

**BETHANN GARRAMON MERKLE**  
**Curriculum Vitae**

Associate Academic Professional Research Scientist  
Wyoming Migration Initiative  
Zoology & Physiology Department  
University of Wyoming  
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Professional websites:  
[EcologicallyTrueStory.org](http://EcologicallyTrueStory.org)

**ACADEMIC RECORD**

**Master of Fine Arts (MFA), Creative Writing (nonfiction)**

2015-2017 University of Wyoming; Laramie, WY

4.0 GPA

*Note that an MFA is a recognized, terminal degree.*

**Bachelor of Arts (B.A.), Environmental Studies**

2004-2007 University of Montana, Missoula, MT

3.93 GPA, University Scholar, Davidson Honors College

- Emphasis in sustainable food and agriculture
- Wilderness Studies minor through the Wilderness Institute's Wilderness and Civilization Program
- Studio Fine Arts minor, photography emphasis

**PROFESSIONAL APPOINTMENTS**

2018-present Associate academic professional research scientist (focus on science communication teaching and graduate student/faculty support and educational outreach; Director, Wyoming Science Communication Initiative, [www.uwyo.edu/wysci](http://www.uwyo.edu/wysci))

2017-2018 Associate academic professional research scientist (focus on illustration, writing, social media, science communication teaching and graduate student/faculty support, and educational outreach), Wyoming Migration Initiative, University of Wyoming

**SELECTED PUBLICATIONS & EXHIBITIONS**

I have co-edited a textbook and authored over 300 articles and essays published in digital and print publications including *American Scientist*, *BC Nature*, *Ecology and Society*, *Ecotone* (Ecological Society of America), *EdibleMissoula*, *Fair Chase*, *Journal of Agriculture, Food Systems, and Community Development*, *Laramie Boomerang*, *Quebec Chronicle-Telegraph*, and *Western Confluence*. My publications emphasize wildlife ecology, science and sustainability, art-science integration, and education/outreach on these topics. I have

extensive experience in writing for print and digital outlets, in journalism, for government reports, and as outreach. This outreach was conducted through educational programs, writing and publishing, fundraising, community development, and via media outlets including newspapers, television, radio, websites/blogs, and social media. I have also provided editorial support (consulting editor or hired for English language or other editing purposes) for articles published in scientific peer-reviewed journals focused on ecology, wildlife management, natural history, public health, and food systems, along with editing for popular publications including magazines and newspapers

### Books

1. Illustrations in *Wild Migrations: Atlas of Wyoming's Ungulates*. Kauffman, Matthew J., James E. Meacham, Hall Sawyer, Alethea Y. Steingisser, William J. Rudd and Emilene Ostlind. 2018. Oregon State University Press.
2. Krausman, Paul. Illustrated by **B.G. Merkle**. 2017. *And Then There Were None: The Demise of Desert Bighorn Sheep in the Pusch Ridge Wilderness*. New Mexico State University Press: Albuquerque, NM.
3. Kinney, K., **B.G. Merkle**, and S.C. Vélez, eds. 2016. *Writing @ 7200 Feet: First-Year College Composition and Rhetoric—Or a Beginner's Guide to Composing Academic, Civic, and Multimodal Genres*. Hayden McNeil: Plymouth, MI.

### Exhibitions & Public Artworks

4. **Merkle, B.G.** 4/2018-6/2018. *What's Your Message*. 4<sup>th</sup> Street Studios and Opal Studios, Laramie, WY. I had two natural history illustrations in this multi-artist show.
5. **Merkle, B.G.** 3/2018-4/2018. *Art in the Museum: Inspired by Life*. Biodiversity Institute, University of Wyoming, Laramie, WY. I had a felted wool sculpture in this multi-artist show featuring art by UWyo Museum of Vertebrates-affiliated students and researchers.
6. **Merkle, B.G.** 2/2018-3/2018. *Laramie Audubon Society: Inaugural Art Show*. Biodiversity Institute, University of Wyoming, Laramie, WY. I had a cast iron sculpture in this multi-artist show.
7. **Merkle, B.G.** 2017. "School of the High Plains." Laramie, WY. I was one of 13 artists commissioned by the Laramie Mural Project to design and paint a component of the expansion of the downtown Laramie "Gill Street" mural, which features fish designed to evoke Wyoming icons.
8. **Merkle, B.G.** 11/2017-1/2018. *An Ecologically True Story: Rethinking the Tale of the Tortoise and the Hare*. Solo multimedia exhibition featuring graphite drawings, watercolors, monotype prints, new media sculptures, installations, and creative writing interpretive text and audios. Biodiversity Institute, University of Wyoming, Laramie, WY.
9. **Merkle, B.G.** 2007. *Visceral Biogeography*. Solo photography exhibit of photographs printed on linen, using traditional, wet darkroom techniques. Liquid Planet, Missoula, MT.
10. **Merkle, B.G.** and other students. 2005. Photography of Glacier National Park: Photography Class Exhibition. The Dark Room, Missoula, MT. *I co-organized this exhibition, along with another University of Montana photography student.*

