

Joseph D. Holbrook, Ph.D.

Haub School of Environment and Natural Resources
Department of Zoology and Physiology
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Education

Ph.D., Natural Resources & Graduate Certificate in Statistical Science

2011-2015, GPA 4.0/4.0

NSF-IGERT Fellow (2011-2015)

Doris Duke Conservation Scholars Mentor (2014-2015)

University of Idaho, Moscow, ID

Department of Fish and Wildlife Sciences

Dissertation: “Social-Ecological Research in the Sagebrush Ecosystem: Evaluating the Landscape Ecology of Burrowing Animals and Implementing a Social-Ecological Impact Assessment.”

Mentors: Drs. Janet Rachlow and Kerri Vierling

M.S., Range and Wildlife Management

2009-2011, GPA 4.0/4.0

Caesar Kleberg Wildlife Research Institute

Texas A&M University-Kingsville, Kingsville, TX

Department of Animal, Rangeland, and Wildlife Sciences

Thesis: “Exploring Mountain Lion Ecology in Texas using Genetic Techniques.”

Mentors: Drs. Randy DeYoung and Michael Tewes

B.S., Wildlife Resources

2004-2008, GPA 3.38/4.0

University of Idaho, Moscow, ID

Department of Fish and Wildlife Sciences

Thesis: “Cougar Population Structure and Gene Flow in Idaho and Western Montana.”

Mentor: Dr. Lisette Waits

Professional Positions

Assistant Professor

09/2018-Present

Haub School of Environment and Natural Resources

Department of Zoology and Physiology

University of Wyoming, Laramie, WY

Research Scientist

10/2016-09/2018

Montana State University

Department of Land Resources and Environmental Sciences

USFS Rocky Mountain Research Station, Missoula, MT

Postdoctoral Scientist

01/2016-10/2016

Montana State University

Department of Land Resources and Environmental Sciences

USFS Rocky Mountain Research Station, Missoula, MT

Biological Science Technician (Wildlife), GS-4 & GS-5

Summer 2005, 2006, 2007, 2008

Boise National Forest

USDA Forest Service, Boise, Idaho

Research Mentoring

Graduate Students – Committee Chair

- Forthcoming.

Graduate Students – Committee Member

- Amanda Veals, PhD, Texas A&M University-Kingsville, *Impacts of Road Matrix on the Landscape Ecology of Ocelots*, 2018-Present

Undergraduates

- Matthew Modlin, Senior, University of Idaho, 2014-2015
- Katey Huggler, Junior, University of Idaho, Doris Duke Conservation Scholars, 2014
- Elyce Gosselin, Sophomore/Junior, University of Idaho, Doris Duke Conservation Scholars, 2014-2015
- Emily Brown, Junior, University of Idaho, Doris Duke Conservation Scholars, 2014

Teaching

Fish and Wildlife Population Ecology (WLF 448) – Fall 2014

University of Idaho (3 credits plus 1 credit lab, 48 students, Evaluation: 3.8/4.0)

I was the instructor of record with a fellow Ph.D. student. We handled all responsibilities with this class including preparing lectures and labs, constructing exams, designing a semester project, and

grading. The main goals of the class were to (1) equip students with knowledge of the scientific process and ability to apply critical thinking, (2) provide on-the-ground examples of population ecology that highlight a diversity of approaches, (3) develop quantitative skills pertaining to population ecology, (4) expose students to real-world data sets, and (5) introduce students to common analyses and software tools.

