

# Melissa Amarello

## Education

**Master of Science in Biology** (December 2012), Arizona State University, National Science Foundation Graduate Research Fellow  
Thesis: *Social Snakes? Non-random association patterns detected in a population of Arizona black rattlesnakes*  
Committee: Dale F. DeNardo (chair), Gordon Schuett, and Brian Sullivan

**Bachelor of Science in Natural Resources, cum laude – Wildlife, Watershed, and Rangeland Resources** (May 2005), University of Arizona  
Honors Thesis: *Antipredator behavior of Mexican lance-headed rattlesnakes*  
Thesis Advisor: Kevin E. Bonine

## Professional Experience

*Co-founder, Director of Education* (2014-present), Advocates for Snake Preservation, Tucson, AZ  
Advocates for Snake Preservation uses science, education, and advocacy to promote compassionate conservation and coexistence with snakes. Responsible for online communications, scheduling and executing educational presentations, and maintaining website.

*Communications Associate*, (2014-present), Center for Biological Diversity, Tucson, AZ  
Provide communications support and manage social media for the Population and Sustainability program.

*Communications Support*, (2014), Arizona Wilderness Coalition, Tucson, AZ  
Assisted with e-newsletter and social media.

*Guest Services & Outreach Assistant* (2013), The Nature Conservancy, Willcox, AZ  
Coordinated educational events and managed volunteers at the Muleshoe Ranch Preserve. Produced material for Facebook page and wrote articles for state chapter newsletter. Designed and conducted research project on rattlesnake ecology and public outreach.

*Co-founder, Social Media & Outreach Coordinator* (2010-2014), Social Snakes, Tucson, AZ  
Founded Social Snakes to promote snake conservation by dispelling myths with facts and using stories and videos to paint a more positive and accurate picture of snakes. Designed and managed socialsnakes.org, educated the public about snake natural history in presentations, exhibits, and online with Facebook and Twitter.

*Graduate Research Assistant* (2009-2012), Arizona State University, Tempe, AZ  
Balanced independent and collaborative research, teaching, coursework, mentoring student volunteers, and outreach. Designed, managed, and completed thesis research on snake social behavior using social network analysis.

## Professional Experience (*continued*)

*Staff Biologist* (2008-2009), Allterra Environmental, Inc., Santa Cruz, CA

Served as GIS specialist on western pond turtle project: analyzed spatial data and presented them graphically in final report.

*Biological Science Technician* (2006-2008), US Geological Survey, Dixon, CA

Worked with two ESA listed species: giant gartersnakes and San Francisco gartersnakes, including applying for state and federal permits. Designed, conducted, and managed a project to investigate effects of fire on San Francisco gartersnakes, maintained large relational databases, and assisted in data analysis, report and manuscript writing.

*Research Technician* (2002-2006), University of Arizona, Tucson, AZ

Supervised other employees and volunteers on projects investigating urban ecology and the effects of fire on reptiles and amphibians. Managed state and federal permits. Developed field protocols, analyzed data using statistical software and GIS, and prepared reports, manuscripts, and presentations.

*Independent Undergraduate Research* (2003), University of Arizona, Tucson, AZ

Designed and conducted an independent project on snake foraging ecology.

*Field Biologist* (1999), The Peregrine Fund, Marble Canyon, AZ

Monitored California condors using radio telemetry.

## Publications

### Journal Articles (peer-reviewed)

- C.F. Smith, G.W. Schuett, **M. Amarello**. 2015. Male mating success in a North American pitviper: influence of body size, testosterone, and spatial metrics. *Biological Journal of the Linnean Society* 115: 185–194.
- R. Clark, G.W. Schuett, R.A. Repp, **M. Amarello**, C.F. Smith, and H-W. Herrmann. 2014. Mating systems, reproductive success, and sexual selection in secretive species: a case study of the rattlesnake, *Crotalus atrox*. *PLoS ONE* 9:e90616+.
- G.W. Schuett, R.A. Repp, **M. Amarello**, and C.F. Smith. 2013. Unlike most vipers, female rattlesnakes continue to hunt and feed throughout pregnancy. *Journal of Zoology* 289: 101-110.
- M.E. Thompson, B.J. Halstead, G.D. Wylie, **M. Amarello**, J.J. Smith, M.L. Casazza, and E.J. Routman. 2013. Effects of prescribed fire on *Coluber constrictor mormon* in coastal San Mateo County, California. *Herpetological Conservation & Biology* 8: 602-615.
- B.J. Halstead, G.D. Wylie, **M. Amarello**, J.J. Smith, M.E. Thompson, E.J. Routman, and M.L. Casazza. 2011. Demography of the San Francisco gartersnake in coastal San Mateo County, California. *Journal of Fish and Wildlife Management* 2: 41-48.
- G.D. Wylie, J.J. Smith, **M. Amarello**, and M.L. Casazza. 2011. A taping method for external transmitter attachment on aquatic snakes. *Herpetological Review* 42: 187-191.

