

PROFESSIONAL APPOINTMENTS

- Senior Scientist**, *Defenders of Wildlife, Washington, DC* Jan 2017-Present
Research the socioeconomic drivers of human-wildlife interactions and develop decision-support tools for managers to mitigate conflict into coexistence; study effects on imperiled species from varied policy issues such as the US-Mexico border wall, climate change and Endangered Species Act; guide and support Defender's Conservation Programs in scientific endeavors; vision, develop and fundraise for novel programs across Defenders and in new Center for Conservation Innovation; expand science capacity through building external partnerships with universities, NGOs and government.
- Postdoctoral Scholar**, *University of California, Berkeley, CA and Panthera, New York, NY* Jan-Dec 2017
Research on funding and co-management strategies for conservation of lions in Africa's protected areas, effective interventions for reducing carnivore attacks on livestock and human-wildlife conflict globally
- Postdoctoral Researcher**, *Panthera, Cornell and University of Cape Town, Ithaca, NY* May 2015-Dec 2016
Research on lion-leopard competition, sustainable lion hunting and conservation applications in Africa
- Doctoral Candidate**, *Yale School of Forestry & Environmental Studies, New Haven, CT* Aug 2009-May 2015
Research on spatiotemporal risk patterns, human perceptions and management and conservation implications of tiger and leopard depredation on livestock in India
- Museum Technician**, *Smithsonian National Museum of Natural History, Washington, D.C.* Jan-July 2009
Museum-based research on squirrel movement morphology and systematics
- Fulbright Research Scholar**, *Wildlife Institute of India, Dehradun, India* Feb-Nov 2008
Field research on the recovery of threatened pheasants in the Western Himalayas of India
- Policy Intern**, *The Wildlife Society, Bethesda, MD* June-Dec 2007
Monitoring and evaluation of policy legislation on wildlife conservation

EDUCATION

- PhD in Ecology**, *Yale School of Forestry & Environmental Studies, New Haven, CT* 2015
Advisor: Oswald Schmitz; Committee: Walter Jetz, David Skelly, Y.V. Jhala
- Bachelor of Arts in Organismal Biology**, *Claremont McKenna College, Claremont, CA* 2007
Magna Cum Laude with Department Honors

SCIENTIFIC PUBLICATIONS

22. Wilkinson, C., A. McInturff, **J. R. B. Miller**, V. Yovovich, K. Gaynor, K. Calhoun, H. Karandikar, J. Martin, P. Parker-Shames, A. Shawler, A. Van Scoyoc, J. Brashares. Ecological framework for contextualizing carnivore-livestock conflict. *Conservation Biology* (in revision).
21. Pekar, A., **J. R. B. Miller**, M. V. Flyman, S. Kasiki, K. M. Kesch, S. Miller, K. Uiseb, V. van der Merve, P. Lindsey. Fencing Africa's protected areas: costs, benefits, and management issues. *Biological Conservation* (in press).
20. Lindsey, P., **J. R. B. Miller***, L. S. Petracca, L. Coad, A. J. Dickman, K. H. Fitzgerald, M. V. Flyman, P. J. Funston, P. Henschel, S. Kasiki, K. Knights, A. J. Loveridge, D. W. Macdonald, R. L. Mandisodza-Chikerema, S. Nazerali, A. J. Plumptre, R. Stevens, H. W. Van Zyl, L. Hunter. 2018. More than \$1 billion needed annually to secure

Africa's protected areas with lions. *Proceedings of the National Academy of Sciences (PNAS)* (in press).

*Shared first authorship.