Invited Lectures, Workshops, Consultations

- Holbrook, J.**, J. Squires, and L. Olson. 2018. Forest structure, silviculture, and Canada lynx ecology. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Holbrook, J.**, J. Squires, and L. Olson. 2018. Habitat relationships of snowshoe hares and Canada lynx in the Northern Rockies. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Squires, J., **J. Holbrook**, J. Ivan, L. Olson, R. Lawrence, and R. Ghormley. 2018. Canada lynx habitat ecology in beetle-impacted forests. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Olson, L., J. Squires, and **J. Holbrook**. 2018. Mapping core and secondary habitat for Canada lynx throughout their western distribution. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, and J. Copeland. 2018. Investigating the responses of wolverines to winter recreation. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Squires, J., L. Olson, K. Heinemeyer, M. Hebblewhite, and **J. Holbrook**. 2018. Winter recreation and forest carnivores: studies of Canada lynx and wolverine. Integrated Planning for the Management of recreation and Wildlife Resources. Organized by the United States Forest Service and Bureau of Land Management, Corvallis, Oregon
- Squires, J., **J. Holbrook**, J. Ivan, L. Olson, R. Lawrence, and R. Ghormley. 2018. Canada lynx habitat ecology in beetle-impacted forests. Rio Grande National Forest Leadership Meeting. Monte Vista, Colorado
- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, and J. Copeland. 2018. Investigating the responses of wolverines to winter recreation. Payette National Forest, McCall, Idaho
- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, and J. Copeland. 2018. Investigating the responses of wolverines to winter recreation. Sawtooth National Forest, Hailey, Idaho
- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, and J. Copeland. 2018. Investigating the responses of wolverines to winter recreation. Boise National Forest, Boise, Idaho

- Holbrook, J.**, and J. Squires. 2017. Canada lynx habitat ecology and management in the Northern Rockies. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Squires, J., and **J. Holbrook**. 2017. Canada lynx ecology in the Northern and Southern Rockies. Forest Carnivore Management Course. Organized by the United States Forest Service, Yellowstone National Park, Wyoming
- Holbrook, J.** 2015. Introduction to R programming. Wildlife 448 – Fish and Wildlife Population Ecology, University of Idaho, Moscow, Idaho
- Holbrook, J.** 2015. Sagebrush-steppe ecology and management. Wildlife 316 –Wildlife Ecology II, University of Idaho, Moscow, Idaho
- Holbrook, J.** 2014. Taxonomy of North American Birds. Wildlife 315 –Wildlife Ecology, University of Idaho, Moscow, Idaho
- Cleary, K., **J. Holbrook**, Z. Klos, M. O'Rourke, and I. Shaver. 2014. Introducing interdisciplinary research. CRISSP Research Experience for Undergraduates, University of Idaho, Moscow, Idaho
- Holbrook, J.** 2013. Landscape ecology. Interdisciplinary Research Techniques, University of Idaho, Moscow, Idaho
- Bentley, A., **J. Holbrook**, R. Niemeyer, and A. Suazo. 2012. Understanding dynamic processes of social-ecological systems in the rangelands. Philosophy 447/502 – Interdisciplinary Epistemology (2 days of lecture), University of Idaho, Moscow, Idaho
- Holbrook, J.** 2010. Conservation genetics. Wildlife Science 6372 – Conservation Biology (2 days of lecture), Texas A&M University-Kingsville, Kingsville, Texas
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Journal Publications and Book Chapters (β = mentored student)

- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, L. Olson, and J. Copeland. *In Review*. Wolverines in winter: indirect habitat loss and functional responses to backcountry recreation. *Ecosphere*.
- Holbrook, J.**, J. Squires, B. Bollenbacher, R. Graham, L. Olson, G. Hanvey, S. Jackson, and R. Lawrence. *In Review*. Forest silviculture and threatened species: characterizing and sustaining habitat mosaics for Canada lynx in the Northern Rockies, U.S. *Forest Ecology and Management*.
- Holbrook, J.**, L. Olson, N. DeCesare, J. Squires, and M. Hebblewhite. *In Review*. Functional responses in habitat selection: clarifying hypotheses and interpretations. *Ecological Applications*.

