

Janet L. Rachlow, Professor
Curriculum Vitae

Department of Fish and Wildlife Sciences
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PROFESSIONAL INTERESTS

Behavioral Ecology and Conservation of Mammals, Wildlife-Habitat Relationships, Ecology of the Sagebrush Ecosystem, Science Communication and Advocacy

PROFESSIONAL POSITIONS

Department Head, Department of Fish and Wildlife Sciences, University of Idaho (2023-present)

Interim Department Head, Department of Fish and Wildlife Sciences, University of Idaho (Spring 2019, Fall 2022)

Professor, Department of Fish and Wildlife Sciences, University of Idaho (2014 – present)

Associate Professor, Department of Fish and Wildlife Sciences, University of Idaho (2007 - 2014)

Assistant Professor, Department of Fish and Wildlife Sciences, University of Idaho (2001 - 2007)

Program Co-Director, Ecology and Conservation Biology Program, University of Idaho (2001 - 2004)

Adjunct Faculty, School of Forestry, Northern Arizona University (1999 - 2000)

EDUCATION

- 1997 National Science Foundation NATO Postdoctoral Fellowship, Institute of Zoology, Zoological Society of London, UK.
- 1997 Ph.D. Ecology, Evolution and Conservation Biology, University of Nevada Reno.
- 1991 M.S. Wildlife Management, University of Alaska Fairbanks.
- 1987 B.A. Biology (Dance minor), University of Iowa.

AWARDS

- 2022 Outstanding Instructor Award, College of Natural Resources, University of Idaho
- 2021 Faculty Excellence Award, College of Natural Resources Advisory Board, University of Idaho
- 2020 Alumni Award for Excellence, University of Idaho
- 2019 Alumni Award for Excellence, University of Idaho
- 2015 Outstanding Researcher Award, College of Natural Resources, University of Idaho
- 2009 Alumni Award for Excellence, University of Idaho
- 2008 Ted Trueblood Communications Award for best professional presentation, Idaho Chapter of The Wildlife Society
- 2007 Outstanding Advisor Award, College of Natural Resources, University of Idaho
- 2006 Alumni Award for Excellence, University of Idaho
- 2005 Friends of the Leadore Ranger District Award, US Forest Service

PERSONAL INTERESTS: Rafting/kayaking, swimming, cycling, running, gardening

GRADUATE STUDENTS MENTORED

Current: (* named the outstanding graduate student in the Department of Fish and Wildlife Sciences)

Fiona McKibben, Ph.D. (2023-present)

Rachel Stein, Ph.D. (2019-present)

* Eric Van Beek, M.S. (2020-present)

Lily Harrison, M.S. (2020-present)

Completed:

Logan Weyand, M.S. (non-thesis) Morbidity and mortality of moose in Idaho. (Dec 2022)

Lindsey Rush, M.S. Regional habitat variation for pygmy rabbits. (Aug 2021)

Erin Kilcullen, MNR. (non-thesis) Effects of stream restoration on available rearing and spawning habitat for steelhead and spring chinook on Whychus Creek, Oregon. (Dec 2019)

Ian Smith, M.S. Habitat specialists as conservation umbrellas: do areas managed for Greater Sage-grouse protect pygmy rabbits? (Aug 2019)

Kristen Busch, M.S. (non-thesis) Understanding camouflage as a tool for teaching evolution. (May 2019)

Tom Schrempp, M.S. Diet selection, forage quality, and forage availability: could forage limit moose populations in northern Idaho? (Aug 2017)

* Charlotte Milling, PhD. The role of physiology, behavior, and habitat in seasonal thermoregulation by pygmy rabbits. (May 2017)

Laura McMahan, M.S. It's a small world: evaluating micro-GPS technologies and factors influencing habitat use by pygmy rabbits in Idaho. (May 2017)

Stephanie DeMay, PhD. Genetic monitoring and dispersal of reintroduced Columbia Basin pygmy rabbits. (Dec 2015)

Joe Holbrook, PhD. Wildlife in the sagebrush-steppe: understanding functional roles and responses to disturbance. (Dec 2015)

* Shaun Grassel, PhD. Ecological relationships of black-footed ferrets, American badgers, and black-tailed prairie dogs in South Dakota. (May 2015). Received the *Alumni Achievement Award* from the College of Natural Resources, University of Idaho in 2022.