### Peer-Reviewed Publications

11. Christensen, K., **B.G. Merkle**, and B. Marsicek. 2018. Integrating Art, Science, and Community Engagement: The University of Wyoming Art Museum's Two-Year Ballengée Project. Invited case study in *Informal Learning Review*.
12. Ellison, A., C. LeRoy, K. Landesbergen, E. Bosanquet, D. B. Borden, P. CaraDonna, K. Cheney, R. Crystal-Ornelas, A. DeFreece, L. Goralnik, E. Irons, **B.G. Merkle**, K. O'Connell, C. Penick, L. Rustad, M. Schulze, N. Waser, and L. 2018. "Art/Science Collaborations: new Explorations of Ecological Systems, Values, and their Feedbacks." In press in the *Bulletin of the Ecological Society of America*.
13. Polfus, J.L., D. Simmons, M. Neyelle, W. Bayha, F. Andrew, L. Andrew, **B.G. Merkle**, K. Rice, and M. Manseau. 2017. Creative Convergence: Exploring Bicultural Diversity through Art. *Ecology and Society* 22(2):4.

## Peer-Reviewed Publications Submitted or in Prep (mss available upon request)

- Januchowski-Hartley, S., N. Sopinka, **B.G. Merkle**, C. Lux, A. Zivian, P. Goff, and S. Oester. Science-poetry: fostering creative practice to enhance engagement and learning. In review (*BioScience*).
- **Merkle, B.G.**, J.A. Merkle and D. Fortin. “Something to talk about: bison vocal communication does not reveal public information about forage quality.” In prep for *Journal of Wildlife Management*.

## Invited Publications

14. **Merkle, B.G.** 2018 *in press*. Perspective: Drawn to Science. Outlook: Science and Technology Education. *Nature* S8, vol 562.
15. **Merkle, B.G.** 2018 *in press*. Transforming science writing instruction by tapping into writing instruction scholarship and best practices. *Dynamic Ecology*. [www.dynamicecology.wordpress.com](http://www.dynamicecology.wordpress.com).
16. Byerley, P., **B.G. Merkle**, and M. Hepner. 2018 *in press*. Marshwalk: Depicting Loss, Hope, and Ecosystem Change on Louisiana’s Coast. *American Scientist*.
17. **Merkle, B.G.** 2018+. “Writing Science” advice column in *The Bulletin of the Ecological Society of America*. Recruited to write this column in April 2018 by editor Edward A. Johnson.
18. **Merkle, B.G.** 2018. Tips for communicating your science with the press: Approaching journalists. *Bulletin of the Ecological Society of America*. [doi.org/10.1002/bes2.1430](https://doi.org/10.1002/bes2.1430).
19. **Merkle, B.G.** 2015. Why scientists (even nonartists) should draw. *Crastina*. ([view article](#))
20. **Merkle, B.G.** 2013. Invited Book Review: Whole Measures only partially measures up. *Journal of Agriculture, Food Systems, and Community Development*. ([view review](#))
21. **Merkle, B.G.** and A. Hettinger. 2018 *in prep*. Careers in Science Communication and Engagement. *Frontiers in Ecology and Evolution*.
22. **Merkle, B.G.** 2018 *in prep*. Invited Book Review: The Chicago Guide to Communicating Science, 2<sup>nd</sup> ed. *Journal of Wildlife Management*.