- Holbrook, J.**, J. Squires, B. Bollenbacher, R. Graham, L. Olson, G. Hanvey, S. Jackson, and R. Lawrence. 2018. Spatio-temporal responses of Canada lynx to silvicultural treatments within the Northern Rockies, U.S. *Forest Ecology and Management* 422:114-124.
- Savage, S., R. Lawrence, J. Squires, **J. Holbrook**, J. Braaten, and W. Cohen. 2018. Shifts in forest structure in northwest Montana from 1972 to 2015 using the entire Landsat archive Multispectral scanner to Operational Land Imager. *Forests* 9:157.
- Kosterman, M., J. Squires, **J. Holbrook**, D. Pletscher, and M. Hebblewhite. 2018. Forest structure provides the income for reproductive success in a southern population of Canada lynx. *Ecological Applications* 28:1032-1043.
- Holbrook, J.**, J. Squires, L. Olson, N. DeCesare, and R. Lawrence. 2017. Understanding and predicting habitat for wildlife conservation: the case of Canada lynx at the range periphery. *Ecosphere* 8:e01939.
- Mumma, M., **J. Holbrook**, N. Rayl, C. Zieminski, T. Fuller, J. Organ, S. Mahoney, and L. Waits. 2017. Examining spatial patterns of selection and use for an altered predator guild. *Oecologia* 185:725-735.
- Vierling, K., J. Aycrigg, T. Cohn, **J. Holbrook**, T. Lorenz, and L. Svancara. From the talk to the walk: effective communication makes for effective management. In *Wildlife and Landscapes: Principles and Applications for Landscape Management*. W.F. Porter, C.J. Parent, and D.M. Williams (Eds). *In Press*. John Hopkins University Press. *Invited*.
- Holbrook, J.**, J. Squires, L. Olson, R. Lawrence, and S. Savage. 2017. Multi-scale habitat relationships of snowshoe hares in the mixed conifer landscape of the Northern Rockies, USA: cross-scale effects of horizontal cover with implications for forest management. *Ecology and Evolution* 7:125-144.
- Holbrook, J.**, D. Pilliod, R. Arkle, K. Vierling, J. Rachlow, and M. Wiest. 2016. Transition of vegetation states positively affects an aridland granivore in the Great Basin, USA. *Rangeland Ecology & Management* 69:449-456.
- Boelman, N., **J. Holbrook**, H. Greaves, J. Krause, H. Chmura, T. Magney, J. Perez, J. Eitel, L. Gough, K. Vierling, J. Wingfield, and L. Vierling. 2016. Airborne laser scanning and spectral remote sensing give a bird's eye perspective on arctic tundra breeding habitat at multiple spatial scales. *Remote Sensing of Environment* 184:337-349.
- Bosque-Pérez, N., P. Klos, J. Force, L. Waits, K. Cleary, P. Rhoades, S. Galbraith, A. Bentley Brymer, M. O'Rourke, S. Eigenbrode, B. Finegan, J. Wulforst, N. Sibelet, and **J. Holbrook**. 2016. A pedagogical model for team-based, problem-focused interdisciplinary doctoral education. *BioScience* 66:477-488.
- Bentley Brymer, A., **J. Holbrook**, R. Niemeyer, A. Suazo, J. Wulforst, K. Vierling, B. Newingham, T. Link, and J. Rachlow. 2016. A social-ecological impact assessment for public land management: application of a conceptual and methodological framework. *Ecology and Society* 21:9.

