### SHARON BARUCH-MORDO

Spatial Scientist, Global Lands, The Nature Conservancy 117 E Mountain Avenue, Suite 200, Fort Collins, Colorado 80524

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Google Scholar page

### **EDUCATION**

Ph.D	<b>Ecology</b> , Colorado State University, 2012
	Dissertation: Black bear ecology and human-bear interactions in an urban system

M.S. **Fishery and Wildlife Biology**, Colorado State University, 2007 Thesis: *Black bear-human conflicts in Colorado: spatiotemporal patterns and predictors* 

B.S. Wildlife Biology, Colorado State University, 2001

A.S. **Environmental Biology**, Northwest College, 2000

#### **POSITIONS**

Spatial Scientist, Development by Design, The Nature Conservancy	
Affiliate Faculty, Department of Fish, Wildlife, and Conservation Biology, Colorado	
State University & Graduate Degree Program in Ecology	
Ph.D. Graduate Research Assistant, Graduate Degree Program in Ecology &	
Department of Fish, Wildlife, and Conservation Biology, Colorado State University	
M.S. Gradate Research Assistant, Department of Fish, Wildlife, and Conservation	
Biology, Colorado State University	
Field, seasonal, and workstudy	
Avian Surveyor, EDM International, Inc., Fort Collins, CO	
Research Assistant, Lynx Data, Division of Wildlife, Fort Collins, CO	
Wolf Trapping and Handling Technician, USGS, Ely, MN	
Research Assistant, Manuscript and Teaching Manual Editing, Department of	
Wildlife Biology, Colorado State University, Fort Collins, CO	
Research Assistant, Northern Goshawk Conservation Assessment, Department of	
Wildlife Biology, Colorado State University, Fort Collins, CO	
Lab Technician, Natural Resources Ecology Lab, Colorado State University, Fort	
Collins, CO	
Wolf Radio Telemetry Technician, USFWS, Lander, WY	

# **TEACHING**

Instructor

**Landscape Ecology** (ECOL 620), Connectivity using circuit theory (lab), Dept. of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO. Fall 2013. Instructor: Dr. B. Noon.

**R Workshop**, Home range estimation and graphics (Module), Colorado State University, Fort Collins, CO. Fall, 2013. Lead instructor: Dr. M. Hooten.

**Bears** (1-day class, lecture and field), Master Naturalist Accreditation, The Forest Conservancy, Aspen, Colorado. Summer 2012.

- Wildlife data collection and analysis (FW471), Home range (lab), Dept. of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO. Fall 2010 and Spring 2011. Instructors: Dr. L. Bailey, Dr. P. Doherty.
- Wildlife data collection and analysis (FW471), Survival estimation (lecture and lab), Dept. of Fish, Wildlife, and Conservation Biology, Colorado State University, Fort Collins, CO. Spring 2007. Instructor: Dr. K. Wilson.

Teaching Assistant

- Wildlife data collection and analysis (FW 471; 4 credits lecture and lab), Dept. of Fishery and Wildlife Biology, Colorado State University, Fort Collins, CO. Fall 2004 and part-time Fall 2010. Instructors: Dr. K. Wilson, Dr. L. Bailey
- Natural resources ecology and measurements Pingree Park (NR 220; 5 credits lecture and field lab), College of Natural Resources, Colorado State University, Fort Collins, CO. Summer 2004.
- **MARK workshop intermediate level**, Colorado State University, Fort Collins, CO. Instructors: Dr. G. White, Dr. K. Burnham, Dr. P. Doherty, Dr. E. Cooch, et al. June, 2009.
- **MARK workshop beginner level**, Mitrani Dept. of Desert Ecology, Sde Boker, Israel. Instructors: Dr. G. White, and Dr. D. Saltz. March, 2009.
- **Distance Sampling workshop**, Dept. of Fishery and Wildlife Biology, Colorado State University, Fort Collins, Colorado. Instructors: Dr. P. Doherty, Dr. J. Laake, Dr. E. Rexstad, et al. January, 2005.