Joel Sauder, PhD. Landscape ecology of fishers (*Pekania pennanti*) in north-central Idaho. (Aug 2014)

Mat Sorum, M.S. Behavior-specific resource selection by Kodiak brown bears. (May 2013)

Adam Wells, PhD. Fine-scale habitat selection and movement models for mountain goats in the Washington Cascades. (May 2012)

* Meghan Camp, M.S. Grazing by cattle in pygmy rabbit habitat: implications for forage and cover resources. (May 2012)

Bonnie Woods, M.S. Fire in the sagebrush shrub-steppe: potential influence on pygmy rabbit habitat. (May 2012)

William Knapp, MNR. (non-thesis) Review of information provided by BLM resource management plans for wind-energy developments. (Dec 2011)

Amanda Price, M.S. Monitoring of uncommon species: developing an index of abundance for pygmy rabbits. (Dec 2009)

Ethan Ellsworth, PhD. Snowshoe hare nutrition in a conifer forest: effects of winter food on energy use, activity, and demography in a low-density population. (Dec 2009; served as major professor after his advisor left UI)

* Wendy Estes-Zumpf, PhD. Dispersal and gene flow among pygmy rabbit (*Brachylagus idahoensis*) populations in Idaho and Southwestern Montana. (May 2008)

Jesse Lewis, M.S. The effects of human influences on black bear habitat selection and movement patterns within a highway corridor. (Dec 2007)

Dana Sanchez, PhD. Pieces of the pygmy rabbit puzzle: space use, survival, and survey indicators. (Dec 2007)

* Ryan Long, M.S. Fuels reduction in a western coniferous forest: effects on two sympatric ungulates and their habitat. (May 2007)

GRADUATE STUDENTS MENTORED (continued)

- Jon Muir, M.S. Habitat selection and reproduction by Shiras moose (*Alces alces shirasi*) in anthropogenic landscapes in Idaho. (May 2006)
- Regan Berkley, M.S. Ecological investigations into a declining population: California bighorn sheep (*Ovis canadensis californiana*) in Owyhee County, Idaho. (May 2005)
- Jason Hicks, M.S. Patterns of genetic variability among source and reintroduced populations of elk (*Cervus elaphus*) in the Western States and a genetic assessment of antler abnormalities. (Dec 2004)
- Alisse Garner, M.S. Genetic diversity and divergence in fragmented populations of the Idaho Ground Squirrel (*Spermophilus brunneus brunneus* and *S. b. endemicus*). (May 2004)

TEACHING EXPERIENCE

Undergraduate Courses Taught at University of Idaho:

- Ecology of Terrestrial Vertebrates (formerly Wildlife Ecology I) – 3 cr.
- Wildlife Techniques Lab (formerly Wildlife Ecology I Lab) – 2 cr.
- Wildland Field Ecology – 2 cr.
- Introduction to the Fish and Wildlife Profession – 1 cr.
- Exploring Natural Resources – 1 cr.
- Fish and Wildlife in a Changing World – 3 cr.

Graduate Courses Taught at University of Idaho:

- Behavioral Ecology – 2 cr.
- Wildlife Habitat Ecology – 2-3 cr.
- Large Mammal Ecology – 2-3 cr.
- Advanced Topics in Conservation Biology – 2 cr.
- Issues in International Wildlife Management – 3 cr.
- Seminars (1 cr): Occupancy Modeling (w/ O. Garton), Dispersal, Sagebrush Habitat Ecology (offered collaboratively with Washington State Univ. and Boise State Univ.)

Other Teaching Experience: Department of Biology and Wildlife, University of Alaska Fairbanks

Substitute Lecturer (1990) Lectured in Wildlife Population Dynamics for >2 months.

Teaching Assistant (1987 - 1990): Assisted in instruction of 6 undergraduate courses: Vertebrate Biology, Mammalogy, Introductory Biology I, Introductory Biology II, Wildlife Management Techniques, Wildlife Population Dynamics.

PEER-REFEREED PUBLICATIONS (*grad student senior author, **undergrad senior author)

- * Stein, R.M., and J.L. **Rachlow**. 2023. The role of acoustics in the behavior and ecology of terrestrial mammals. *Mammal Review*. <https://doi.org/10.1111/mam.12314>
- * Stein, R.M., B. Lecigne, J.U.H. Eitel, T.R. Johnson, C. McGowan, and J.L. **Rachlow**. 2022. Structure and perspective: Quantifying how vegetation and vantage point influence visibility in diverse habitats. *Frontiers in Ecology and Evolution*. <https://doi.org/10.3389/fevo.2022.911051>
- Olsoy, P.J., C.R. Milling, J.D. Nobler, M.J. Camp, L.A Shipley, J.S. Forbey, J.L. **Rachlow**, and D.H. Thornton. 2022. Food quality, security, and thermal refuge influence the use of microsites and patches by pygmy rabbits (*Brachylagus idahoensis*) across landscapes and seasons. *Ecology and Evolution*. 12(5), e8892.