### Journal Articles (peer-reviewed, continued)

- M. Amarello**, E.M. Nowak, E.N. Taylor, G.W. Schuett, R.A. Repp, P.C. Rosen, and D.L. Hardy. 2010. Potential environmental influences on variation in body size and sexual size dimorphism among Arizona populations of the western diamond-backed rattlesnake (*Crotalus atrox*). *Journal of Arid Environments* 74: 1443-1449.
- J.J. Smith, **M. Amarello**, and M. Goode. 2010. Seasonal growth of free-ranging Gila monsters (*Heloderma suspectum*) in a southern Arizona population. *Journal of Herpetology* 44: 484-488.
- M. Amarello** and M. Goode. 2003. *Crotalus tigris* diet. *Herpetological Review* 35: 177.
- M. Amarello** and M. Goode. 2003. *Trimorphodon biscutatus* (western lyresnake) predation. *Herpetological Review* 35: 182.
- M. Amarello**, K. Setser, and M. Goode. 2003. *Masticophis flagellum* (coachwhip) diet. *Herpetological Review* 35: 178.

### Book Chapters (peer-reviewed)

- G.W. Schuett, R.W. Clark, R.A. Repp, **M. Amarello**, C.F. Smith, and H.W. Greene. 2017. Social behavior of rattlesnakes: a shifting paradigm. G.W. Schuett, M.J. Feldner, C.F. Smith, and R.S. Reiserer (eds.), *The Rattlesnakes of Arizona*. Eco Publishing, Rodeo, NM.
- M. Amarello**, K. Bonine, and D. Lazcano. 2008. Factors influencing the antipredator behavior of Mexican lance-headed rattlesnakes (*Crotalus polystictus*) toward humans. Pp. 229-234 in W.K. Hayes, K.R. Beaman, M.D. Cardwell, and S.P. Bush (eds.), *The Biology of Rattlesnakes*. Loma Linda University Press, Loma Linda, CA.
- M. Goode, J.J. Smith, and **M. Amarello**. 2008. Seasonal and annual variation in home range and movements of tiger rattlesnakes (*Crotalus tigris*) in the Sonoran Desert of Arizona. Pp. 327-334 in W.K. Hayes, K.R. Beaman, M.D. Cardwell, and S.P. Bush (eds.), *The Biology of Rattlesnakes*. Loma Linda University Press, Loma Linda, CA.
- J.J. Smith, M. Goode, and **M. Amarello**. 2008. Changes in structure and composition of Sonoran Desert reptile communities associated with golf courses. Pp. 311-320 in J.C. Mitchell, R.E. Jung Brown, and B. Bartholomew (eds.), *Urban Herpetology*. *Herpetological Conservation* Vol. 3, Society for the Study of Amphibians and Reptiles, Salt Lake City, UT.

### Popular Science

- J.J. Smith and **M. Amarello**. 2017. Shedding our old views of snakes. *The Cactus Wren*· dition LXV(3): 20-21. [www.maricopa-audubon.org/Wrendition%20Fall%202017.pdf](http://www.maricopa-audubon.org/Wrendition%20Fall%202017.pdf)
- M. Amarello**. 2016. Wildlife slaughter persists at rattlesnake roundups despite conservation efforts. *National Geographic Voices*. [www.snakes.ngo/NatGeo2016](http://www.snakes.ngo/NatGeo2016)
- M. Amarello** and J.J. Smith. 2010-present. *Social Snakes Blog*. [www.snakes.ngo/news](http://www.snakes.ngo/news)
- M. Amarello** and J.J. Smith. 2012. Social Snakes? The role of kin selection in rattlesnake aggregations. *Sonoran Herpetologist* 25: 129-130.
- J.J. Smith and **M. Amarello**. 2012. The story of Chris, the Arizona black rattlesnake. *The Nature Conservancy's Field Notes* Fall 2012: 10-12.
- M. Amarello**. 2005. Antipredator behavior in the Mexican lance-headed rattlesnake. *Sonoran Herpetologist* 18:32.
- M. Amarello**. 2004. Tracking *Trimorphodon*. *News From the Mews* 7: 3.
- M. Amarello**. 2003. Banded rock rattlesnake study at Chiricahua National Monument. *Renew, News and Happenings at the School of Renewable Natural Resources, College of Agriculture and Life Sciences, University of Arizona* 4: 10.