#### ADVANCED TRAINING AND SKILLS

Software and programming

R, Python, SAS, MATLAB, WinBUGS, JAGS, ArcGIS, NetLogo, MARK, Distance

#### Modeling Concepts

Information-theoretic inference, Frequentist and Bayesian methods and inference, Individual-based models, Patch-selection models, Resource selection models, Species distribution models, Random forest models, Spatial analysis and autocorrelation, Home range estimation, Demographic parameters estimation

## Workshops

- **NCEAS Summer Institute**. Training workshop in ecological analysis and synthesis for early-career researchers, NCEAS, Santa Barbara, CA, Summer 2013.
- **Hierarchical models** for abundance, distribution and species richness in spatially structured populations using unmarked/R and WinBUGS. USGS Patuxent Wildlife Research Center, Winter 2012.
- **African BioMathematics Initiative** (NSF-funded): Workshop and Advanced Study Institute on Conservation Biology Part I and II. Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University. Kruger National Park, South Africa, Summer 2010 and Lake Naivasha, Kenya, Winter 2011.
- **Advanced Ecological Data Analysis in R**. The Wildlife Society 17<sup>th</sup> Annual Conference, Snowbird, UT. Oct, 2010.
- **A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology**. Ecological Society of America 94<sup>th</sup> Annual Meeting, Albuquerque, NM. Aug, 2009.
- **Capture, Immobilization, and Handling of Wildlife**. Colorado Division of Wildlife, Fort Collins, CO. 2005, 2008, and 2010.
- SAS Programming I: Essentials. SAS Institute, Denver, CO. Sept, 2004

#### **PUBLICATIONS**

Peer-reviewed (\* indicates co-leads)

- Kiesecker, J.\*, **S. Baruch-Mordo**\*, C.M. Kennedy, J.R. Oakleaf, A. Baccini, B.W. Griscom. *In Review*. Hitting the target but missing the mark: Unintended consequences of the Paris climate agreement. *Conservation Letters*.
- **Baruch-Mordo, S.\***, Kiesecker, J.\*, C.M. Kennedy, J.R. Oakleaf, J.J. Opperman. *In Revision*. From Paris to practice: Sustainable implementation of renewable energy goals. *Environmental Research Letters*.
- Oakleaf, J.R\*, C.M. Kennedy\*, **S. Baruch-Mordo**, J.S. Gerber, P.C. West, J.A. Johnson, J. Kiesecker. *In Revision*. Mapping global development potential for renewable energy, fossil fuels, mining and agriculture sectors. *Scientific Data*.
- Kennedy, C.M.\*, J.R. Oakleaf\*, J. Kiesecker, **S. Baruch-Mordo**, D. Theobald. *Accepted*. Managing the Middle: A Shift in Conservation Priorities based on the Global Human Modification Gradient. *Global Change Biology*.
- Schafer, T., **S. Baruch-Mordo**, D.L. Lewis, K.R. Wilson, J.S. Mao, S.W. Breck. 2018. American black bear den-site selection and characteristics in an urban environment. *Ursus* 29:25-31.
- Entrekin, S.A., A.M. Trainor, J. Saiers, L.A. Patterson, K.O. Maloney, J.E. Fargione, J. Kiesecker, S. Baruch-Mordo, J.P. Nicot, K. Konschnik, H. Wiseman, J.N. Ryan. 2018. Water stress from high volume hydraulic fracturing threatens aquatic biodiversity and ecosystem services in Arkansas, U.S.A. *Environmental Science and Technology* 52:2349-2358.
- Dietsch, A.M., K.M. Slagle, **S. Baruch-Mordo**, S.W. Breck, L.M. Ciarniello. 2018. Education is not a panacea for reducing human-black bear conflicts. *Ecological Modeling* 367:10-12.
- Garshelis, D.L., **S. Baruch-Mordo**, A. Bryant, K.A. Gunther, K. Jerina. 2017. Is diversionary feeding an effective tool for reducing human–bear conflicts? Case studies from North America and Europe. *Ursus* 28:31-55.
- Patterson L.A., K. Konschnik, H. Wiseman, J. Fargione, K.O. Maloney, J. Kiesecker, J.P. Nicot, **S. Baruch-Mordo**, S. Entrekin, A. Trainor, J.E. Saiers. 2017. Unconventional oil and gas spills: risks, mitigation priorities and state reporting requirements. *Environmental Science and Technology* 51:2563-2573.
- Maloney, K.O., **S. Baruch-Mordo**, L.A. Patterson, J.P. Nicot, S. Entrekin, J. Fargione, J. Kiesecker, K. Konschnik, J.N. Ryan, A. Trainor, J.E. Saiers, and H. Wiseman. 2017. Unconventional oil and gas spills: materials, volumes and risks to surface waters in four states of the U.S. <u>Science of the Total Environment</u> 581-582: 369 377.
- Smith, J.T., J.S. Evans, B.H. Martin, **S. Baruch-Mordo**, J.M. Kiesecker, and D.E. Naugle. 2016. Reducing cultivation risk for at-risk species: predicting outcomes of conservation easements for sage-grouse. *Biological Conservation* 201:10-19.
- Oakleaf, J.R., C.M. Kennedy, **S. Baruch-Mordo**, P.C. West, J.S. Gerber, L. Jarvis, and J. Kiesecker. 2015. A world at risk: Aggregating development trends to forecast global habitat conversion. *PLoS One* 10(10):e0138334
- Johnson, H.E., S.W. Breck, S. Baruch-Mordo, D.L. Lewis, C.W. Lackey, K.R. Wilson, J. Broderick, J.S. Mag and J.P. Beckmann. 2015. Shifting Perceptions of Risk and Reward: Dynamic Selection for Human Development by Black Bears in the Western United States. <u>Biological Conservation</u> 187:164-172
- Lewis, D.L., **S. Baruch-Mordo**, K.R. Wilson, S.W. Breck, J.S. Mao, and J. Broderick. 2015. Foraging ecology of black bears in urban environments: guidance for human-bear conflict mitigation. <u>Ecosphere</u> 6(8):141.
- **Baruch-Mordo, S.,** K.R. Wilson, D. Lewis, J.S. Mao, J. Broderick, and S.W. Breck. 2014. Stochasticity in natural forage production affects use of urban areas by black bears: implications to management of human-bear conflicts. *PLoS One* 9(1): e85122
- **Baruch-Mordo, S.,** J.S. Evans, J.P. Severson, D.E. Naugle, J.D. Maestas, J.M. Kiesecker, M.J. Falkowski, C.A. Hagen, and K.P. Reese. 2013. Saving sage-grouse from the trees: A proactive solution to reducing a key threat to a candidate species. *Biological Conservation*, 167: 233-241.
- Baruch-Mordo, S., C.T. Webb, S.W. Breck, and K.R. Wilson. 2013. Use of patch selection models as a