PEER-REFEREED PUBLICATIONS (continued)

- Pilliod, D.S., J.L. Beck, C.J. Duchardt, J.L. **Rachlow**, K.E. Veblen. 2022. Leveraging rangeland monitoring data for wildlife: from concept to practice. *Rangelands*. 44:87-98. <https://doi.org/10.1016/j.rala.2021.09.005>
- Robb, B.C., P.J. Olsoy, J.J. Mitchell, T.T. Caughlin, D.M. Delparte, M.R. Fremgen, J.D. Nobler, J.L. **Rachlow**, L.A. Shipley, and J.S. Forbey. 2022. Near-infrared spectroscopy aids ecological restoration by classifying variation of taxonomy and phenology of a native shrub. *Restoration Ecology*. 30(5), e13584. <https://doi.org/10.1111/rec.13584>
- * Smith, I.T., S.J. Knetter, L.K. Svancara, J.W. Karl, T.R. Johnson, and J.L. **Rachlow**. 2021. Overlap between sagebrush habitat specialists differs among seasons: implications for umbrella species conservation. *Rangeland Ecology and Management*. 78:142-154.
- Aycrigg, J.L., A.G. Wells, E.O. Garton, B. Magipane, G.E. Liston, L.R. Prugh, and J.L. **Rachlow**. 2021. Habitat selection by Dall's sheep is influenced by multiple factors including direct and indirect climate effects. *PLOS One*. 16(3): e0248763.
- Bowyer, T.R., D.R. McCullough, J.L. **Rachlow**, S. Ciuti, and J.C. Whiting. 2020. Evolution of ungulate mating systems: integrating social and environmental factors. *Ecology and Evolution*. 10:5160–5178.
- Lecigne, B. J.U.H. Eitel, and J.L. **Rachlow**. 2020. viewshed3d: an R package for quantifying 3D visibility in the environment using terrestrial lidar data. *Methods in Ecology and Evolution*. DOI: 10.1111/2041-210X.13385.
- Noonan, M.J. et al. 2020. Effects of body size on estimation of mammalian area requirements. *Conservation Biology*. 34:1012-1028
- * Olsoy, P.J., J.S. Forbey, L.A. Shipley, J.L. **Rachlow**, B.C. Robb, J.D. Nobler, and D.H. Thornton. 2020. Mapping foodscapes and sagebrush morphotypes with unmanned aerial systems for multiple herbivores. *Landscape Ecology*. 35:921–936.
- * Smith, I.T., J.L. **Rachlow**, L.K. Svancara, L.A. McMahon, and S.J. Knetter. 2019. Habitat specialists as conservation umbrellas: do areas managed for greater sage-grouse also protect pygmy rabbits? *Ecosphere*. 10(8): e02827.
- * Schrempp, T.V., J.L. **Rachlow**, T.R. Johnson, L.A. Shipley, R.A. Long, J.L. Aycrigg, and M.A. Hurley. 2019. Variation in the nutritional landscape links forest management to population performance of moose. *PLOS ONE*. 14(7) :e0219128.
- Bowyer, R.T., M.S. Boyce, J.R. Goheen, and J.L. **Rachlow**. 2019. Conservation of the world's mammals: status, protected areas, community efforts, and hunting. *Journal of Mammalogy*. 100:923–941.
- * Nobler, J.D., M.J. Camp, M.M. Crowell, L.A. Shipley, C. Dadabay, J.L. **Rachlow**, L. James, and J.S. Forbey. 2019. Preferences of specialist and generalist mammalian herbivores for mixtures versus individual plant secondary metabolites. *Journal of Chemical Ecology*. 45:74-85.
- * Milling, C.R., J.L. **Rachlow**, P.J. Olsoy, M.A. Chappell, T.R. Johnson, J.S. Forbey, L.A. Shipley, and D.H. Thornton. 2018. Habitat structure modifies microclimate: an approach for mapping fine-scale thermal refuge. *Methods in Ecology and Evolution*. 9:1648–1657.
- * Milling, C.R., J.L. **Rachlow**, M.A. Chappell, M.J. Camp, T.R. Johnson, L.A. Shipley, D.R. Paul, and J.S. Forbey. 2018. Seasonal temperature acclimatization in a semi-fossorial mammal and the role of burrows as thermal refugia. *PeerJ*. 6:e4511; doi10.7717/peerj.4511
- * Crowell, M.M, L.A. Shipley, J.S. Forbey, J.L. **Rachlow**, and R.G. Kelsey. 2018. Dietary partitioning of toxic leaves and fibrous stems differs between sympatric specialist and generalist mammalian herbivores. *Journal of Mammalogy*. 99:565–577.
- * Grassel, S.M. and J.L. **Rachlow**. 2018. When generalists behave as specialists: local specialization by American badgers. *Canadian Journal of Zoology*. 96: 592–599.
- * Camp, M.J., L.A. Shipley, C.R. Milling, J.L. **Rachlow**, and J.S. Forbey. 2018. Interacting effects of ambient temperature and food quality on the foraging ecology of small mammalian herbivores. *Journal of Thermal Biology*. 71:83-90.

