the Wildlife Society, 2015-2017

Society for Range Management, 2015-2017

Interests <u>Clubs and volunteer experience</u>:

Last Chance Ranch Rescue Volunteer/Shift Manager (PA), Feb 2020-present
Livestock Feeding: Shift manager in charge of 6 employees per shift
Horse Riding and Training: Riding and groundwork with green horses
Oklevueha Native American Church Lifetime Member, 2015-present
National Brittany Rescue Volunteer, 2014-present
NRA Lifetime Member and Volunteer, 2010-present
Gilcrease Animal Sanctuary Volunteer (NV), Feb 2018-July 2019
Member of the American Brittany Club, volunteer at hunt tests and field trials,
2013-2017
Eco-lunch coordinator, Utah State University, 2016-2017
Wildland Department Seminar committee member, 2016-2017
LGBT student mentor 2015-2017
Toastmasters International, 2016-2017
Utah State University Wildlife Society Club, 2015-2017

<u>Hobbies</u>:

Snowboarding
Hiking
Shooting- Target, trap, skeet
Canine and equine training
Archery
Fly fishing
Drawing and painting
Buddhist studies

Conference Proceedings

Kristen Y. Heroy, Beth A. Burritt, Samuel B. St. Clair, Juan J. Villalba, Nutritional state influences trembling aspen (*Populus tremuloides)* intake by sheep. Annual Society for Range Management, St.

George, UT, 2/2017

Kristen Y. Heroy, Beth A. Burritt, Samuel B. St. Clair, Juan J. Villalba. Nutrients and secondary compounds influence trembling aspen (Populus tremuloides) intake by sheep. Annual Society for Range Management, Corpus Christi, TX; 2/2016.

Kristen Y. Heroy, Juan J. Villalba: *Presentation: Aspen: a young life nipped in the bud*. Front Range Ecology Symposium, Colorado State University; 02/2015

Publications

Heroy KY, St. Clair SB, Burritt BA, Durham SL, Villalba JJ. 2018. Nutritional state and secondary compounds influence trembling aspen (*Populus tremuloides*) intake by lambs. Applied Animal Behaviour Science, *https://doi.org/10.1016/j.applanim.2018.05.031*

Heroy KY, St. Clair SB, Rogers PC, Villalba JJ. 2018. The influence of the foodscape on quaking aspen use by ungulates and stand condition. International Journal of Forest, Animal and Fisheries Research, 2(2):50-63. DOI: 10.22161/ijfaf.2.2.2

Heroy KY, St. Clair SB, Burritt BA, Villalba JJ. 2017. Plant community chemical composition influences trembling aspen (Populus tremuloides) intake by sheep. J Chem Ecol, 43(8):817-830. DOI: 10.1007/s10886-017-0872-6.