19. Rogan, M., **J. R. B. Miller**, P. Lindsey, J. W. McNutt. 2018. Socioeconomic drivers of illegal bushmeat hunting in a Southern Africa savanna. *Biological Conservation* 226:24-31.
18. van Eeden, L. M.*, A. Eklund*, **J. R. B. Miller***, et al., A. Treves*. 2018. The best available science for preventing carnivore predation on livestock. *PLOS Biology* 16:e2005577. *Shared first authorship.
17. Peters, R., W. J. Ripple, C. Wolf, M. Moskwik, G. Carreón-Arroyo, G. Ceballos, A. Córdova, R. Dirzo, P. R. Ehrlich, A. D. Flesch, R. List, T. E. Lovejoy, R. F. Noss, J. Pacheco, J. K. Sarukhán, M. E. Soulé, E. O. Wilson, **J. R. B. Miller** and 2,556 scientist signatories from 43 countries. 2018. Nature divided, scientists united: U.S.-Mexico border wall threatens biodiversity and binational conservation. *BioScience* 68:740-743.
16. **Miller, J. R. B.**, R. T. Pitman, G. K. H. Mann, A. K. Fuller, and G. A. Balme. 2018. Lions and leopards show no spatial, temporal or demographic consequences of intraspecific competition. *J of Animal Ecology* 87:1709-1726.
15. Baghai, M.*, **J. R. B. Miller***, L. J. Blanken, H. T. Dublin, K. H. Fitzgerald, P. Gandiwa, K. Laurenson, J. Milanzi, A. Nelson, and P. Lindsey. 2018. Models for the collaborative management of African protected areas. *Biological Conservation* 218:73-82. *Shared first authorship.
14. Begg, C., **J. R. B. Miller**, and K. Begg. 2018. Effective implementation of age restrictions increases selectivity of sport hunting of the African lion. *Journal of Applied Ecology* 55:139-146.
13. Balme, G., R. Pitman, H. Robinson, **J. R. B. Miller**, P. Funston, and L. Hunter. 2017. Leopard distribution and abundance is unaffected by interference competition with lions. *Behavioral Ecology* 28:1348-1358.
12. Schmitz, O. J., **J. R. B. Miller**, A. M. Trainor, B. Abrahms. 2017. Toward a community ecology of landscapes: predicting multiple predator-prey interactions across geographic space. *Ecology* 98:2281-2292.
11. Balme, G. A., **J. R. B. Miller**, R. T. Pitman, and L. T. B. Hunter. 2017. Caching reduces kleptoparasitism in a solitary, large felid. *Journal of Animal Ecology* 86:634-644.
10. **Miller, J. R. B.**, P. J. Funston, G. Balme, & 21 co-authors. 2016. Aging traits and sustainable trophy hunting of African lions. *Biological Conservation* 201:160-168.
9. **Miller, J. R. B.**, K. J. Stoner, M. R. Cejtin, T. K. Meyer, A. D. Middleton, and O. J. Schmitz. 2016. Tools for human-carnivore coexistence: a quantitative assessment of techniques for reducing large carnivore depredation of livestock. *Wildlife Society Bulletin* 40:806-815.
8. **Miller, J. R. B.**, Y. V. Jhala, and O. J. Schmitz. 2016. Human perceptions mirror realities of carnivore attack risk for livestock: implications of mitigating human-carnivore conflict. *PLOS One* 11:e0162685.
7. **Miller, J. R. B.**, Y. V. Jhala, and J. Jena. 2016. Livestock losses and hotspots of attack from tigers and leopards in Kanha Tiger Reserve, central India. *Regional Environmental Change* 16:17-29.
6. **Miller, J. R. B.** 2015. Mapping attack hotspots to mitigate human-carnivore conflict: Approaches and applications of spatial predation risk modeling. *Biodiversity and Conservation* 24:2887-2911.
*Won Herbert Bormann Prize for Best Scientific Paper at Yale School of Forestry & Environmental Studies
5. **Miller, J. R. B.**, Y. V. Jhala, J. Jyoti, and O. J. Schmitz. 2015. Landscape-scale accessibility of livestock to tigers: implications of spatial grain for modeling predation risk to mitigate human-carnivore conflict. *Ecology and Evolution* 5:1354-1367.
4. **Miller, J. R. B.**, J. M. Ament, and O. J. Schmitz. 2013. Fear on the move: predator hunting mode predicts variation in prey mortality and plasticity in prey spatial response. *Journal of Animal Ecology* 83:214-222.