PEER-REFEREED PUBLICATIONS (continued)

- * Olsoy, P.J., L.A. Shipley, J.L. **Rachlow**, J.S. Forbey, N.F. Glenn, M.A. Burgess, and D.H. Thornton. 2018. Unmanned aerial systems measure structural habitat features for wildlife across multiple scales. *Methods in Ecology and Evolution*. 9:594-604.
- * McMahon, L.A., J.L. **Rachlow**, L.A. Shipley, J.S. Forbey, and T.R. Johnson. 2017. Habitat selection differs across hierarchical behaviors: selection of patches and intensity of patch use. *Ecosphere*. 8(11):e01993. doi:10.1002/ecs2.1993.
- * Camp, M.J., L.A. Shipley, T.R. Johnson, P. Olsoy, J.S. Forbey, J.L. **Rachlow**, and D. Thornton. 2017. The balancing act of foraging: mammalian herbivores trade-off multiple risks when selecting food patches. *Oecologia*. 185:537-549. (highlighted student paper)
- * Milling, C.R., J.L. **Rachlow**, T.R. Johnson, J.S. Forbey, and L.A. Shipley. 2017. Seasonal variation in behavioral thermoregulation and predator avoidance in a small mammal. *Behavioral Ecology*. 28:1236-1247.
- Forbey, J.S., G.L. Patricelli, D.M. Delparte, A.H. Krakauer, P.J. Olsoy, M.R. Fremgen, J.D. Nobler, L.P. Spaete, L.A. Shipley, J.L. **Rachlow**, A.K. Dirksen, A. Perry, B.A. Richardson, and N.F. Glenn. 2017. Emerging technology to measure habitat quality and behavior of grouse: examples from studies of Greater Sage-grouse. *Wildlife Biology*. wlb.00238. doi: 10.2981/wlb.00238
- * DeMay, S.M., P.A. Becker, J.L. **Rachlow**, and L.P. Waits. 2017. Genetic monitoring of an endangered species recovery: demographic and genetic trends for reintroduced pygmy rabbits. *Journal of Mammalogy*. 98:350-364.
- * McMahon, L.A., J.L. **Rachlow**, J.S. Forbey, and L.A. Shipley, T.R. Johnson, and P.J. Olsoy. 2017. Evaluation of micro-GPS receivers for tracking small-bodied mammals. *PLoS ONE*. 12(3):e0173185. doi.org/10.1371/journal.pone.0173185
- * Bentley Brymer, A.L., J.D. Holbrook, R.J. Niemeyer, A.A. Suazo, J.D. Wulforst, K.T. Vierling, B.A. Newingham, T.E. Link, and J.L. **Rachlow**. 2016. A social-ecological impact assessment for public land management: application of a conceptual and methodological framework. *Ecology and Society*. 21:9.
- * Camp, M.J., J.L. **Rachlow**, R. Cisneros, D. Roon, and R.J. Camp. 2016. Evaluation of GPS telemetry collar performance in the tropical Andes of southern Ecuador. *Natureza and Conservação*. 14:128-131
- * Crowell, M.M., M.J. Camp, L.A. Shipley, J.L. **Rachlow**, and J.S. Forbey. 2016. Selection of food patches by sympatric herbivores in response to concealment and distance from a refuge. *Ecology and Evolution*. 6:2865-2876.
- * DeMay, S.M., P.A. Becker, L.P. Waits, T.R. Johnson, and J.L. **Rachlow**. 2016. Consequences for conservation: population density and genetic effects on reproduction of an endangered lagomorph. *Ecological Applications*. 26:784-795.
- * Ellsworth, E., M. Boudreau, K. Nagy, J. Marshall, J.L. **Rachlow**, and D. Murray. 2016. Effects of supplemental food on winter energy expenditure and activity in free-ranging snowshoe hares. *Canadian Journal of Zoology*. 94:115-121.
- * Grassel, S.M., J.L. **Rachlow**, and C.J. Williams. 2016. Reproduction by black-tailed prairie dogs and black-footed ferrets: effects of weather and food availability. *Western North American Naturalist*. 76:405-416.
- * Holbrook, J.D., R.S. Arkle, D.S. Pilliod, J.L. **Rachlow**, K.T. Vierling, and M.M. Wiest. 2016. Transition of vegetation states positively affects harvester ants in the Great Basin, United States. *Rangeland Ecology and Management*. 69:449-456.
- * Holbrook, J.D., R.S. Arkle, K.T. Vierling, J.L. **Rachlow**, D.S. Pilliod, and M.M. Wiest. 2016. Effects of biotic and abiotic factors on occupancy and abundance of predator and prey: implications of the fire-cheatgrass cycle in sagebrush ecosystems. *Ecosphere*. 7(6):e01307. doi:10.1002/ecs2.1307
- ** Parsons, M.A., T.C. Barkley J.L. **Rachlow**, J.L. Johnson-Maynard, T.R. Johnson, C.R. Milling, J.E. Hammel, and I. Leslie. 2016. Cumulative effects of an herbivorous ecosystem engineer in a heterogeneous landscape. *Ecosphere*. 7(3):e01334. doi:10.1002/ecs2.1334.