## Scientific Reports

- M. Amarello and J.J. Smith. 2008. 2008 Reptile Surveys at Cloverdale Coastal Ranch, Southern San Mateo County, California. Prepared for Peninsula Open Space Trust.
- M. Amarello and J.J. Smith. 2008. 2007 Reptile Surveys at Cloverdale Coastal Ranch, Southern San Mateo County, California. Prepared for Peninsula Open Space Trust.
- J.J. Smith and M. Amarello. 2007. The effects of road construction on Sonoran Desert reptiles. Prepared for T & E, Inc.
- G.D. Wylie and M. Amarello. 2006. Results of 2006 monitoring for Giant Gartersnakes (*Thamnophis gigas*) for the bank protection project on the left bank of the Colusa Basin Drainage Canal in Reclamation District 108, Sacramento River bank protection project, phase II. Prepared for US Army Corps of Engineers.
- G.D. Wylie, and M. Amarello. 2006. Surveys for the current distribution and abundance of Giant Gartersnakes (*Thamnophis gigas*) in the southern San Joaquin Valley. Prepared for US Bureau of Reclamation.
- M. Amarello. 2005. Defensive behavior of *Crotalus polystictus* (Mexican Lance-headed Rattlesnake). Prepared for T & E, Inc.
- M. Amarello and M. Goode. 2004. Banded Rock Rattlesnake (*Crotalus lepidus klauberi*) foraging ecology. Prepared for T & E, Inc.
- M. Goode and M. Amarello. 2004. Effects of fire on Banded Rock Rattlesnakes (*Crotalus lepidus*) at Chiricahua National Monument. Prepared for National Park Service, Sonoran Desert Network Inventory and Monitoring Program.
- M. Goode, J. Smith, M. Amarello, K. Setser, and N. Favour. 2004. Effects of urban development on herpetofauna. Prepared for Arizona Game and Fish Department, Heritage Fund – Urban Wildlife Program.

## Works in Preparation

- M. Amarello and J.J. Smith. Social snakes: non-random association patterns in a rattlesnake social network.

## Presentations

### Invited Conference Presentations

- M. Amarello** and J.J. Smith. 2016. The secret social lives of snakes and why they matter. Joint Meetings of Ichthyologists and Herpetologists. New Orleans, LA.
- M. Amarello**, J.J. Smith, and M. Goode. 2006. Can golf courses sustain populations of Sonoran desert reptiles and amphibians? Joint Meetings of Ichthyologists and Herpetologists. New Orleans, LA.
- M. Goode, **M. Amarello**, and J.J. Smith. 2006. Oasis or mirage: use of a golf course and surrounding desert areas by tiger rattlesnakes. Joint Meetings of Ichthyologists and Herpetologists. New Orleans, LA.
- J.J. Smith, M. Goode, and **M. Amarello**. 2006. Changes in desert lizard ecology before and after golf course construction. Joint Meetings of Ichthyologists and Herpetologists. New Orleans, LA.
- M. Amarello**. 1999. California Condors: natural history and the Arizona recovery project. International Wildlife Rehabilitation Council Annual Conference. Tucson, AZ.