- decision support tool to evaluate mitigation strategies of human-wildlife conflict. <u>Biological</u> <u>Conservation 160:263-271.</u>
- **Baruch-Mordo, S.,** S.W. Breck, K.R. Wilson, and J. Broderick. 2011. The carrot or the stick? Evaluation of education and enforcement as management tools for human-wildlife conflicts. <u>PLoS One 6(1):</u> e15681
- **Baruch-Mordo**, S., S.W. Breck, K.R. Wilson, and J. Broderick. 2009. A tool box half full: how social science can help solve human-wildlife conflict. *Human Dimensions of Wildlife* 14:219-223.
- **Baruch-Mordo, S.,** S.W. Breck, K.R. Wilson, and D.M. Theobald. 2008. Spatiotemporal distribution of black bear-human conflicts in Colorado. *Journal of Wildlife Management* 72:1853-1862.
- Wolfe, L.L., C.T. Goshorn, and **S. Baruch-Mordo.** 2008. Immobilization of black bears (*Ursus americanus*) with a combination of butorphanol, azaperone, and medetomidine. <u>Journal of Wildlife Diseases</u> 44:748-752.
- Thiemann, G.W., R.S. Stahl, **S. Baruch-Mordo**, and S.W. Breck. 2008. *Trans* fatty acids provide evidence of anthropogenic feeding by black bears. *Human-Wildlife Conflicts* 2:183-193.

## Book chapter

- Oakleaf, J.R., C.M. Kennedy, **S. Baruch-Mordo**, and J.M. Kiesecker. 2017. Geography of risk. Pp. 7-19 *in* Energy Sprawl Solutions. Island Press, Washington DC.
- Walter, D.W., J. Fischer, **S. Baruch-Mordo**, and K. VerCauteren. 2011. What is the proper method to delineate home range of an animal using today's advanced GPS telemetry systems: the initial step. Pp. 249 268 *in* Modern Telemetry. InTech, Rijeka, Croatia

#### Reports and Proceedings

- Siemers, J.L., K.R., Wilson, **S. Baruch-Mordo**. 2013. Wildlife fencing and escape ramp monitoring: preliminary results for mule deer in southwest Colorado. Proceedings of the 2013 International Conference on Ecology and Transportation, Scottsdale, AZ.
- Crabtree, R., J.W. Sheldon, K. Wilson, C. Potter, B. Winkelman, D. Weiss, **S. Baruch-Mordo**, and G. Reese. 2011. Decision support for climate change adaptation in the GPLCC: creating geospatial data products for ecosystem assessment and predictive species modeling. Yellowstone Ecosystem Research Center report, Bozeman, MT.
- Crooks, K., C. Haas, **S. Baruch-Mordo**, K. Middledorf, S. Magle, T. Shenk, K. Wilson, and D. Theobald. 2008. Roads and connectivity in Colorado: animal-vehicle collisions, wildlife mitigation structures, and lynx-roadway interactions. Report No. CDOT-2008-4, Colorado Department of Transportation Research Branch, Denver, CO.