- Holbrook, J.**, R. Arkle, J. Rachlow, K. Vierling, D. Pilliod, and M. Wiest. 2016. Occupancy and abundance of predator and prey: implications of the fire-cheatgrass cycle in sagebrush ecosystems. *Ecosphere* 7:e01307.
- Gosselin[♯], E., **J. Holbrook**, K. Huggler[♯], E. Brown[♯], K. Vierling, R. Arkle, and D. Pilliod. 2016. Ecosystem engineering of harvester ants: effects on vegetation in a semi-arid environment. *Western North American Naturalist* 76:82-89.
- Holbrook, J.**, K. Vierling, L. Vierling, P. Adam, and A. Hudak. 2015. Occupancy of red-naped sapsuckers: using LiDAR to understand the effects of vegetation structure and disturbance. *Ecology and Evolution* 5:5383-5393.
- Klos, P., J. Abatzoglou, J. Blades, M. Clark, M. Dodd, T. Hall, A. Haruch, P. Higuera, **J. Holbrook**, V. Jansen, K. Kemp, A. Lankford, A. Lamar, T. Link, T. Magney, A. Meddens, L. Mitchell, B. Moore, P. Morgan, B. Newingham, R. Niemeyer, B. Soderquist, A. Suazo, K. Vierling, V. Walden, and C. Walsh. 2015. Indicators of climate change in Idaho: an assessment framework for coupling biophysical change and social perception. *Weather, Climate, and Society* 7:238-254.
- Holbrook, J.**, R. Arkle, J. Rachlow, K. Vierling, and D. Pilliod. 2015. Sampling animal sign in heterogeneous environments: how much is enough? *Journal of Arid Environments* 119:51-55.
- Balkenhol, N., **J. Holbrook**, D. Onorato, P. Zager, C. White, and L. Waits. 2014. A multi-method approach for analyzing hierarchical genetic structures: a case study with cougars *Puma concolor*. *Ecography* 37:1-12.
- Holbrook, J.**, A. Caso, R. DeYoung, and M. Tewes. 2013. Population genetics of jaguarundis in Mexico: implications for future research and conservation. *Wildlife Society Bulletin* 37:336-341. (**Cover Article**)
- Holbrook, J.**, R. DeYoung, J. Janecka, M. Tewes, R. Honeycutt, and J. Young. 2012. Genetic diversity, population structure, and movements of mountain lions, *Puma concolor*, in Texas. *Journal of Mammalogy* 93:989-1000.
- Holbrook, J.**, R. DeYoung, M. Tewes, and J. Young. 2012. Demographic history of an elusive carnivore: using museums to inform management. *Evolutionary Applications* 5:619-628.
- Holbrook, J.**, R. DeYoung, A. Caso, M. Tewes, and J. Young. 2012. Hog-nosed skunks (*Conepatus leuconotus*) along the Gulf of Mexico: population status and genetic diversity. *Southwestern Naturalist* 57:223-225.
- Holbrook, J.**, R. DeYoung, M. Tewes, J. Young, J. Mays, and E. Meyers. 2011. Natural dispersal or illegal pets? Limitations on assigning origin to road-killed ocelots in the southwestern United States. *Wildlife Society Bulletin* 35:504-507.
- Holbrook, J.**, R. DeYoung, M. Tewes, and J. Young. 2011. Demographic history of mountain lions in Texas. Pages 97-103 in Williams, J., H. Robinson, and L. Sweanor, editors. *Proceedings of the 10th Mountain Lion Workshop*. May 2-5, 2011. Bozeman, Montana, USA.

Additional Publications

- Heinemeyer, K.S., J.R. Squires, M. Hebblewhite, J.S. Smith, **J.D. Holbrook**, and J.P. Copeland. 2017. Wolverine-Winter Recreation Project: Investigating the interaction between wolverines and winter recreation. Final Report, December 15, 2017. 71pp. Available at: www.roundriver.org/wolverine.
- DeYoung, R., **J. Holbrook**, M. Tewes, and J. Young. 2012. Using museums to inform management: genetic insights into Texas mountain lion populations. Pages 32-33 in the April Issue of Texas Parks and Wildlife Magazine.
- Tewes, M., **J. Holbrook**, R. DeYoung, and J. Young. 2012. Potential impacts of the Eagle Ford Shale development on the cougar population in south Texas. *Wild Felid Monitor* 5(2):19.
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Oral Presentations

- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, and J. Copeland. 2018. Investigating the responses of wolverines to winter recreation. Idaho Chapter of the Wildlife Society, Fort Hall, Idaho
- Heinemeyer, K., J. Squires, M. Hebblewhite, J. Smith, **J. Holbrook**, and J. Copeland. 2018. Investigating the responses of wolverines to winter recreation. Montana Chapter of the Wildlife Society, Butte, Montana
- Holbrook, J.**, J. Squires, L. Olson, N. DeCesare, and R. Lawrence. 2017. Understanding and predicting habitat for Canada lynx conservation at the range periphery. American Society of Mammalogists, Moscow, Idaho
- Squires, J., **J. Holbrook**, and L. Olson. 2017. Rectifying habitat relationships of Canada lynx with forest silviculture and management. Society of American Foresters Colorado and Wyoming joint meeting, Casper, Wyoming (*Invited*)
- Squires, J., **J. Holbrook**, and L. Olson. 2017. Canada lynx ecology and National Forest management. Annual USDA Forest Service Region 1 Wildlife Biologists Meeting, Greenough, Montana (*Invited*)
- Holbrook, J.**, J. Squires, and R. Graham. 2017. Characterizing the intersection of Canada lynx habitat and forest silviculture. Annual USDA Forest Service Region 1 Silviculturists Meeting, Missoula, Montana (*Invited*)
- Squires, J., **J. Holbrook**, M. Kosterman, L. Olson, and R. Lawrence. 2017. Characterizing habitat of Canada lynx through the lens of habitat use, functional responses, and demography. Colorado Chapter of the Wildlife Society, Fort Collins, Colorado (*Invited*)
- J. Holbrook**. 2016. Mapping habitat in the context of functional responses for wildlife conservation: the case of the Canada lynx. Ecology Department Seminar Series, Montana State University, Bozeman, Montana (*Invited*)