## Conference Presentations

- M. Amarello** and J.J. Smith. 2016. The secret social lives of snakes and why they matter. Southwest Partners in Amphibian and Reptile Conservation. Alpine, TX.
- M. Amarello** and J.J. Smith. 2015. How (and why) we're changing how people view and treat snakes. Compassionate Conservation 2015. Vancouver, Canada.
- M. Amarello**, J.J. Smith, and M.G. Starkey. 2014. Advocates for Snake Preservation: the future of snake conservation. Biology of the Pitvipers 2. Tulsa, OK.
- M. Amarello** and J.J. Smith. 2012. Social snakes? Arizona black rattlesnake aggregations exhibit hallmarks of sociality. World Congress of Herpetology. Vancouver, Canada. *Won the Herpetologists' League Graduate Research Award for best student presentation.*
- M. Amarello** and D.F. DeNardo. 2011. SnakeBook: An Arizona black rattlesnake (*Crotalus cerberus*) social network. Current Research on Herpetofauna of the Sonoran Desert V. Tucson, AZ.
- M. Amarello**, J.J. Smith, and J. Slone. 2011. Family Values: Rattlesnake parental care is more than just attendance. Biology of the Rattlesnakes Symposium. Tucson, AZ.
- M. Amarello**, E.M. Nowak, E.N. Taylor, G.W. Schuett, R.A. Repp, P.C. Rosen, and D.L. Hardy. 2009. Body size variation among Arizona populations of the western diamond-backed rattlesnake (*Crotalus atrox*) is predicted by GIS-based estimates of isothermality and precipitation. Society for Integrative and Comparative Biology. Boston, MA.
- M. Amarello**, E.M. Nowak, and E.N. Taylor. 2005. Variation among populations of *Crotalus atrox* (western diamond-backed rattlesnakes). Current Research on Herpetofauna of the Sonoran Desert III. Phoenix, AZ.
- M. Amarello**, K.E. Bonine, and D.Lazcano. 2005. Defensive behavior of *Crotalus polystictus* (Mexican lance-headed rattlesnake). Biology of the Rattlesnakes Symposium. Loma Linda, CA.
- M. Amarello**, M. Goode, A. Holycross, D. Prival, H.K. McCrystal, and D.F. Retes. 2004. Geographic variation in *Crotalus lepidus klauberi* (banded rock rattlesnakes). Joint Meetings of Ichthyologists and Herpetologists. Norman, OK.

## Posters

- M. Amarello** and J.J. Smith. 2014. SnakeBook: the Arizona black rattlesnake social network. Biology of the Pitvipers 2. Tulsa, OK.
- M. Amarello**, J.J. Smith, and J. Slone. 2011. Family Values: Rattlesnake parental care is more than mere attendance. Behavior 2011. Bloomington, IN. Available from Nature Precedings: [dx.doi.org/10.1038/npre.2011.6671.1](https://doi.org/10.1038/npre.2011.6671.1)
- M. Amarello** and J.J. Smith. 2009. A snake of a different color: physiological color change in Arizona black rattlesnakes. Snake Ecology Group. Donnelly, ID. Available from Nature Precedings: [dx.doi.org/10.1038/npre.2011.6711.1](https://doi.org/10.1038/npre.2011.6711.1)
- B.J. Halstead, G.D. Wylie, **M. Amarello**, J.J. Smith, and M.L. Casazza. 2009. Population ecology of the endangered San Francisco Gartersnake in California coastal scrub habitat. Snake Ecology Group. Donnelly, ID.
- A. Bockoven, **M. Amarello**, and M.W. Sears. 2009. Implications of tradeoffs between crypsis and thermoregulation for the evolution of animal coloration. Society for Integrative and Comparative Biology. Boston, MA.
- M. Amarello** and J.J. Smith. 2008. Patterns of growth and activity in young Gila monsters (*Heloderma suspectum*). Current Research on Herpetofauna of the Sonoran Desert IV. Tucson, AZ.

## Posters (continued)

- M. Amarello, D. Lazcano, and K.E. Bonine. 2006. Conducta defensiva de la cascabel hocico de puerco (*Crotalus polystictus*). Ninth Reunión Nacional de Herpetología México. Monterrey, Nuevo León, México.
- M. Amarello and M. Goode. 2004. Variation in spatial ecology within a population of tiger rattlesnakes (*Crotalus tigris*) living on and away from a golf course. Snake Ecology Group. Carbondale, IL.
- M. Amarello and M. Goode. 2004. Banded rock rattlesnake (*Crotalus lepidus*) foraging ecology. Undergraduate Research Forum, The Honors College, University of Arizona. Tucson, AZ.