### **PRESENTATIONS**

**Professional Meetings** 

- **Baruch-Mordo, S.,** Kiesecker, J., Kennedy, C., Oakleaf, J., Opperman, J., Baccini, A., Griscom, B.W. 2018. From Paris to practice: Hitting the target but missing the mark. TNC All Science meeting, Houston, TX.
- **Baruch-Mordo, S.,** Wilson, K., Breck, S. 2013. Challenging Current Paradigms of Urban Bear Management: Lessons Learned from Aspen, Colorado. 22<sup>nd</sup> International Conference on Bear Research and Management, Provo, UT.
- Kennedy, C., Oakleaf, J., **Baruch-Mordo, S.,** Kiesecker, J., West, P., Gerber, J. 2013. Future global energy and mining landscapes: call for proactive conservation planning. Ecological Society of America, 98<sup>th</sup> Annual Meeting, Minneapolis, MN.
- Siemers, J., Wilson, K., **Baruch-Mordo, S.** 2013. Wildlife fencing escape ramp monitoring: preliminary results for mule deer in southwest Colorado. International Conference on Ecology & Transportation, Scottsdale, AZ.
- Baruch-Mordo, S., Evans, J., Kiesecker, J., Naugle, D., Maestas, J. 2012. Using range-wide models to

- inform sage-grouse conservation: data challenges and opportunities. Wyoming Chapter of The Wildlife Society annual meeting, Laramie, WY.
- **Baruch-Mordo, S.,** Wittemyer, G., Hooten, M., Reed, S., Theobald, D. 2012. A practical guide for use of home range estimators. The Wildlife Society 19<sup>th</sup> Annual Conference, Portland, OR.
- Lewis, D., **Baruch-Mordo, S.,** Breck, S.W., and Wilson, K., 2012. Black bear foraging site selection in urban environments. The Wildlife Society 19<sup>th</sup> Annual Conference, Portland, OR.
- **Baruch-Mordo, S.,** Webb, C.T., Breck, S.W., and Wilson, K. 2012. Patch selection models evaluate effects of conflict management on wildlife foraging. Student Conference on Conservation Science, American Museum of Natural History, New York, NY.
- **Baruch-Mordo, S.,** Webb, C.T., Breck, S.W., and Wilson, K. 2012. Using patch selection models to evaluate effects of human-wildlife conflict management on wildlife foraging decisions. North American Congress for Conservation Biology, Society for Conservation Biology, Oakland, CA.
- **Baruch-Mordo, S.** 2011. Food for thought: why diversionary feeding may not be an effective management tool for urban human-bear conflicts. Invited panelist, Bear Feeding, 20<sup>th</sup> International Conference on Bear Research and Management, Ottawa, Canada.
- Himes Boor, G.K., **Baruch-Mordo, S.** 2011. Using individual-based movement models to investigate mechanism of emergent herding behavior in African buffalo. 8<sup>th</sup> European Conference on Mathematical and Theoretical Biology and Annual Meeting of The Society for Mathematical Biology, Krakow, Poland.
- **Baruch-Mordo, S.,** Wilson, K.R., Broderick J. 2011. Urban black bear ecology: fluctuating synanthropy and its implications for management. International Urban Wildlife Management and Planning Conference, Austin, TX.
- **Baruch-Mordo, S.,** Wilson, K.R., Broderick J. 2011. Urban black bear ecology: fluctuating synanthropy and its implications for management. International Urban Wildlife Management and Planning Conference, Austin, TX.
- Breck S.W., **Baruch-Mordo, S.,** Wilson, K.R., Broderick J. 2011. The carrot or the stick? Evaluation of education and enforcement as management tools for urban human-bear conflicts. International Urban Wildlife Management and Planning Conference, Austin, TX.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2010. Urban black bear ecology: fluctuating synanthropy and its implications for management. The Wildlife Society 17<sup>th</sup> Annual Conference, Snowbird, UT.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2009. Foraging ecology of black bears in a Colorado urban setting. Carnivores 2009 by the Defenders of Wildlife, Denver, CO.
- **Baruch-Mordo, S.,** Breck S.W., Wilson, K.R., Broderick J. 2009. Investigating the urban black bear legend. Colorado Chapter of The Wildlife Society summer meeting, Fort Collins, CO.
- **Baruch-Mordo, S.,** Breck S.W., Wilson, K.R., Broderick J. 2009. Investigating the urban black bear legend. 10<sup>th</sup> Western Black Bear Workshop, Reno, NV.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2008. Efficacy of education as a management tool in reducing bear-human conflicts in a Colorado urban setting. Pathways to Success: Integrating Human Dimensions into Fisheries and Wildlife Management, Estes Park, CO.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2007. Roaring fork valley urban black bear ecology. Association of Zoos and Aquariums Western Regional Conference, Wildlife Conservation in Fragmented Habitats session, Denver, CO.
- **Baruch-Mordo, S.,** Breck S.W., and Wilson, K.R. 2006. Modeling predictors of black bear-human conflicts in Colorado. 9<sup>th</sup> Western Black Bear Workshop, Raton, NM.
- **Baruch-Mordo, S.,** Wilson, K.R., and Breck S.W. 2005. Spatial and temporal distribution of black bearhuman conflicts in Colorado. Colorado Chapter of the Wildlife Society winter meeting, Colorado Springs, CO.
- **Baruch-Mordo**, S., Wilson, K.R., and Breck S.W. 2004. Spatial and temporal distribution of black bear-human conflicts in Colorado. Carnivores 2004 by the Defenders of Wildlife, Santa Fe, NM.