PEER-REFEREED PUBLICATIONS (continued)

- * Utz, J.L., L.A. Shipley, J.L. **Rachlow**, T. Johnstone-Yellin, M.J. Camp, and J.S. Forbey. 2016. Understanding trade-offs between predation and food risks in a specialist mammalian herbivore. *Wildlife Biology*. 22:167-173.
- * Camp, M.J., L.A. Shipley, T.R. Johnson, J.S. Forbey, J.L. **Rachlow**, and M.M. Crowell. 2015. Modeling tradeoffs between the risk of starvation and toxicity: A framework for understanding habitat selection. *Ecology*. 96:3292–3302.
- * DeMay, S.M., J.L. **Rachlow**, L.P. Waits, and P.A. Becker. 2015. Comparing telemetry and fecal DNA sampling methods to quantify survival and dispersal of juvenile pygmy rabbits. *Wildlife Society Bulletin*. 39:413-421. (cover photo)
- * Grassel, S.M., J.L. **Rachlow**, and C.J. Williams. 2015. Spatial interactions between sympatric carnivores: asymmetric avoidance of an intraguild predator. *Ecology and Evolution*. 5:2762-2773.
- * Holbrook, J.D., R.S. Arkle, J.L. **Rachlow**, K.T. Vierling, and D.S. Pilliod. 2015. Sampling animal sign in heterogeneous environments: how much is enough? *Journal of Arid Lands*. 119:51-55.
- * Olsoy, P.J., J.S. Forbey, J.L. **Rachlow**, J.D. Nobler, N.F. Glenn, L.A. Shipley. 2015. Fearscape: mapping functional cover of prey with terrestrial LiDAR. *BioScience*. 65:74-80.
- Pu, X., L. Lam, K. Gehlken, A.C. Ulappa, J.L. **Rachlow**, and J. Sorensen Forbey. 2015. Antioxidant capacity of Wyoming big sagebrush (*Artemisia tridentate ssp. Wyomingensis*) varies spatially and is not related to the presence of a sagebrush dietary specialist. *Western North American Naturalist*. 75:78-87.
- * Sauder, J. and J.L. **Rachlow**. 2015. Fine-scale forest heterogeneity influences habitat selection by fishers (*Pekania pennanti*) within home ranges. *Forest Ecology and Management*. 347:49-56.
- ** DeMay, S.M., D.A. Roon, J.L. **Rachlow**, and R. Cisneros. 2014. Selective foraging on bromeliads by Andean bears in the Ecuadorian paramo. *Ursus*. 25:139-147.
- * Ulappa, A.C., R.G. Kelsey, G.G. Frye, J.L. **Rachlow**, L.A. Shipley, L. Bond, X. Pu, and J.S. Forbey. 2014. Plant proteins and secondary metabolites influence diet selection in a mammalian specialist herbivore. *Journal of Mammalogy*. 95:834-842.
- Rachlow**, J.L., R.M. Peter, L.A. Shipley, and T.R. Johnson. 2014. Sublethal effects of capture and collaring: experimental and field evidence. *Wildlife Society Bulletin*. 38:458-465.
- * Camp, M.J., J.L. **Rachlow**, L.A. Shipley, T.R. Johnson, and K.D. Bockting. 2014. Habitat specialists in multiple use landscapes: grazing and pygmy rabbits. *The Rangeland Journal*. 36:151-159.
- Estes-Zumpf, W.A., S.E. Zumpf, J.L. **Rachlow**, J.R. Adams, and L.P. Waits. 2014. Genetic evidence confirms the presence of pygmy rabbits in Colorado. *Journal of Fish and Wildlife Management*. 5:118-123.
- * Sauder, J. and J.L. **Rachlow**. 2014. Both forest composition and configuration influence landscape-scale habitat selection by fishers (*Pekania pennanti*) in the Rocky Mountains of Idaho. *Forest Ecology and Management*. 314:75-84.
- * Wells, A.G., C.C. Blair, E.O. Garton, C.G. Rice, J.S. Horne, J.L. **Rachlow**, and D.O. Wallin. 2014. The Brownian Bridge synoptic model of habitat selection and space use for animals using GPS telemetry data. *Ecological Modelling*. 273: 242-250.
- * DeMay, S.M., P.A. Becker, C.A. Eidson, J.L. **Rachlow**, T.R. Johnson, and L.P. Waits. 2013. Evaluating noninvasive genetic monitoring for endangered pygmy rabbit recovery efforts. *Molecular Ecology Resources*. 13:654-662.
- Haines, A.M., M. Zak, K. Hammond, J. M. Scott, D.D. Goble, J.L. **Rachlow**. 2013. The need to incorporate uncertainty into recovery goals for endangered species. *Animals*. 3:745-753.
- * Woods, B.A., J.L. **Rachlow**, C. Bunting, T.R. Johnson, and K.D. Bockting. 2013. Managing high-elevation sagebrush steppe: do conifer encroachment and prescribed fire affect habitat for pygmy rabbits? *Rangeland Ecology and Management*. 66:462-471.
- * Camp, M.J., J.L. **Rachlow**, B.A. Woods, T.R. Johnson, and L.A. Shipley. 2013. Examining the functional components of cover: the relationship between concealment and visibility in shrub-steppe habitat. *Ecosphere*. 4(2):19. doi.org/10.1890/ES12-00114.1

