

RHIANNON JAKOPAK

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RESEARCH INTERESTS

Population ecology, life history strategies, mammal ecology, human dimensions, science communication.

EDUCATION

- 2017 – Pres. **Master of Science**, Zoology and Physiology and Environment and Natural Resources
Advisor: Dr. Kevin Monteith
University of Wyoming (UW), Laramie, WY
- 2016 **Bachelor of Science**, Wildlife and Fisheries Biology and Management
Bachelor of Arts, Religious Studies
UW, Laramie, Wyoming – GPA: 3.7/4.0

RESEARCH EXPERIENCE

Graduate Student, Department of Zoology and Physiology – UW, 8/2017 – Pres.

Title: Does the petal fall far from the rose? Revealing the ontogeny and population consequences of ungulate migration

Explore the factors influencing inheritance of migration routes, subsequent home range selection, and population-level consequences of movement behavior.

Small Mammal Trapping Project Manager, Mpala Research Centre, 5/2016 – 11/2016

Title: Are elephant shrews more like elephants, or shrews? Quantifying life-history and demographics of *Elephantulus rufescens*

Title: Abundance-occupancy relationships in small mammals: testing the core-satellite species hypothesis

Conducted small mammal trapping. Organized and analyzed long-term small mammal mark-recapture data in R and RMark. Facilitated communication between Kenyan-based field operations and US-based principle investigators. Prepared fecal and blood samples for later analyses. Worked as a part of a multi-national team in a remote location.

Undergraduate Remote Sensing Intern, WyomingView – UW, 1/2016 – 5/2016

Title: Evaluating the spectral separability of crop classes in multitemporal Landsat imagery

Employed multivariate statistics to identify agricultural fields within and between years using remotely sensed images. Conducted analyses in MiniTab.

Undergraduate Research Fellow, Wyoming Scholars Research Program – UW, 10/2015 – 6/2016

Title: Assessing a critical assumption and providing context to remotely sensed data for ecological studies

Evaluated whether *in situ* and satellite-derived Normalized Difference Vegetation Index values reflect on-the-ground measures of vegetation biomass for forage quality research. Wrote Program R code to calculate Normalized Difference Vegetation Index values and conduct analyses.

Undergraduate Research Fellow, Wyoming EPSCoR – UW, 7/2015 – 5/2016

Title: Organizing the pantry: cache management improves quality of overwinter food stores in a montane mammal

Conducted independent research regarding variation in cache structure in the American pika which culminated in a peer-reviewed publication. Collected field measurements of cache composition and arrangement. Designed and implemented field methodologies. Developed Microsoft Access database and wrote Program R code for data analyses. Backpacked in rugged montane conditions for up to 9 days at a time.

Undergraduate Research Intern, McNair Scholar Program – UW, 4/2012 – 9/2012

Title: Rebranding Israel: War, Tourism, and Sex

Composed an extensive proposal, literature review, and research manuscript. Conducted funded undergraduate research. Gathered, cataloged, and analyzed the presence of topics concerning women in Israel in indices of over 100 books.

PROFESSIONAL EXPERIENCE

Writing Center Graduate Assistant, UW Writing Center – UW, 8/2017 – Pres.

Developing stronger writers among UW's undergraduate students, graduate students, and faculty via one-on-one, peer-tutoring consultations. Conceptualize and execute research identifying ways that writing centers can better support scientific writers. As workshop coordinator, design and implement workshops on a variety of topics (developing personal statements, publishing undergraduate research, and writing proposals) and provide logistical support to other workshop leaders. Manage social media accounts.

Ground Squirrel Trapping Technician, Idaho Cooperative Fish and Wildlife Research Unit – University of Idaho, 4/2017 – 8/2017

Trapped and handled multiple squirrel species (including Northern Idaho ground squirrel, a federally listed species). Used radio telemetry to find ground squirrel hibernacula. Conducted vegetation surveys. Lived and worked with small team in remote field locations.