- Bosque-Perez, N., J. Force, L. Waits, S. Eigenbrode, J. Wulfhorst, K. Cleary, **J. Holbrook**, S. Galbraith, A. Bentley Brymer, Z. Klos, P. Rhoades, M. O'Rourke, B. Finegan, and N. Sibelet. 2016. A model for team-based interdisciplinary doctoral education. Science of Team Science Meeting, Phoenix, Arizona
- Holbrook, J.**, R. Arkle, K. Vierling, J. Rachlow, D. Pilliod, and M. Wiest. 2016. Occupancy and abundance of American badgers and Piute ground squirrels in the sagebrush-steppe: implications of the fire-cheatgrass cycle. Montana Chapter of the Wildlife Society, Missoula, Montana
- Mumma, M., **J. Holbrook**, N. Rayl, C. Zieminski, T. Fuller, S. Mahoney, and L. Waits. 2015. Patterns of resource selection in a changing predator complex. The Wildlife Society, Winnipeg, Manitoba, Canada
- Bentley Brymer, A., **J. Holbrook**, R. Niemeyer, A. Suazo, J. Wulfhorst, J. Rachlow, K. Vierling, T. Link, and B. Newingham. 2015. Merging ecosystem services and social processes for a social-ecological impact assessment on U.S. public land. International Association for Society and Natural Resources, Charleston, South Carolina
- Holbrook, J.**, A. Bentley Brymer, R. Niemeyer, A. Suazo, T. Link, B. Newingham, J. Rachlow, K. Vierling, and J. Wulfhorst. 2014. Social-ecological impacts of juniper removal in a public lands context: merging deliberative workshops and participatory GIS. 4th Annual Meeting of the NSF-IGERT Program, University of Idaho, Boise, Idaho
- Holbrook, J.**, K. Vierling, L. Vierling, P. Adam, and A. Hudak. 2014. Ecosystem engineers in a coniferous forest: using LiDAR to understand the role of vegetation structure and disturbance across spatial scales. Joint meeting with the Northwest Section and Idaho Chapter of the Wildlife Society, Boise, Idaho
- Niemeyer, R., A. Bentley Brymer, **J. Holbrook**, A. Suazo, R. Heinse, T. Link, B. Newingham, J. Rachlow, K. Vierling, and J. Wulfhorst. 2013. Employing a deliberative process to understand knowledge integration and sagebrush-steppe system dynamics. 3rd Annual Meeting of the NSF-IGERT Program, University of Idaho, CATIE, Costa Rica
- Klos, Z., J. Abatzoglou, J. Blades, M. Clark, C. Currie, M. Dodd, S. Eigenbrode, T. Hall, A. Haruch, J. Hicke, P. Higuera, **J. Holbrook**, V. Jansen, K. Kemp, A. Lamar, A. Lankford, T. Link, T. Magney, A. Meddens, L. Mitchell, B. Moore, P. Morgan, B. Newingham, R. Niemeyer, B. Soderquist, A. Suazo, C. Teston, K. Vierling, V. Walden, C. Walsh. 2012. Indicators of climate change in Idaho: the intersection of biophysical change with social perception across a diverse landscape. Pacific Northwest Climate Conference, Boise, Idaho
- Bentley, A., **J. Holbrook**, R. Niemeyer, A. Suazo, R. Heinse, T. Link, B. Newingham, M. O'Rourke, J. Rachlow, K. Vierling, and J. Wulfhorst. 2012. Understanding dynamic processes of the social-ecological system in the sagebrush-steppe of Idaho. 2nd Annual Meeting of the NSF-IGERT Program, University of Idaho, Moscow, Idaho
- DeYoung, R., **J. Holbrook**, M. Tewes, and J. Young. 2012. Using museums to inform management: genetic insights into Texas mountain lion populations. Trans-Pecos Wildlife Conference - 2012, Alpine, Texas