PEER-REFEREED PUBLICATIONS (continued)

- * Sauder, J.D., J.L. **Rachlow**, and M.M. Weist. 2012. Influence of topography and canopy cover on Argos satellite telemetry performance. *Wildlife Society Bulletin*. DOI: 10.1002/wsb.157.
- * Camp, M.J., J.L. **Rachlow**, B.A. Woods, T.R. Johnson, and L.A. Shipley. 2012. When to run and when to hide: the influence of cover and distance to refugia on perceptions of predation risk. *Ethology*. 118:1010–1017.
- * Wells, A.G., J. L. **Rachlow**, E.O. Garton, and C.G. Rice. 2012. Mapping vegetation communities across home ranges of mountain goats in the North Cascades for conservation and management. *Applied Vegetation Science*. 15:560-570.
- Bowyer, R.T., J.L. **Rachlow**, K.M. Stewart, and V. Van Ballenberghe. 2011. Vocalizations by Alaskan moose: female incitation of male aggression. *Behavioral Ecology and Sociobiology*. 65:2251-2260.
- Adams, J.R., C.S. Goldberg, B. Bosworth, J.L. **Rachlow**, and L.P. Waits. 2011. Rapid species identification of pygmy rabbits (*Brachylagus idahoensis*) from faecal pellet DNA. *Molecular Ecology Resources*. 11:808-812.
- * Lewis, J.S. and J.L. **Rachlow**. 2011. Activity patterns of black bears related to sex, season, and daily movement rates. *Western North American Naturalist*. 71:388-395.
- ** Falcón-Linero, W., C.S. Goldberg, L.P. Waits, W.A. Estes-Zumpf, and J.L. **Rachlow**. 2011. First record of multiple paternity in the pygmy rabbit (*Brachylagus idahoensis*): Evidence from analysis of 16 microsatellite loci. *Western North American Naturalist*. 71:271-275.
- * Price, A.J. and J.L. **Rachlow**. 2011. Development of an index of abundance for pygmy rabbits. *Journal of Wildlife Management*. 75:929-937.
- * Lewis, J.S., J.L. **Rachlow**, J.S. Horne, E.O. Garton, W.L. Wakkinen, J.A. Hayden, and P. Zager. 2011. Identifying habitat characteristics to predict highway crossing areas for black bears within a human-modified landscape. *Landscape and Urban Planning*. 101:99-107.
- * Estes-Zumpf, W.A., J.L. **Rachlow**, L.P. Waits, and K.I. Warheit. 2010. Dispersal, gene flow, and population genetic structure in the pygmy rabbit (*Brachylagus idahoensis*). *Journal of Mammalogy*. 91:208-219
- * Price, A.J, W.A. Estes-Zumpf, and J.L. **Rachlow**. 2010. Survival of juvenile pygmy rabbits. *Journal of Wildlife Management*. 74:43-47.
- * Sanchez, D.M., J.L. **Rachlow**, A.P. Robinson, T.R. Johnson. 2009. Survey indicators for pygmy rabbits: temporal trends of burrow systems and pellets. *Western North American Naturalist*. 69:426-436.
- * Long, R.A., J.L. **Rachlow**, and J.G. Kie. 2009. Sex-specific responses by elk to fuels reduction in a Western coniferous forest. *Journal of Mammalogy*. 90:423-432.
- * Estes-Zumpf, W.A. and J.L. **Rachlow**. 2009. Natal dispersal by pygmy rabbits (*Brachylagus idahoensis*). *Journal of Mammalogy*. 90: 363-372.
- * Long, R.A., J.D. Muir, J.L. **Rachlow**, and J.G. Kie. 2009. Evaluation of wildlife-habitat relationships: a comparison of two model-building approaches. *Journal of Wildlife Management*. 73:294-302.
- * Long, R.A., J.L. **Rachlow**, and J.G. Kie. 2008. Response of elk and deer to experimental habitat manipulation: effects of season and scale. *Journal of Wildlife Management*. 72:1133-1142.
- * Sanchez, D.M. and J.L. **Rachlow**. 2008. Spatio-temporal factors affecting space use by pygmy rabbits. *Journal of Wildlife Management*. 72:1304-1310.
- Scott, J.M., J.L. **Rachlow**, and R.T. Lackey. 2008. Policy and position statements: what is an appropriate role of professional societies? *BioScience*. 58:865-869.
- * Estes-Zumpf, W.A., J.L. **Rachlow**, and L.P. Waits. 2008. Ten polymorphic microsatellite markers for the pygmy rabbit (*Brachylagus idahoensis*). *Molecular Ecology Resources*. 8:360-362
- * Horne, J.S., E.O. Garton, and J.L. **Rachlow**. 2008. A synoptic model of animal space use: simultaneous analysis of home range, habitat selection, and inter/intra-specific relationships. *Ecological Modelling*. 214:338-348.
- * Long, R.A., J.L. **Rachlow**, J.G. Kie, and M. Vavra. 2008. Fuels reduction in a Western coniferous forest: effects on quantity and quality of forage for elk. *Rangeland Ecology and Management*. 61:302-313.