Center Supervisor, Blue Bonnet Swamp Nature Center – East Baton Rouge Parish Parks and Recreation, Baton Rouge, LA, 11/2016 – 2/2017

Educated visitors on the ecology of Blue Bonnet Swamp (e.g., plant and animal identification, damage caused by invasive species, bird migrations through the Gulf

Coast). Oversaw center operations, including managing program aides, scheduling educational tours, managing gift shop inventory, and operating cash register.

Field Technician, Wyoming Cooperative Fish and Wildlife Research Unit – UW, 5/2015 – 7/2015

Located and collared mule deer fawns. Conducted habitat and vegetation surveys. Investigated mortalities and performed field necropsies. Worked as a part of a small team in remote settings. Hiked 5-12 miles/day in rugged terrain.

Laboratory Volunteer, Wyoming Cooperative Fish and Wildlife Research Unit – UW, 3/2015 – 5/2016

Composited and processed fecal samples. Inventoried vegetation samples. Trained intern. Entered data.

Field Assistant, Department of Zoology and Physiology – UW, 12/2014 – 1/2015

Mist-netted and observed Golden-winged Manakin lekking behavior in the Mindo Cloudforest. Identified tropical birds.

Crew Member, Wyoming Conservation Corps – UW, 5/2014 – 8/2014

Applied herbicide for mountain pine beetle mitigation. Built over 5 miles of trail. Restored historic buildings. Installed fence (post and cable and barbwire). Bucked and limbed downed trees (over 50 hours chainsaw work). Worked with a team in remote settings under harsh environmental conditions.

Applied Sciences Writing Intern, Seney National Wildlife Refuge and Lake States Fire Science Consortium – UW, 1/2014 – 3/2014

Summarized scientific papers into research briefs for audiences having minimal scientific backgrounds.

Ecology Team Leader, Upward Bound Math Science Program – UW, 5/2013 – 7/2013

Assisted and promoted the success of low income, first generation, and/or minority high school students with their ecology-related research projects and overall college preparation.

Safe Zone Program Coordinator, Campus Activities Center – UW, 1/2013 – 5/2014

Created content for program website to develop and maintain web presence and increase visibility of the program. Designed, organized, publicized, and executed public training sessions regarding the lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities. Created and maintained e-mail lists. Maintained social media page. Promoted from Assistant Coordinator to Coordinator in 9/13.

TEACHING EXPERIENCE

2017 Graduate Writing Tutor, *University of Wyoming Writing Center*

2016 Teaching Assistant: Field Methods in Mammalogy, *Mpala Research Centre*

Undergraduate Teaching Assistant: Principles of Fish and Wildlife Management, *University of Wyoming*

2015 Undergraduate Teaching Assistant: Mammalogy, *University of Wyoming*

2013 Supplemental Instructor: History of Islam, *University of Wyoming*
Online Supplemental Instructor: African Spirits in the New World, *University of Wyoming*

PEER-REVIEWED PUBLICATIONS

1. Goheen, J. R., D. J. Augustine, K. E. Veblen, D. M. Kimuyu, T. M. Palmer, L. M. Porensky, R. M. Pringle, C. Riginos, A. T. Ford, A. A. Hassan, **R. Jakopak**, T. R. Kartzinel, S. Kurukura, A. M. Louthan, W. O. Odadi, T. O. Otieno, A. M. Wambua, H. S. Young, and T. P. Young. In review. Conservation lessons from large-mammal manipulations in East African savannas: the KLEE, UHURU, and GLADE experiments. *The Year in Ecology and Conservation Biology, Annals of the New York Academy of Sciences*, Wiley.
2. **Jakopak, R.**, L. E. Hall and A. D. Chalfoun. 2017. Organizing the pantry: cache management improves the quality of overwinter food stores in a montane mammal. *Journal of Mammalogy* 98(6): 1674–1681.

OTHER PUBLICATIONS

1. Beagle, E., J. Bennet Ponsford, **R. Jakopak**, G. Nikolov, A. Parker. 2017. Put Wyoming first: Leave graduate tuition untaxed. *Casper Star Tribune* Letter to the Editor.
2. **Jakopak, R.** 2016. It's the little things: What we can learn from small mammals. Mpala Research Centre Memos.
3. **Jakopak, R.** and J. Polasik. 2014. Fire and Black-Backed Woodpeckers in Upper Michigan. Seney National Wildlife Refuge. Research brief.
4. **Jakopak, R.** 2014. The 1976 (Walsh Ditch) Fire & Wildlife. Seney National Wildlife Refuge. Research brief.