## Public Presentations

- 2016-2017. Living with snakes. Presented 5 times to Appleton-Whittell Research Ranch, Pima Animal Care Center, Vistoso Sun City Hiking Club, and Southwest Wings Festival.
- 2014-2017. Rattlesnake family life. Presented 5 times to REI Outdoor School, The Sierra Club, Tucson Bird Wildlife Festival, Southern Arizona Hiking Club, and Southwest Wings Festival.
- 2014-2015. Rattlesnake social life. Presented 7 times to Sky Island High School, The Sierra Club, Southern Arizona Hiking Club, Southwest Wings Festival, and others.
- 2010-2017. The secret lives of Arizona snakes (*for kids*). Presented 13 times to Campo Urbano, Thornydale Elementary School, Pima Public Library's Summer Program, Western National Parks Association, Camp Audubon, and others.
- M. Amarello and J.J. Smith. 2016. How (and why) we're changing how people view and treat snakes. Tucson Herpetological Society. Tucson, AZ.
- M. Amarello and J.J. Smith. 2014. Social networking by and for rattlesnakes. Tucson Herpetological Society. Tucson, AZ.
- M. Amarello. 2014. Real world rattlesnakes. Wings Over Willcox. Willcox, AZ.
- M. Amarello. 2013. Parental care, helping, and other things snakes aren't supposed to do. Wings Over Willcox. Willcox, AZ.
- M. Amarello and J.J. Smith. 2012. Social Snakes? Remote photography reveals parental care, social bonding, and other things snakes aren't supposed to do. Presented 4 times to Appleton-Whittell Research Ranch Potlucks and Presentations Educational Series, The Sierra Club, and The Tucson Herpetological Society.
- M. Amarello. 2012. Rattlesnake Parental Care. Muleshoe Ranch. Willcox, AZ.
- M. Amarello. 2011-2012. Rattlesnake research at Muleshoe Ranch. Presented 4 times to The Sierra Club, Wings Over Willcox, Cedar Crest College, and Verde Valley School.
- M. Amarello. 2011. The secret lives of Arizona snakes. Presented to The Sierra Club and National Geographic Society / National Park Service Saguaro BioBlitz Biodiversity Festival.
- M. Amarello. 2009. Rattlesnake: The colorful natural history of Arizona's most famous natives. Appleton-Whittell Research Ranch Potlucks and Presentations Educational Series. Elgin, AZ.
- M. Amarello and J.J. Smith. 2008. Reptile research at Cloverdale Coastal Ranch. Peninsula Open Space Trust Lunch Lecture Series. Palo Alto, CA.
- M. Amarello. 2007. Reptile research on the San Mateo Coast. Pescadero Conservation Alliance Saturday Afternoon Lecture Series. Pescadero, CA.
- M. Amarello. 2005. Living with reptiles. Stone Canyon Golf Club. Oro Valley, AZ.
- M. Amarello. 2005. Banded rock rattlesnakes. Arizona Senior Academy. Tucson, AZ.
- M. Amarello. 2005. Banded rock rattlesnakes: the exception to the rule. Tucson Herpetological Society. Tucson, AZ.

## Awards & Grants

### Outreach & Advocacy

Jarchow Conservation Award, 2017  
LUSH Fresh Handmade Cosmetics Charity Pot Initiative, 2016, \$8,790

### Research

National Science Foundation Graduate Research Fellowship, 2007-2012, \$120,000  
Herpetologists' League Graduate Research Award, 2012, \$500  
Tucson Herpetological Society CH Lowe Research Grant, 2012, \$1000  
Chicago Herpetological Society, 2011, \$1000  
ASU Graduate and Professional Student Association JumpStart Research Grant, 2009, \$499  
Sigma Xi Grants-in-Aid of Research, 2008, \$500  
T & E, Inc. Grant for Conservation Biology Research, 2004, \$1927  
Tucson Herpetological Society CH Lowe Research Grant, 2004, \$494  
UA Honors Alumni Legacy Grant, 2004, \$1202  
T & E, Inc. Grant for Conservation Biology Research, 2003, \$2500  
UA Honors College Undergraduate Research Grant, 2003, \$1000

### Travel

Graduate and Professional Student Association Conference Travel Grant (ASU), 2012  
School of Life Sciences Graduate Programs Travel Grant (ASU), 2011  
Graduate and Professional Student Association Conference Travel Grant (ASU), 2011  
Honors Alumni Legacy Grant for Travel (UA), 2004  
Women in Science and Engineering Travel Grant (UA), 2004

## Teaching Experience

**Teaching Associate**, School of Life Sciences, Arizona State University, 2009-2011

BIO 182: General Biology II Honors Laboratory (3 sections)  
BIO 182: General Biology II Laboratory (2 section)  
BIO 187: General Biology II Laboratory (3 sections)  
MIC 206: Microbiology Laboratory (2 sections)

**Undergraduate Teaching Assistant**, University of Arizona, Spring 2004

EEB 483: Herpetology with Laboratory (1 section)