PEER-REFEREED PUBLICATIONS (continued)

- * Lewis, J.S, J.L. **Rachlow**, E.O. Garton, L.A. Vierling. 2007. Effects of habitat on GPS collar performance: addressing location error. *Journal of Applied Ecology*. 44:663-671.
- Scott, J.M., J.L. **Rachlow**, R.T. Lackey, A.B. Pidgorna, J.L. Aycrigg, G.R. Feldman, L.K. Svancara, D.A. Rupp, D.I. Stanish, and R.K. Steinhorst. 2007. Policy advocacy and science: prevalence in the research literature and perspectives of conservation biologists. *Conservation Biology*. 21:29-35.
- * Hicks, J.F., J.L. **Rachlow**, O.G. Rhodes, Jr., C.L. Williams, and L.P. Waits. 2007. Reintroduction and genetic structure: Rocky Mountain elk in Yellowstone and the western States. *Journal of Mammalogy*. 88:129-138.
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- Rachlow**, J.L. and L.K. Svancara. 2006. Prioritizing habitat for surveys of a rare mammal: a modeling approach applied to pygmy rabbits. *Journal of Mammalogy*. 87:827-833.
- * Hicks, J.F. and J.L. **Rachlow**. 2006. Is there a genetic basis for antler malformations in reintroduced elk in northern Arizona? *Southwestern Naturalist*. 51:276-282.
- * Garner, A. and J.L. **Rachlow**. 2005. Genetic diversity, population divergence, and conservation of Idaho ground squirrels in fragmented habitats. *Conservation Genetics*. 6:759-774.
- * Garner, A., J.L. **Rachlow**, and Hicks, J.F. 2005. Patterns of genetic diversity and its loss in mammalian populations. *Conservation Biology*. 19:1215-1221.
- Rachlow**, J.L., Sanchez, D.M., and Estes-Zumpf, W.A. 2005. Natal burrows and nests of free-ranging pygmy rabbits (*Brachylagus idahoensis*). *Western North American Naturalist*. 65:136-139.
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- Rachlow**, J.L., I.T. Smith, and M.D. Matocq. 2021. Pygmy rabbit. Chapter E in Sagebrush Conservation Strategy – Challenges to Sagebrush Conservation. (T.E. Remington, P.A. Deibert, S.E. Hanser, D.M. Davis, L.A. Robb, and J.L. Welty, eds). U.S. Geological Survey Open-File Report 2020–1125, 327 p., <https://doi.org/10.3133/ofr20201125>.

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- Remington, T.E., J.L. Welty, C.L. Aldridge, A.F. Jakes, D.S. Pilliod, J.L. **Rachlow**, and I.T. Smith. 2021. Sage-grouse management as an umbrella for conservation of sagebrush. Chapter Q in Sagebrush Conservation Strategy – Challenges to Sagebrush Conservation. (T.E. Remington, P.A. Deibert, S.E. Hanser, D.M. Davis, L.A. Robb, and J.L. Welty, eds). U.S. Geological Survey Open-File Report 2020–1125, 327 p., <https://doi.org/10.3133/ofr20201125>.
- Feldhamer, G.A., J.F. Merritt, C. Krajewski, J.L. **Rachlow**, and K.M. Stewart. 2020. Mammalogy: Adaptation, Diversity, Ecology, 5th edn. John Hopkins University Press (textbook).
- Horne, J.S., J. Fieberg, L. Börger, J.L. **Rachlow**, J.M. Calabrese, and C.H. Fleming. 2020. Animal home ranges: concepts, uses and estimation. In: Population Ecology in Practice (D. Murray and B.K. Sandercock, eds.). Wiley-Blackwell.
- Rachlow**, J.L., P.A. Becker, L.A. Shipley, and E.S. Larrucea. 2018. *Brachylagus idahoensis*. In: Lagomorphs of the World (A.T. Smith, K. Hackländer, P. Alves, and C.H. Johnston, eds.). John Hopkins University Press.
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OTHER PUBLICATIONS (book reviews, commentaries, IUCN documents, etc.):