Seminars, Symposia, and Outreach (selected)

- **Baruch-Mordo, S.** From urban bear ecology in Colorado to sage-grouse ecology across the West: unifying themes of conservation research. 2013. TNC Colorado Chapter, Boulder, CO.
- **Baruch-Mordo, S.,** Wilson, K.R., Lewis, D. Breck S.W., Broderick J. 2010. Urban black bear ecology in the Roaring Fork Valley. Aspen Rotary Club, Aspen, CO.
- **Baruch-Mordo, S.,** Wilson, K.R., Lewis, D. Breck S.W., Broderick J. 2010. Urban black bear ecology in the Roaring Fork Valley. Roaring Fork Audubon Society, Carbondale, CO.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2010. Nuisance Black Bear Conflicts in Colorado modifying, understanding, and predicting human and bear behaviors in an urban setting. Berryman Institute Symposium, Logan, UT.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2009. Urban Bears. Rocky Mountain National Park, Science Behind the Scenery Series, Estes Park, CO.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2009. Urban black bear ecology Understanding, modifying, and predicting bear and human behavior. Interactions of Society and the Environment seminar series, USGS Science Center, Fort Collins, CO.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2008. Black bear-human conflicts: Understanding, modifying, and predicting human and bear behaviors in a Colorado urban setting. Berryman Institute symposium, Starkville, MS.
- **Baruch-Mordo, S.,** Wilson, K.R., Breck S.W., Broderick J. 2007. Roaring fork valley urban black bear ecology. Aspen Center of Physics, Aspen, CO.
- **Baruch-Mordo, S.,** and Wright K. 2007. Urban black bear ecology. Aspen Center for Environmental Studies, Aspen, CO.
- Broderick, J., **Baruch-Mordo**, S., Breck S.W., and Wilson, K.R. 2006. Roaring Fork valley urban black bear study: a search for better solutions to manage bear-human conflicts. A joint presentation before the Colorado Wildlife Commission, Steamboat Springs, CO.

#### **MEDIA INTERVIEWS**

**Radio** Colorado Public Radio, Utah Public Radio **TV** Denver 7, CBS4 Denver, Aspen Plum TV

**Newspaper** Denver Post, Aspen Times, Aspen Daily News, Fort Collins Coloradoan, Glenwood

Springs Independent, Grand Junction Daily Sentinel, Wall Street Journal, Huffington

Post

#### ACADEMIC HONORS

**Distinguished Alumni Award** – Northwest College 2015

**Best Student Presentation Award** – 22<sup>nd</sup> International Conference on Bear Research and Management, Provo, UT 2012

School of Global Environmental Sustainability Leadership Fellow – Colorado State University 2012 International Presidential Fellow – Colorado State University 2010