## Media Coverage of Work

- A. Murphy. 2017. [For the Love of Rattlesnakes, Scrub All GPS Data from Your Nature Photos](#). Motherboard. October 23.
- D. Cole. 2017. [Proposed bill allows shooting snakes, rats in city limits](#). The Sierra Vista Herald. February 8.
- E. Thompson. 2016. [Rattlesnake ally joins charge for Quabbin Reservoir habitat](#). Telegram & Gazette. June 14.
- M. Serreze. 2016. [Scientists ask Beacon Hill to reject Sen. Lesser's 'Rattlesnake Island' moratorium](#). MassLive Media. June 14.
- B. Keim. 2016. [Even snakes have friends—one more reason not to slaughter them](#). National Geographic. March 10.
- K. Brulliard. 2016. [How to kill thousands of rattlesnakes in just four days](#). The Washington Post. March 12.
- S. Hinckley. 2016. [Texas rattlesnake roundup: Why some people kill snakes for sport](#). The Christian Science Monitor. March 13.
- Arizona Illustrated Nature. 2015. [Living with Rattlesnakes](#). Wild Ideas...The Podcast. 2014. Melissa Amarello on Advocates for Snake Preservation and Arizona black rattlesnake social behavior.
- Arizona Illustrated Nature. 2014. [Group spreads appreciation, support for snakes](#). Center for Snake Conservation. 2013. [Women and Snakes – February 4, 2013](#). Snake Talk [blog].
- J. Riutta. 2012. Timelapse Rattlesnake. Wingscapes [blog]: 6 December.
- Wingscapes Team. 2012. [Surveilling the society of snakes with time lapse cameras](#). Wingscapes Tips & Articles. 14 May.
- J. Taylor. 2012. [Melissa Amarello: rattlesnake social behavior](#). The Reptile Living Room's Interview with an Expert Series. 29 February.
- B. Rulon-Miller. 2011. [Social interactions between mothers and young: do rattlesnakes exhibit care for their offspring?](#) Rattlesnake Education and Awareness [blog]. 14 December.
- B. Hirshon. 2011. [Welcome to the BioBlitz!](#) National Geographic Daily News. 21 October.
- S. Milius. 2011. [Good mother rattlesnake](#). Science News: Meeting Notes. 27 August.
- T. Beal. 2011. [No need to be rattled: like you, this fella's not looking for a fight](#). Arizona Daily Star. 23 July.
- D. Yetman. 2010. Desert Venom. The Desert Speaks, Season 19, Episode 1905. Arizona Public Media, Tucson, AZ

## Service

### Institutional

**Mentored Undergraduate Students:** Emilie Cayron (independent project: kin aggregation in Arizona black rattlesnakes), Troy Collon, Neda Javidan, Anthony Lozano, and Gregg Peifer

**Grant Reviewer:** ASU Graduate and Professional Student Association, 2010  
Reviewed multiple grant proposals for a university-wide grant competition

**Behavior Reading Group Coordinator:** 2009-2010



## Professional

### **Southwest Partners in Amphibian and Reptile Conservation**

Steering Committee Co-Chair

### **Gartersnake Conservation Working Group**

Member

### **Manuscript Reviewer:**

Journal of Herpetology

Herpetological Review

PLOS ONE

Journal of Experimental Zoology Part A: Ecological Genetics and Physiology

Acta Herpetologica

## Community

**Volunteer Cat Herder**, Tucson CARES, 2016-2017, Tucson, AZ

**Volunteer Naturalist**, The Nature Conservancy Muleshoe Ranch, 2011–2013, Willcox, AZ

**Exhibitor**, Wings Over Willcox, 11-13 January 2012, Willcox, AZ

**Exhibitor**, National Geographic Society / National Park Service Saguaro BioBlitz Biodiversity Festival, 21-22 October 2011, Tucson, AZ

**Exhibitor**, Desert Mountain School Science Fair, February 2011, Phoenix, AZ

**Exhibitor**, Enchanted Trail at the Nina Pulliam Rio Salado Audubon Center, October 2010, Phoenix, AZ

**Participant in Ask-A-Biologist**, ASU School of Life Sciences, Fall 2009–present, Phoenix, AZ

## Professional Development

Nonprofit Technology Conference, 2016

Nonprofit Technology Conference, 2015

Preparing Future Faculty Exploratory Phase, ASU Graduate College, 2011-2012

Arizona State University Mentor Training Workshop, 15 April 2011

## Professional Memberships

Compassionate Conservation

Partners in Amphibian and Reptile Conservation

Tucson Herpetological Society

Society for the Study of Amphibians and Reptiles

Animal Behavior Society

Herpetologists' League

Chicago Herpetological Society