## Popular Publications (Journalism, Literature, Editorial)

*Selected publications are listed below; a complete curriculum vitae is available upon request.*

23. **Merkle, B.G.** 2018. “Wild Migrations: A new atlas puts Wyoming’s ungulate migrations on the map.” *UWYO Magazine*. 20(1): 68-69.
24. **Merkle, B.G.** 2018. “Marvelous Maiasaura: How a Dinosaur Discovery Changed How We Think About Dinosaur Families.” *Root & Star* magazine. Issue 14.
25. **Merkle, B.G.** 2018. “Invisible Journeys: Wyoming’s Incredible, Migratory Pronghorn.” *Root & Star* magazine. Issue 13.
26. **Merkle, B.G.** 2017. Amphibious Citizen Scientists. *Western Confluence*. ([view article](#); I also created the accompanying illustrations and photos.)
27. **Merkle, B.G.** 2016. Green Fire. *Poems Across the Big Sky, II*. Many Voices Press: Kalispell, MT.
28. **Merkle, B.G.** 2016-present. Illustrated natural history column in *root and star* children’s magazine. ([view magazine website](#))
29. **Merkle, B.G.** 2016. Drawn to Caribou. *American Scientist* 104(1): 16-18. ([view article](#))
30. **Merkle, B.G.** 2015. Drawn to Québec: An eel is an eel is an eel, or is it? *Québec Chronicle-Telegraph*. ([view article](#))
31. **Merkle, B.G.** 2015. Drawn to the West: Rare fireflies light up Montana. *Laramie Boomerang*. ([view article](#))
32. **Merkle, B.G.** 2015. Drawn to the West: What's wrong with that sagebrush? *Laramie Boomerang*. ([view article](#))
33. **Merkle, B.G.** 2015. Clean and Unclean: Eating Meat. *The Learned Pig*. ([view article](#))
34. **Merkle, B.G.** 2014. Drawn to Québec: The buzz about bees. *Québec Chronicle-Telegraph*. ([view article](#))
35. **Merkle, B.G.**, editor. 2014. Celebrating 25 Years of Chronicling Our Community: The Quebec Chronicle-Telegraph, North America’s Oldest Newspaper (since 1764). *Quebec Chronicle-Telegraph*. 250<sup>th</sup> anniversary special edition magazine I edited and co-produced for the *Québec Chronicle-Telegraph*’s 250<sup>th</sup> anniversary. ([view magazine](#))

36. **Merkle, B.G.** 2014. Pickled winter: Is the environment eating too much salt? *Québec Chronicle-Telegraph*. ([view article](#))
37. **Merkle, B.G.** 2014. Local scientists “say cheese.” *Québec Chronicle-Telegraph*. ([view article](#))
38. **Merkle, B.G.** and J.A. Merkle. 2013. A park where the buffalo roam. *BC Nature*.
39. **Merkle, B.G.** 2013. Tradition and sustainability in a Bordeaux bottle & Bordeaux-Québec Connection gets personal. *Québec Chronicle-Telegraph*. ([view article](#))
40. **Merkle, B.G.** 2013. Nocturnal wonders: moths outshine butterflies at night. *Québec Chronicle-Telegraph*. ([view article](#))
41. **Merkle, B.G.** and J. A. Merkle. 2013. A glimpse of field work in the “Land of the Living Skies.” Centre d’étude de la forêt/the Centre for Forest Research.
42. **Merkle, B.G.** 2013. Conserving Québec’s caribou, Part III: A taste of heritage. *Québec Chronicle-Telegraph*. ([view article](#))
43. **Merkle, B.G.** 2013. Conserving Québec’s caribou, Part II: Woodland caribou not “out of the woods.” *Québec Chronicle-Telegraph*. ([view article](#))
44. **Merkle, B.G.** 2013. Up close and personal with a caribou researcher, part I. *Québec Chronicle-Telegraph*. ([view article](#))
45. **Merkle, B.G.** 2013. Orcas iced in: a hot topic in the frozen North. *Québec Chronicle-Telegraph*. ([view article](#))
46. **Merkle, B.G.** and J. A. Merkle. 2012. Conservation photography as more than just a hobby, part II. *Early Career Ecologists*. ([view article](#))
47. **Merkle, B.G.** and J. A. Merkle. 2012. Conservation photography as more than just a hobby, part I. *Early Career Ecologists*. ([view article](#))
48. Merkle, J. A., P. R. Krausman, and **B. G. Merkle**. 2012. How ‘bout them apples: Insights on reducing human-bear conflicts. *Fair Chase*. ([view article](#))
49. **Merkle, B.G.** 2012. Local students address the “Kestrel Conundrum.” *Québec Chronicle-Telegraph*. ([view article](#))
50. **Garramon, B.** 2008-2010. Missoula Urban Demonstration Project. Editor, graphic designer and co-author of quarterly journal, *Backyard Culture*; co-author of historical essays and timelines chronicling organization’s history.
51. **Garramon, B.** 2003-2004. Columnist, *The Technocrat*, Montana Tech of the University of Montana, Butte, Montana.