- Olsoy, P.J., S.N. Barrett, B.C. Robb, J.S. Forbey, T.T. Caughlin, M.D. Blocker, C. Merriman, J.D. Nobler, J.L. **Rachlow**, L.A. Shipley, and D.M. Delparte. 2021. Scaling up sagebrush chemistry with near-infrared spectroscopy and UAS-acquired hyperspectral imagery. International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences. Vol. XLIV-M-3, p127-132.
- Rachlow**, J. and J. Witham. 2020. On mammals and reviving species. In: Inspired by Endangered Species: Animals and Plants in Fabric Perspectives (D. Marcinkowski DeSoto). Schiffer Publishing.
- Rachlow**, J., P.A. Becker, and L. Shipley. 2016. *Brachylagus idahoensis*. The IUCN Red List of Threatened Species 2016: e.T2963A45176206. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T2963A45176206.en>
- Wilhere, G.F., Maguire, L.A., J.M. Scott, J.L. **Rachlow**, D.D. Goble, and L.K. Svancara. 2012. Conflation of values and science: response to Noss et al. Conservation Biology. 26:943-944.
- Scott, J.M. and J.L. **Rachlow**. 2011. Refocusing the advocacy debate. Conservation Biology. 25:1-3.
- Beauvais, G.P., E. Sequin, J. **Rachlow**, R. Dixon, B. Bosworth, A. Kozlowski, C. Carey, P. Bartels, M. Obradovitch, T. Forbes, and D. Hays. 2008. *Brachylagus idahoensis*. The IUCN Red List of Threatened Species 2008: e.T2963A9507224.
- Scott, J.M. and J.L. **Rachlow**. 2006. Science, policy and scientists. Frontiers in Ecology and the Environment. 4:68-69.
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- Rachlow**, J.L. 1998. White rhinoceros (*Ceratotherium simum*) reproduction and population density: lessons from Matobo National Park. Zimbabwe Science News. 32:8-14.
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- Rachlow**, J.L., Cunningham, C. and J. Berger. 1993. Horns today, gone tomorrow. The Rhino and Elephant Foundation Journal. 8:22-30.

PRESENTATIONS AT PROFESSIONAL MEETINGS

Presentations authored or co-authored with students and collaborators:

- >110 presentations at national and international professional meetings (American Society of Mammalogists, Society for Conservation Biology, The Wildlife Society, World Lagomorph Conference, Joint Fire Science Program, etc.)
- >100 presentations at regional or state professional meetings (AAAS Arctic Science Conference, state and section meetings of The Wildlife Society, Western States Deer and Elk Workshop, etc.)

Professional meetings/symposia organized:

- American Society of Mammalogists national meeting at University of Idaho, Moscow, ID. 2017 (with R. Long)
- Advocacy, Policy, Science, and Professional Societies, The Wildlife Society, Monterey, CA. 2009. (with M. Scott and M. Nelson)
- Advocacy in Conservation Science, Society for Conservation Biology, San Jose, CA. 2006. (with M. Scott and R. Lackey)
- Bighorn Sheep Ecology and Management, Idaho Chapter of The Wildlife Society, Moscow, ID. 2003. (with F. Cassirer)

Invited presentations: 3 international, 14 national, and 10 regional oral presentations

PROFESSIONAL EXTRAMURAL SERVICE

Seattle City Lights Wildlife Research Advisory Committee (2019-2022)

Associate Editor, Journal of Mammalogy (2008 - 2011)

Science Advisory Committee for the Columbia Basin Pygmy Rabbit Recovery Team (2005-present)

IUCN Species Survival Commission, Lagomorph Specialist Group (2005-present)

Associate Editor, Western North American Naturalist (2003 - 2006)

African Wild Dog Conservancy, Board of Directors (2005-2012)

Project Advisory Committee for the Idaho Chapter of the Rocky Mountain Elk Foundation (2001-2016)

PROFESSIONAL MEMBERSHIPS

American Society of Mammalogists:

Vice President (2021-present)

Board of Directors (2014 – 2021)

Grinnell Award Committee, Chair (2019-present)

Program Committee (2016 – present)

Merriam Award Committee (2017 – 2020)

Publications Committee (2008 – 2011)

Resolutions Committee (2003 – 2010), Chair (2007 – 2010)

Conservation of Land Mammals Committee (1997-2004)

Society for Conservation Biology

The Wildlife Society

Idaho Chapter of The Wildlife Society:

Student Affairs Committee (2016-present)

Presentation Evaluation Committee, (2018-present), Chair (2020-present)

World Lagomorph Society:

Vice President (2016 – present)