RESEARCH PRESENTATIONS

* Indicates presented.

1. **Jakopak, R.,*** and M. Drollette. 2018 (accepted). Writing Center Approach to Student Success in the Science Classroom. Colorado Wyoming Writing Tutors Conference. Panel discussion.
2. **Jakopak, R.,*** 2018 (accepted). Match made in heaven: the benefits of collaboration between science and writing centers. Rocky Mountain Writing Centers Association. Oral presentation.
3. **Jakopak, R.,*** and K. Monteith. 2017. Does the petal fall from the rose? Revealing the ontogeny and consequences of ungulate migration. Wyoming Chapter of The Wildlife Society. Poster presentation. *Awarded Best Student Poster Presentation*.
4. **Jakopak, R.,*** A. M. Wambua, and J. R. Goheen. 2017. Are elephant shrews more like elephants, or shrews? Quantifying life-history and demographics of *Elephantulus rufescens*. American Society of Mammalogists. Poster presentation.

5. J. R. Goheen, D. E. Boro, **R. Jakopak**, T. R. Kartzinel, S. D. Newsome, and A. M. Wambua. 2017. Climate forcing, inter-individual variation, and specialization in an African small-mammal community. American Society of Mammalogists. Oral presentation.
6. **Jakopak, R.,*** L. E. Hall and A. D. Chalfoun. 2016. Understanding the architecture of food caches in a montane mammal. University of Wyoming Undergraduate Research Day. Oral presentation.
7. **Jakopak, R.,*** E. O. Aikens and K. L. Monteith. 2016. Assessing a critical assumption and providing context to remotely sensed data for ecological studies. University of Wyoming Undergraduate Research Day. Oral presentation.
8. **Jakopak, R.*** and R. Sivanpillai. 2016. Evaluating the spectral separability of crop classes in multi-temporal Landsat imagery. University of Wyoming Undergraduate Research Day. Oral presentation.
9. **Jakopak, R.,*** L. E. Hall and A. D. Chalfoun. 2016. Organizing the pantry: Pikas do it, too! Front Range Student Ecology Symposium. Poster presentation.
10. **Jakopak, R.,*** L. E. Hall and A. D. Chalfoun. 2015. Understanding the architecture of food caches in a montane mammal. Wyoming Chapter of The Wildlife Society and Wyoming Landscape Conservation Initiative Joint Conference. Poster presentation.

SCIENCE OUTREACH AND PROFESSIONAL SERVICE

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| 2018 | <p>Provided feedback for Student Chapter of The Wildlife Society resume/CV workshop.</p> <p>Organized population genetics reading group for interested students and faculty.</p> <p>Departmental service – graduate student representative to faculty meetings.</p> <p>Co-organize (along with the Biodiversity Institute, Ruckelshaus Institute, and Wyoming EPSCoR) ScienceCafe, a science outreach event bringing research conducted at UW to the local high school and community.</p> <p>Assist Education and Graduate Student Committee by initiating a social media networking group for graduate students in American Society of Mammalogists and updating resources detailing funds available to graduate students.</p> |
| 2017 | <p>Departmental service – graduate student representative to faculty meetings.</p> <p>Guest lecture at Marty Indian School, 3rd and 4th grade – “Life of a Wildlife Biologist.”</p> <p>Judged Region VII Science Fair – elementary level.</p> <p>Created and managed social media accounts for Southeastern Louisiana University Vertebrate Museum. Designed interpretive poster for Darwin Day 2017.</p> |
| 2016 | <p>Assisted administering rabies vaccinations to cats and dogs with the Laikipia Rabies Vaccination Campaign in Laikipia County, Kenya.</p> <p>Worked with multiple organizations (Wyoming Conservation Corps, US Fish and Wildlife Services, Laramie Rivers Conservation District, Wyoming Wildlife</p> |

Federation, and Wyoming Student Chapter of The Wildlife Society) to build wildlife-friendly fences.