## Videos

52. Nickerson, G., T. Zaffarano, M. Kauffman, and **B.G. Merkle**. 2017. “Travis Zaffarano, a research profile: A Cody native studies elk using camera traps.” ([view video](#)) *Co-producer*
53. Nickerson, G., **B.G. Merkle**, M. Kauffman. 2017. “Digging Migration: Wildlife Archaeology Stories.” *Co-producer and co-videographer*. ([view video](#))
54. Nickerson, G., **B.G. Merkle**, M. Kauffman. 2017. “Digging Migration: Bison Archaeology in Wyoming.” *Co-producer and co-videographer*. ([view video](#))
55. Nickerson, G., **B.G. Merkle**, M. Kauffman. 2017. “Digging Migration: Hunting Mammoth in Wyoming 13,000 Years Ago.” *Co-producer and co-videographer*. ([view video](#))
56. Nickerson, G., **B.G. Merkle**, M. Kauffman. 2017. “Digging Migration: Wyoming’s Ancient Pronghorn Corridor.” *Co-producer*. ([view video](#))
57. Nickerson, G., M. Kauffman, and **B.G. Merkle**. 2017. “Wildlife Crossings in Wyoming Really Work for Pronghorn, Deer, and People.” *Co-producer*. ([view video](#))
58. Nickerson, G., B. Robb, and **B.G. Merkle**. 2017. “For Wyoming’s Mule Deer, Eclipse was a Great Opportunity...to Nap?” *Co-producer*. ([view video](#))
59. Nickerson, G., and **B.G. Merkle**. 2017. “Size Matters – For Understanding Migratory Mule Deer Group Dynamics.” *Co-producer*. ([view video](#))
60. Nickerson, G., M. Kauffman, **B.G. Merkle**, and H. Sawyer. 2017. “Pronghorn Don’t Cross I-80, Do They?” *Co-producer*. ([view video](#))

61. Nickerson, G., M. Kauffman, **B.G. Merkle**, and J. Merkle. 2017. “Not All Mule Deer Migrate the Same Distance. That’s a Good Thing.” *Co-producer*. ([view video](#))
62. Nickerson, G., J. Merkle, S. Dwinell, **B.G. Merkle**, and M. Kauffman. 2017. “Surfing the Green Wave: A Roadside Explanation of Mule Deer Migration.” *Co-producer*. ([view video](#))
63. Participant, along with Professor David Romtvedt, in “The Tension and Inspiration of Place: MFA Conversations.” 2017. Co-produced by University of Wyoming videographer Ali Grossman and Jeffery Lockwood, UW MFA program. Laramie, Wyoming. ([view video](#))
64. Participant in “Drawn to Science: Exploring the Historical and Contemporary Synergies between Drawing, Creativity and Science.” Video of my invited lecture for the University of Wyoming Zoology/Physiology Dept., Laramie, Wyoming. ([view video](#))
65. **Merkle, B.G.**, producer. 2014. 250<sup>th</sup> anniversary commemorative video for the *Québec Chronicle-Telegraph*, North America's oldest newspaper. Quebec City, Quebec, Canada. ([view video](#))
66. **Merkle, B.G.**, producer. 2014. Interview of Bethann Garramon Merkle, 250<sup>th</sup> anniversary coordinator; one in a series of interviews filmed for the 250<sup>th</sup> anniversary commemorative video for the *Québec Chronicle-Telegraph*, North America's oldest newspaper. Quebec City, Quebec, Canada. ([view interview](#), excerpted for the film mentioned above)

## Websites

I have served as a consultant, webmaster, designer, and editor, as well as a content writer, blog author, and/or photographer, for a wide range of entities, including: sustainability organizations, literacy organizations, wildlife researchers, small businesses, and professional organizations. In these capacities, I have developed websites, conducted website redesigns and enhancement to increase user-accessibility, and have done on-going website management.