- Holbrook, J.,** A. Caso, R. DeYoung, and M. Tewes. 2012. Population genetics of jaguarundis in Mexico: implications for conservation and future research. American Society of Mammalogists, Reno, Nevada
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2011. Temporal changes of mountain lion populations in Texas: a genetic evaluation. Texas Chapter of the Wildlife Society, San Antonio, Texas (*Best Presentation: 1st Place Clarence Cottam Award*)
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2011. Temporal changes of mountain lion, *Puma concolor*, populations in Texas. Texas Society of Mammalogists, Junction, Texas (*TSM Award*)
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2011. Demographic history of peripheral mountain lions. 10th Mountain Lion Workshop, Bozeman, Montana (*Invited*)
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2011. Demographic history of peripheral mountain lions. Joint meeting with the American and Australian Society of Mammalogists, Portland, Oregon
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Population genetic structure, gene flow, and genetic diversity of mountain lions in Texas and New Mexico. The Wildlife Society, Snowbird, Utah
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Mountain lion genetics in New Mexico and Texas: structure, flow, and diversity. American Society of Mammalogists, Laramie, Wyoming
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Mountain lion genetic structure, gene flow, and genetic diversity in Texas. Texas Society of Mammalogists, Junction, Texas
- Holbrook, J.,** and R. DeYoung. 2010. Mountain lion genetics in Texas. Presented to expert mountain lion research panel and state agency personnel evaluating current status of Texas mountain lions. Organized by Caesar Kleberg Wildlife Research Institute, Kingsville, Texas (*Invited*)
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Population genetic structure and genetic diversity of mountain lions in Texas. Texas Chapter of the Wildlife Society, Galveston, Texas
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Population genetic structure, gene flow, and genetic diversity of mountain lions in Texas. TAMUK Javelina Research Symposium, Kingsville, Texas (*Provost's Award*)
- Balkenhol, N., **J. Holbrook,** P. Zager, C. White, J. Rachael, D. Onorato, R. Desimone, and L. Waits. 2009. Hierarchical, multi-scale analysis of landscape-genetic relationships in Idaho cougars (*Puma concolor*). US-International Association of Landscape Ecology, Snowbird, Utah (*Best Student Presentation Honorable Mention Award*)

Balkenhol, N., **J. Holbrook**, P. Zager, C. White, J. Rachael, D. Onorato, R. Desimone, and L. Waits. 2009. Hierarchical population genetic structure in cougars (*Puma concolor*) of Idaho and western Montana. Idaho Chapter of the Wildlife Society, Moscow, Idaho

Holbrook, J., L. Waits, D. Onorato, C. White, J. Rachael, P. Zager, and R. Desimone. 2008. Genetic diversity, population structure, and gene flow among cougars in Idaho and Montana. Idaho Chapter of the Wildlife Society, Boise, Idaho

Holbrook, J., L. Waits, D. Onorato, C. White, J. Rachael, P. Zager, and R. Desimone. 2008. Genetic diversity, population structure, and gene flow among cougars in Idaho and Montana. Western Wildlife Students Conclave, Fort Collins, Colorado (**Best Presentation Award**)

Poster Presentations

Niemeyer, R., A. Bently Brymer, **J. Holbrook**, A. Suazo, J. Whlfhorst, B. Newingham, and T. Link. 2016. Interdisciplinary science for land managers: lessons learned in the context of public land management. American Geophysical Union, San Francisco, California

Holbrook, J., R. Arkle, K. Vierling, J. Rachlow, and D. Pilliod. 2015. The relative influence of biotic and abiotic factors on occupancy and abundance of predator and prey: American badgers and Piute ground squirrels in the sagebrush-steppe. The Wildlife Society, Winnipeg, Manitoba, Canada

Gosselin, E., K. Huggler, E. Brown, **J. Holbrook**, K. Vierling, R. Arkle, and D. Pilliod. 2015. Ecosystem engineering of harvester ants: effects on vegetation across spatial scales in a sagebrush-steppe ecosystem. Ecological Society of America, Baltimore, Maryland