**Dale Hein Award for Pingree Park** Summer Field Course – Colorado State University 2001, Awarded to the most enthusiastic student demonstrating academic excellence

Dean's List - College of Natural Resources, Colorado State University 2000-2001

**Writing in the Academic World essay contest winner** – Northwest College 2000, E.O. Wilson – A Biography

Outstanding Full-time Adult Student Award – Northwest College 2000

**President's Honor Roll** – Northwest College 1998-2000

### **GRANTS, FELLOWSHIPS, AND AWARDS**

Research

Can wind and solar save the Amazon? – 2018, Cornell-TNC seed grant, co-PIs Drs. Joseph Kiesecker, Eilyan Bitar (\$192,546)

Impacts of hydraulic fracturing on water quantity and quality – 2014, NCEAS-SNAP working group, co-PIs Drs. Joseph Kiesecker, Joe Fargione, Joe Ryan and Anne Trainor (\$240,000)

**Ungulate use of escape ramps: design and monitoring** – 2012, Colorado Department of Transportation, co-PI Dr. Ken Wilson (\$71,944)

Scholarships, fellowships, and student grants

(Unspecified amounts indicate award was <\$5,000)

**Spatial Ecology and Telemetry Working Group**, The Wildlife Society – 2012 Travel Grant.

**Biometrics Working Group**, The Wildlife Society – 2012 Travel Grant.

**Society for Conservation Biology** – 2012 Travel Grant.

**Graduate Degree Program in Ecology** – 2012 Travel Grant.

**International Association for Bear Research and Management** – 2011 Travel Grant.

Colorado Chapter of the Wildlife Society – 2011 Travel Grant, 2009 McKean Memorial Scholarship.

**Aspen Field Biology Lab** – 2008, 2007, and 2006 Bob Lewis Fellowships (\$35,000 total).

**City of Aspen** – 2008 Environmental Quality Grant (\$13,000).

Rocky Mountain Goats Foundation – Bill Burtness Fellowship 2008 and 2004.

**Berryman Institute** – 2006 Graduate Student Fellowship (\$15,000).

Warner College of Natural Resources, Colorado State University – 2009, 2007, 2005, and 2004
Douglas L. Gilbert Memorial Scholarship, 2008 Anheuser-Busch Environmental Fellowship,
2007 Hill memorial Fellowship (\$5,000), 2005 Jay Hokenstrom Memorial Scholarship, 2004
Need-based Scholarship, 2001 Philip A. Connolly Memorial Scholarship, 2000 Ernest and
Bernice Dice Scholarship.

**Colorado Division of Wildlife** – 2000 Cultural Diversity Scholarship

Northwest College, Powell Wyoming – 2000 Patricia Wolsborn Liberal Arts Scholarship for Continuing Education, 1999 Beta Sigma Phi Sorority Scholarship, 1999 International Student Scholarship, 1999 Life & Health Divisional Merit Award, 1999 Robert W. Frisby Scholarship.

#### PROFESSIONAL ACTIVITIES AND SERVICES

Past Member

Society for Conservation Biology; Ecological Society of America; The Wildlife Society; International Association for Bear Research and Management

#### Reviewer

Animal Behaviour; Animal Conservation; Biological Conservation; Canadian Journal of Zoology; Conservation Letters; Ecology and Society; Ecological Modeling; Ecosphere; Environmental Research Letters; Global Change Biology; Human Dimensions of Wildlife; Integrative Zoology; Journal of Mammalogy; PLoS ONE; Restoration Ecology; Sustainability; Ursus; Wildlife Research; Abstracts for The Wildlife Society Annual Conferences; Proceedings of Biennial Conference on Colorado Plateau; NSF – Geography and Spatial Sciences.

#### Outreach and Volunteering

Front Range Student Ecology Symposium, panel member "Diverse Avenues in Ecology"; Consult Cities of Boulder and Durango Colorado on bear management plan; Consult Whistler Bear Aware on human-bear conflicts; Blogger on NSF-funded BioDiverse Perspective – Making the case for science

communication; **B-SURE career panel** for undergrads, Colorado State University; **Front Range Student Ecology Symposium** teaching telemetry to high school students and student presentations judge; Graduate student representative at the **Dept. of Fish, Wildlife, and Conservation Biology**, Colorado State University; Volunteer **Colorado Division of Wildlife** (Canada geese banding, eagle roost watch, river otter surveys).