2015-present [EcologicallyTrueStory.org](http://EcologicallyTrueStory.org)

2014-present Communication and Engagement Section, Ecological Society of America, [www.esa.org/communication-engagement](http://www.esa.org/communication-engagement), formerly [advancingecocomm.wordpress.com](http://advancingecocomm.wordpress.com)

2012-2014 Green Ministries of the Anglican Diocese of Quebec, [espritvertqc.com](http://espritvertqc.com) (no longer operational)

2012 Yamaska Literacy Council, [yamaskaliteracy.ca](http://yamaskaliteracy.ca)

2011-present CommNatural communications consulting, [commnatural.com](http://commnatural.com)

2011-2014 Quebec Chronicle-Telegraph, [qctonline.com](http://qctonline.com)

2011-2014 Literacy Quebec, [literacyquebec.org](http://literacyquebec.org)

2011 Verger Trottier, [vergertrottierorchard.blogspot.com](http://vergertrottierorchard.blogspot.com)

2010-2013 Lifelong Learning Quebec, [lifelonglearningquebec.org](http://lifelonglearningquebec.org)

2010-2013 Quebec City Reading Council, [qcrc.org](http://qcrc.org)

2010 [Jamerkleresearch.wordpress.com](http://Jamerkleresearch.wordpress.com)

2009-2010 Missoula Urban Demonstration Project, [mudproject.org](http://mudproject.org)

2008-2009 Grow Choteau, [sites.google.com/site/GrowChoteau](http://sites.google.com/site/GrowChoteau)

2007-2009 Boone and Crockett Club, webpages specific to their educational programs, [boone-crockett.org](http://boone-crockett.org)

## EDITORIAL CONTRIBUTIONS

2018-present Section editor, Communicating Science, *The Bulletin of the Ecological Society of America*. Recruited to launch this section and write a quarterly “Writing Science” column for it.

2018-present Contributing editor, *The Journal of the Guild of Natural Science Illustrators*

2014-present Editor-in-chief, webmaster, Communication and Engagement Section of the Ecological Society of America. [www.esa.org/communication-engagement](http://www.esa.org/communication-engagement)

2009-present Contributing editor and editorial committee member, *Journal of Food Systems, Agriculture, and Community Development*

## Manuscript editing

I have provided editorial support for manuscripts which have been published or are in press in nearly 20 peer-reviewed journals and popular publications, including:

1. *African Journal of Ecology*

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2. *Animal Conservation*
3. *Ecology Letters*
4. *Fair Chase*
5. *Human-Wildlife Interactions*
6. *International Journal of Applied Earth Observation and Geoinformation*
7. *Journal of Agriculture, Food Systems and Community Development*
8. *Journal of Foodborne Pathogens and Disease*
9. *Journal of Food Protection*
10. *Journal of Mammalogy*
11. *Journal of Peasant Studies*
12. *Journal of Wildlife Management*
13. *PLOS Biology*
14. *PLOS Blogs*
15. *Quebec Chronicle-Telegraph*
16. *The Wildlife Society Bulletin*
17. *Ursus*

### **Government report editing**

I have also provided editorial support for the Sahtú Renewable Resources Board (SRRB), a First Nations collaborative conservation organization tasked with managing hunting and wildlife resources for/by the Dene First Nation (Northwest Territories, Canada). For the SRRB, I edited government reports and multilingual conservation outreach books and materials.

### **Conference presentation editing**

I have provided editorial support for presentations made at conferences across North America, including: City Club Missoula, Ecological Society of America Annual Meetings (2013-present), an Emerging Issues across Rural-Urban Interfaces conference, several meetings of the Montana and Wyoming chapters of The Wildlife Society, several annual conferences of The Wildlife Society, and an Urban Wildlife Ecology and Management Conference.