Bentley-Brymer, A., **J. Holbrook**, R. Niemeyer, and A. Suazo. 2013. A conceptual framework for investigating the sagebrush-steppe: an interdisciplinary, social-ecological approach. Poster and video submission for the annual, nation-wide NSF-IGERT science communication competition, online

Holbrook, J., J. Rachlow, K. Vierling, R. Arkle, and D. Pilliod. 2012. Habitat relationships of an ecosystem engineer in the sagebrush-steppe of Idaho. 2nd Annual Meeting of the NSF-IGERT Program, University of Idaho, Moscow, Idaho

Bentley, A., **J. Holbrook**, R. Neimeyer, and A. Suazo. 2012. A conceptual framework for investigating the sagebrush-steppe: an interdisciplinary, social-ecological approach. Ecological Society of America, Portland, Oregon

Holbrook, J., R. DeYoung, M. Tewes, and J. Young. 2011. Population trends of mountain lions in Texas: a genetic exploration. The Wildlife Society, Kona, Hawaii

Holbrook, J., R. DeYoung, M. Tewes, J. Young, J. Mays, and E. Meyers. 2011. Natural dispersal or illegal pets? Seeking the origin of road-killed ocelots in the southwestern United States. Texas Chapter of the Wildlife Society, San Antonio, Texas

- Holbrook J.,** A. Caso, C. Bautista, R. DeYoung, and M. Tewes. 2011. Exploring population genetics of jaguarundi in Tamaulipas, Mexico. Texas Chapter of the Wildlife Society, San Antonio, Texas
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Illuminating long-distance movements of mountain lions in Texas: a genetic approach. The Wildlife Society, Snowbird, Utah
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Employing genetic techniques to evaluate long-distance movements of mountain lions in Texas. Texas Deer Study Group, Kingsville, Texas
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Employing genetic techniques to evaluate long-distance movements of mountain lions in Texas. American Society of Mammalogists, Laramie, Wyoming
- Holbrook, J.,** R. DeYoung, M. Tewes, and J. Young. 2010. Evaluating long-distance movements of mountain lions in Texas using genetic techniques. Texas Chapter of the Wildlife Society, Galveston, Texas
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Grants

I have received a total of \$395,339.20 for successful research grants

- Holbrook, J.** (PI). 2018. Synthesis of disease transmission and its impacts on bighorn sheep populations. United States Forest Service, \$30,000
- Squires, J. (PI), **J. Holbrook** (Co-PI), and L. Olson (Co-PI). 2018. A synthesis of current science and the development of disturbance ecology for Canada lynx conservation and management in the Northern Rocky Mountains. United States Forest Service, \$170,000
- Lawrence, R. (PI), J. Squires (Co-PI), and **J. Holbrook** (Co-PI). 2016. Habitat-use patterns of Canada lynx in spruce-beetle impacted forests of the Rio Grande National Forest in southern Colorado. United States Forest Service, \$110,000
- Squires, J. (PI), L. Olson (Co-PI), and **J. Holbrook** (Co-PI). 2016. Bioclimatic envelope of Canada lynx in the Northwestern United States. United States Forest Service, \$50,000
- Wulforst, J., A. Bentley-Brymer, **J. Holbrook**, R. Niemeyer, and A. Suazo. 2014. Social impacts of proposed juniper removal in a public lands context: merging deliberative workshops and public participatory GIS. Bureau of Land Management, \$16,841.00
- Wulforst, J., A. Bentley-Brymer, **J. Holbrook**, R. Niemeyer, and A. Suazo. 2014. Social impacts of proposed juniper removal in a public lands context: merging deliberative workshops and public participatory GIS. Idaho Office of Species Conservation, \$12,500.00
- Wulforst, J., A. Bentley-Brymer, **J. Holbrook**, R. Niemeyer, and A. Suazo. 2014. Social impacts of proposed juniper removal in a public lands context: merging deliberative workshops and public participatory GIS. University of Idaho, Rangeland Center, \$3,692.20

Holbrook, J. 2012. Graduate and professional student association travel grant. University of Idaho, \$546