Trapped, collared, and tracked (via VHF telemetry) least chipmunks to locate hibernacula.

Student ambassador to prospective zoology undergraduates.

2015 Organized multiple fundraising events for the Wyoming Student Chapter of The Wildlife Society.

2014 Curatorial assistant with University of Wyoming Museum of Vertebrates: identified and inventoried mammal specimens. Assisted with specimen preparation.

SKILLS

Analytical: Computer software: R – intermediate; MARK – proficient; MiniTab – proficient; ERDAS Imagine – intermediate; Microsoft Office Suite (Access, Excel, Word) – advanced. Database creation and management.

Field: VHF telemetry. Processing and handling adult ungulates (mule deer, bighorn sheep) and neonate mule deer. Small mammal trapping (Sherman and Tomahawk) and handling (morphometric measurements). Backcountry backpacking and camping (up to 9 consecutive days; hike up to 14 miles/day). Camera trapping (Bushnell). Vegetation surveys. Handheld GPS use. Vehicle operation (4WD, manual transmission). Working with small team in remote locations.

RELEVANT COURSES

Graduate:

Advanced Ecology (ECOL 5620) – Enrolled
Mini Microeconomics (ENR 4890) – A
Movement Ecology (ZOO 5890)– Enrolled

Population Genetics (BOT 5664) – A
R Programming for Scientists (ENR 5890) – A

Undergraduate:

Advanced Remote Sensing of the Environment (GEOG 4211) – A
Behavioral Ecology (ZOO 4415) – A
Comparative Environmental Physiology (ZOO 4190) – A
Computational Biology (BOT 4550) – A
Fire Ecology (GEOG 4470) – A
General Ecology (LIFE 3400) – B
Genetics (LIFE 3050) – A
Introduction to Field Ecology (LIFE 3410) – A

Limnology (ZOO 4440) – A
Mammalogy (ZOO 4370) – A
Population Ecology (ZOO 4400) – A
Principles of Fish and Wildlife Management (ZOO 2450) – A
Remote Sensing (BOT 4111) – A
Scientific Communication (ZOO 4100) – A
Vegetation Ecology (BOT 4700) – A
Wildlife Ecology and Management (ZOO 4300) – A

HONORS AND AWARDS

- 2017 Wyoming Chapter of The Wildlife Society Travel Grant (\$250)
Wyoming Chapter of The Wildlife Society Best Student Poster Award
- 2016 Arts and Sciences Outstanding Undergraduate Student
Beth Williams Memorial Award
Anne Slater Religious Studies Outstanding Graduate (\$250)
Robert A. Jenkins Undergraduate Research Award (\$1400)
University of Wyoming President's List
Arts and Sciences Sanders Walter Study Abroad Scholarship (\$1500)
- 2015 University of Wyoming President's List
National Science Foundation EPSCoR Undergraduate Research Fellowship (\$5300)
Wyoming Research Scholars Program Fellowship (\$6300)
- 2014 Dick and Lynne Cheney Study Abroad Grant (\$700)
- 2013 University of Wyoming Dean's List
University of Wyoming President's List
- 2012 Arts and Sciences Sanders Walter Study Abroad Scholarship (\$500)
Dick and Lynne Cheney Study Abroad Grant (\$1000)
- 2011 University of Wyoming Dean's List
- 2010 Rocky Mountain Scholars Award (\$20,000)
Horatio Alger Scholars Award (\$5000)

PROFESSIONAL MEMBERSHIPS

500 Women Scientists, Laramie Pod
American Society of Mammalogists
Committee member: Education and Graduate Students Committee
Society for Conservation GIS (inactive)
University of Wyoming Student Chapter of The Wildlife Society (inactive)
2015 – Treasurer
Wyoming Chapter of The Wildlife Society

REFERENCES

Dr. Kevin L. Monteith, graduate advisor
Haub School of Environment and Natural Resources

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