### **RESEARCH & CREATIVE SCHOLARSHIP**

1. Barber, B., **B.G. Merkle**, K. Landreville, and J. Crait. In progress. "Student Attitudes, Capabilities, and Motivations Before and after a Science Communication Course." IRB exempt, #20170824BB01656.
2. Landreville, K., **B.G. Merkle**, B. Barber, and K. Vaughan. 2017-present, in progress. UW Public Engagement and Communication Survey. A survey to quantify University of Wyoming campus-wide attitudes, capabilities, and motivations for public engagement and communication about research and creative scholarship activities. IRB exempt, # 20180104KL01819.
3. **Merkle, B.G.** "Establishing a baseline: Documenting how Ecological Concepts are Represented in Children's Books." In progress. Visual critique/content analysis of Caldecott Medal-winning books and turn-of-the-century western children's books (held in the University of Wyoming's Toppan Rare Books Collection). A research presentation on this topic was presented at the 2017 annual meeting of the Ecological Society of America. Anticipated products: an academic article for submission in a journal such as *Biology Teacher*, along with workshops which will facilitate discussions between librarians, teachers, children's book creators, and biologists. [View project webpage](#) at [ecologicallytruestory.org](http://ecologicallytruestory.org).
4. **Merkle, B.G.** *An Ecologically True Story: Reinterpreting the Fable of the Tortoise and the Hare*. In progress; research on-going in Arizona, East Africa, and Europe. Existing and anticipated products: a multimedia project and exhibition a) investigating the conservation and social/cultural issues in ecosystems where tortoises and hares co-exist, and b) illustrating the value of utilizing a multidisciplinary method for researching and telling this story. [View project webpage](#) at [ecologicallytruestory.org](http://ecologicallytruestory.org).
5. **Merkle, B.G.** *Hunting for a Sense of Place: Exploring Ecology, Myth, and Ritual on Montana's Rocky Mountain Front*. In progress. This heavily researched, book-length collection of personal essays focuses

on the role of storytelling in one's a) development of ecological knowledge, b) engagement in a local landscape and socio-cultural history, and c) hunting and gardening as central ways of engaging in an ecosystem and historical issues. Current and anticipated products: master's thesis submitted in partial completion of requirements for an MFA in Creative Writing (University of Wyoming, 5/2017); anticipated publication of essays published in outlets such as *Orion* and *Ecotone*; anticipated book publication.

6. **Merkle, B.G.** *Pica Tidings*. In progress. The black-billed magpie (*Pica pica*) and magpies around the world have long been creatures of lore, omen, portent. This project entails researching historical, cultural, and scientific perspectives on magpies. Anticipated products: Long-form essay submitted to *Orion Magazine*.

## AWARDS, HONORS & SCHOLARSHIPS

- 2018 Invited/founding section editor, "Communicating Science," *The Bulletin of the Ecological Society of America*.
- 2018 Invited/founding columnist, "Writing Science," *The Bulletin of the Ecological Society of America*.
- 2018 Invited Lead, Training Section, "Strategy Development: Increasing the Impact of Public Engagement Within and Beyond ESA," Ecological Society of America (4-person committee funded by ESA; I am leading a team of ~10 people to develop a white paper about training for science communication and engagement within ESA.)
- 2018 Participant, OCEANDOTCOMM professional science communicators training residency, Louisiana Universities Marine Consortium. Participation by application only (42 accepted out of 75 applicants).
- 2016 University of Wyoming, Alumni Association Graduate Student Award (\$1,000)
- 2016 Creative writing residency at AMK Ranch, University of Wyoming/National Park Service Research Center
- 2016 Promoting Intellectual Engagement in the First-Year teaching award; blind nomination by students; 170+ nominees, 26 awardees; University of Wyoming
- 2016 Selected for inclusion in *Poems Across the Big Sky (2)*, a 2016 anthology, ed. Lowell Jager, Many Voices Press; >1,200 submissions, ~250 poems selected.
- 2016 University of Wyoming Art Museum's Art-Science Symposium/Initiative planning committee; only student on committee comprised of faculty/staff from numerous UW departments (2015-2016)
- 2015 Best Environmental Reporting (3<sup>rd</sup> place) for article "An eel is an eel is an eel, or is it?" Québec Community Newspaper Association (QCNA)
- 2015 University of Wyoming Art Museum's Art-Science Symposium/Initiative planning committee; only student on committee comprised of faculty/staff from numerous UW departments (2015-2017)
- 2015 University of Wyoming MFA in Creative Writing Program (2015-2017); one of ten admitted out of >300 applicants
- 2014 Best Special Section, 1<sup>st</sup> place, Québec Community Newspapers Association (QCNA) award for 250th anniversary special edition magazine I edited/coordinated for the Québec Chronicle-Telegraph, North America's oldest newspaper
- 2014 Best Community Newspaper Promotion, 1<sup>st</sup> place, QCNA award for year-long 250th anniversary campaign I coordinated for the Québec Chronicle-Telegraph
- 2014 National journalism award, Newspapers Canada/Canadian Tire Jumpstart Foundation
- 2014 Feature photograph on back cover, Montana Outdoors annual photography issue
- 2013 Best Business Column or Feature, 1<sup>st</sup> place, QCNA
- 2013 Best Investigative or In-depth Reporting, 2<sup>nd</sup> place, QCNA
- 2013 Best Newspaper Promotion, 2<sup>nd</sup> place, QCNA
- 2013 Best Special Section, 3<sup>rd</sup> place, QCNA