Holbrook, J., and L. Waits. 2008. Population structure and gene flow among cougars in Idaho and Montana. University of Idaho, Student Grants Program, \$880

Holbrook, J., and L. Waits. 2008. Population structure and gene flow among cougars in Idaho and Montana. University of Idaho, Laboratory for Conservation and Ecological Genetics, DeVlieg Small Grants Program, \$880

Service

- *Ecosphere*, Associate Editor (2018-Present)
- Reviewer for *Journal of Mammalogy*, *Ecology and Evolution*, *Journal of Biogeography*, *Northwestern Naturalist*, *PlosONE*, *Diversity and Distributions*, *Conservation Genetics*, *Rangeland Ecology & Management*
- Organized Fish and Wildlife Seminar Series, Department of Fish and Wildlife Sciences (Spring 2015-Fall 2015)
- Student member of Rangeland Ecology and Management selection committee, Forest, Rangeland, and Fire Sciences (Spring 2015)
- Member of Department Head selection committee, Fish and Wildlife Sciences (Fall 2013 – Spring 2014)
- Science fair judge, Whatcom County, Bellingham, Washington (8 March 2014)
- Volunteer for Quail Coalition, South Texas chapter annual banquet (August 2010)
- Volunteer for King Ranch Institute for Ranch Management Annual Symposium (October 2009)
- Volunteer for Quail Unlimited, South Texas chapter annual banquet (August 2009)

Awards

- National Science Foundation Fellowship, Integrative Graduate Education and Research Traineeship (IGERT), University of Idaho, (2011-2015)
- J. Michael and Sharon L. Scott Graduate Student Scholarship, \$1200 (spring 2015-fall 2015)
- Shikar-Safari Club International Scholarship, \$4000 (fall 2013-spring 2014)
- Graduate Research Assistantship, Caesar Kleberg Wildlife Research Institute, Texas A&M University- Kingsville (2009-2011)
- Master's Student of the Year in Range and Wildlife Science, Texas A&M University-Kingsville (2010)
- Houston Safari Club Dan L. Duncan Scholarship, \$4000 (fall 2010-spring 2011)
- Quail Coalition Scholarship in Wildlife Management, \$1000 (summer 2011)
- Quail Unlimited Scholarship in Wildlife Management, \$1000 (spring 2010)
- Nonresident Public Education Grant (NPEG), Texas A&M University-Kingsville, \$4000 (fall 2009-spring 2011)
- Outstanding Senior in Wildlife Resources, University of Idaho (2008)
- Dean's List, University of Idaho (fall 2006 - spring 2008)

- United States Department of Agriculture Certificate of Merit, Boise National Forest (summer 2005)
- 1st Place Team in Academic Competition, 43rd annual Western Wildlife Students Conclave (March 2008)
- Ford Country Scholarship, \$5000 (fall 2004)

Additional Training

Workshops

- Modeling Patterns and Dynamics of Species Occurrence by Larissa Bailey, Moscow, Idaho (August 2015)
- Analysis of Resource Selection by Animals by Ryan Long, Moscow, Idaho (January 2015)
- Modeling Patterns and Dynamics of Species Occurrence by Darryl MacKenzie, Bozeman, Montana (September 2012)
- Chemical Immobilization by Safe Capture International by Keith Amass, Bastrop, Texas (September 2009)
- Conservation Genetics in Wildlife Ecology by Lisette Waits, Moscow, Idaho (Winter 2008)
- Information-Theoretic Approaches in Wildlife Ecology by Jon Horne and Oz Garton, Moscow, Idaho (Fall 2007)

Memberships

- The Wildlife Society (2010-Present)
 - Ecological Society of America (2012-Present)
 - American Society of Mammalogists (2012-Present)
 - Idaho Chapter of The Wildlife Society (2014-2015)
 - The Wildlife Society, Texas Chapter (2009-2011)
 - Texas Society of Mammalogists (2009-2011)
 - Wildlife and Agriculture Graduate Student Organization, Texas A&M University-Kingsville (2009-2011)
 - Xi Sigma Pi Honor Society, Epsilon Chapter (2007-present)
 - The Wildlife Society, University of Idaho Student Chapter (2004-2008) – Served as President and Vice President for 1 year each
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