3. **Miller, J. R. B.** 2010. Survey of Western Tragopan, Koklass Pheasant, and Himalayan Monal populations in the Great Himalayan National Park, Himachal Pradesh, India. *Indian Birds* 6:60-65.
2. **Miller, J. R. B.** 2009. New vocalizations by the Koklass pheasant *Pucrasia macrolopha*. *International Journal of Galliforms Conservation* 1:56-57.
1. **Miller, J. R. B.** and D. A. McFarlane. 2008. A preliminary investigation into Hayne Estimates of poison dart frog (Anura: Dendrobatidae) densities in recovering tropical forest habitats, southwest Costa Rica. *Herpetological Conservation and Biology* 3:298-294.

OP-EDS & BOOK CHAPTERS

3. Bird, B., R. Peters and **J. R. B. Miller**. 2018. Border wall disrupts more than people's lives. Santa Fe New Mexican.
2. **Miller, J. R. B.**, J. D. C. Linnell, V. Athreya, and S. Sen. 2017. Human-Wildlife Conflict in India: Addressing the Source. *Economic & Political Weekly* LII:23-25.
1. **Miller, J. R. B.** and O. J. Schmitz. 2012. Food Webs and Sustainability. In R. K. Craig, J. C. Nagle, B. Pardy, O. Schmitz, & W. Smith (Eds.), *Berkshire Encyclopedia of Sustainability: Ecosystem Management and Sustainability*, Vol. 5. Great Barrington, MA: Berkshire Publishing Group LLC.

FELLOWSHIPS AND AWARDS

Best Talk Award for Science Applied to Responsible Wildlife Management (\$70) , South African Wildlife Management Association Symposium	2016
Herbert Bormann Prize for Best Scientific Paper (\$500) , Yale School of Forestry & Enviro Studies	2015
Junior Research Fellowship , American Institute for Indian Studies (\$12,770)	2012
Critical Language Scholarship to study Hindi in India, U.S. Department of State	2010
Graduate Student Research Fellowship , National Science Foundation	2008
U.S. Fulbright Student Research Scholarship to India, U.S. Department of State	2008

GRANTS

Professional Development Grant (\$500) , Berkeley Postdoctoral Association	2017
Postdoc Travel Grant (\$500) , Cornell Postdoc Association	2016
Conference Travel Fellowship (\$500) , Yale Graduate Student Assembly	2014
Travel Award (\$300) , Student Chapter of the Ecological Society of America	2014
Doctoral Travel Funds (\$500) , Yale School of Forestry & Environmental Studies	Annually 2013-2015
Junior Research Fellowship (\$12,770) , American Institute for Indian Studies	2012
Exploration Fund (\$3,000) , Lewis and Clark	2012
Wildlife Conservation Fund (\$2,400) , John Ball Zoo Society	2012
Alumni Grant (\$500) , U.S. State Department Critical Language Scholarship	2012
Research Fellowship (\$7,720) , Yale Tropical Resources Institute	2011-2012
Conservation Endowment Fund (\$23,592) , Association of Zoos & Aquariums	2011
Summer Research Award (\$4,000) , Yale South Asian Studies Council Summer Research Award	2010
ECOSAVE Grant (\$2,000) , Yale Institute for Biospheric Studies	2010
Preliminary Research Grant (\$5,000) , Yale Institute for Biospheric Studies	2009

TEACHING EXPERIENCE

Guest Instructor , Sierra Nevada Wildlife Ecology (undergraduate field course), UC Forestry Camp	2017
Keynote Speaker , Green Living Seminar, Massachusetts College of Liberal Arts	2016
Guest Lecturer , Mammalogy (undergraduate course), Cornell University	2015
Guest Lecturer , Conservation In Practice (graduate seminar), Yale School of Forestry & Enviro Studies	2014
Teaching Assistant , Conservation In Practice (graduate seminar), Yale School of Forestry & Enviro Studies	2012
Teaching Assistant , Landscape Ecology (graduate course), Yale School of Forestry & Enviro Studies	2010
Certified Outdoor Trip Leader , On-The-Loose Outdoors Club, Claremont McKenna College	2006-2007
Volunteer 3rd & 4th Grade Science Teacher , Oakmont and Chaparral Elementary Schools	2003, 2005, 2007

INVITED TALKS (SELECTED)

Rock Creek Park Seminar , Smithsonian National Zoo (2018)
Career Panel , Integrative Conservation Conference, University of Georgia (2018)
World Wildlife Day Panel on Big Cats , U.S. State Department (2018)
Wildlife Seminar , UC Berkeley (2017)
Wildlife Conservation Society Chapter Meeting , Cornell University (2016)
Harvard Wildlife Career Fair , Harvard (2016)
Department of Biological Sciences Seminar , University of Cape Town (2015)
Human-Tiger Conflict Workshop , WWF-Nepal (2014)
Public Seminar , Connecticut's Beardsley Zoo (2014)
Seminar , Wildlife Institute of India (2014)
Centre for Ecological Sciences Seminar , Indian Institute of Science (2014)
Seminar , WWF-India (2012)

CONTRIBUTED PRESENTATIONS (SELECTED)

Integrative Conservation Conference at Univeristy of Georgia (2018)
SCB International Congress for Conservation Biology, Workshop on Spatial Risk Modeling (2017)
South African Wildlife Management Association (2016)
Cornell Dept of Natural Resources Symposium (2016)
Network for Conserving Central India Sym (2014, 2016)
SCB North American Congress for Conserv Bio (2014)
Ecological Society of America (2014)
Gordon Conference - Predator-Prey Interactions (2014)

PROFESSIONAL DEVELOPMENT & TRAININGS

• Hacking for Conservation , Conservation X Labs	2017
• Teaching Conservation Science , AMNH Network of Conservation Educators & Practitioners	2017
• Meeting Facilitation Workshop , UC Berkeley	2017
• Pixar's Story Strategies for Science Communication Workshop , UC Berkeley	2017
• Editorial Intern , Cornell Lab of Ornithology Communications Team	2014- 2015
• Postdoc Leadership Development Program , Cornell University	2015-2016
• iRest Training (Level 1) in meditative self-inquiry, yoga nidra and stress reduction	2010

SERVICE, COMMUNITY & PUBLIC OUTREACH

Member: Protecting Science for the Public Good (ProSci)	2018-Present
Chief Financial Officer: Society for Conservation Biology Asia Section Board	2017-Present
Member: African Lion Working Group	2016-2017
Graduate Student Committee Member: 1 PhD and 4 MSc students	2016-Present
Co-Founder and Web Manager: Network for Conserving Central India	2014-2017
Science Website Designer and Manager: 6 websites for labs and working groups	2009-2017
Career mentor to Masters, undergraduate and high school students: Cornell Environmental Mentors, Women in Science at Yale and ELM Alumni Mentoring Program	2014-2017
Founder and Member: Panthera Human-Felid Conflict Working Group	2016
Founder and Executive Editor: Bulletin of the Wildlife Institute of India	2012- 2014
Staff Writer: Yale Environmental Review	2012- 2013
Founder and Leader: PhD Peer Mentoring Program, Yale School of Forestry & Enviro. Studies	2011-2015
Graduate Student Representative: Yale Graduate Assembly	2010- 2011
Conference Organizer: Central Indian Landscape Symposium (2017), Kanha-Pench Landscape Sympos. (2014)	
Grant proposal reviewer: National Science Foundation – Geography and Spatial Sciences Program, Conservation Leadership Programme	
Reviewer: <i>Biological Conservation, Biodiversity & Conservation, Environment, Human Dimensions of Wildlife, J of Wildlife Management; Mammalia; Nature Communications; Oikos; PLOS One</i>	
Professional society member: Society for Conservation Biology (Yale and UC Berkeley Chapters), Ecological Society for America, The Wildlife Society	

PROFESSIONAL SKILLS

Field research: Carnivore and prey sign surveys, transect and spotlight lagomorph surveys, bird playback surveys, bird call counts, vegetation structure surveys, VHF biotelemetry and triangulation, net-catching and radio- collaring deer fawns, mist netting, necropsy, camera trapping, mark-recapture
Languages: Hindi (intermediate), Spanish (beginning)
Software: ArcGIS, R Statistical Software, ERDAS IMAGINE, ENVI, Mimics 3D Image Processing, EndNote, Mendeley Desktop, Adobe Photoshop, Microsoft Office (Word, Excel, PowerPoint)