- 2013 Commissioned photography project in Prince Albert National Park, Parks Canada (\$1,000.00 CAD contract; 56 final images)
- 2012 Best Newspaper Promotion, 2<sup>nd</sup> place, QCNA
- 2012 Best Sports Story, 2<sup>nd</sup> place, QCNA
- 2012 Outstanding Photojournalism award, QCNA
- 2012 Best Sports Photograph, 2<sup>nd</sup> place, QCNA
- 2012 Best News Photo, 3<sup>rd</sup> place, QCNA
- 2007 Heisey Foundation Scholarship (\$2,500)
- 2007 Montana Baker Grant (\$500)
- 2006 'Best of the Best' writing assessment award, University of Montana
- 2006 Elizabeth Jestrab-Chaffee Scholarship (\$1675)
- 2006 Montana Baker Grant (\$1,000)
- 2006 Montana Motor Carriers Association Leonard Eckel Memorial Educational Trust Scholarship (\$720)
- 2006 University of Montana anonymous donor scholarship (\$375)
- 2005 Montana Motor Carriers Association Leonard Eckel Memorial Educational Trust Scholarship (\$715)
- 2003 Member, NASA Space Consortium student project; Selected by Dean of Engineering to be a member of a student design team which constructed and carried out experiments whose purpose was to collect data about the feasibility of full-scale near-space experiments. Montana Tech of the University of Montana
- 2003 1st Place, Front Range Art Association's Choteau High School Art Award
- 2003 Anne Wiprud Memorial Scholarship (\$400)
- 2003 Choteau Kiwanis Scholarship (\$500)
- 2003 Elizabeth Jestrab-Chaffee Scholarship (\$1,675)
- 2003 Montana Baker Grant (1,000)
- 2003 Montana Motor Carriers Association Leonard Eckel Memorial Educational Trust Scholarship (\$1,050)
- 2003 Montana Tech of the University of Montana scholarships (\$3948)
- 2003 3 Rivers Communication Scholarship (\$500)

## TEACHING & MENTORING

### Courses Taught

- Autumn 2018 **Lead Instructor, course designer**, ZOO 5890-4: Visualizing Science, Zoology & Physiology Department, University of Wyoming.
  
- Autumn 2017 **Lead Instructor, primary course designer**, ZOO 5890-4: The Art of Science Communication, Zoology & Physiology Department, University of Wyoming. Contributing instructor, Dr. Brian Barber, Biodiversity Institute. [Click here](#) to view University of Wyoming press release about our students' collaboration with the Laramie Mural Project and the Laramie Public Art Coalition.
  
- Spring 2017 **Lead Instructor, course designer**, ERS 2500: Writing Across Topics in Energy; School of Energy Resources, University of Wyoming. Co-taught with Kevin Kelley. [Click here](#) to view University of Wyoming press release about our students' collaboration with the University of Wyoming Art Museum.
  
- Autumn 2016 **Lead developer**, new curriculum for ERS 2500: Writing Across Topics in Energy; School of Energy Resources, University of Wyoming. Co-developed with Kevin Kelley.



- Spring 2016 **Lead Instructor**, ERS 2500: Writing Across Topics in Energy; School of Energy Resources, University of Wyoming. Co-taught with Ryan Oberhelman.
- Summer 2018 **Co-editor, co-developer**, new ENGL 1010 curriculum, University of Wyoming. Co-edited and developed with Kelly Kinney and Samantha Valez.
- Autumn 2015 **Instructor of Record**, ENGL 1010-30: Composition and Rhetoric; English Department, University of Wyoming

### **Mentoring**

- 2018-present **Supervisor**, Kayla Matlock, science communication and policy internship, undergraduate student in Ecosystem Science and Management and Haub School of Environment and Natural Resources, University of Wyoming
- 2016-present **Committee member**, Tyler Loyd, master's thesis, evaluating how field journaling in elementary school can build students' connections with their community, Science and Math Teaching Center, University of Wyoming
- 2018 **Supervisor**, Emily Reed, science communication internship, undergraduate student in the Professional Writing Minor and Haub School of Environment and Natural Resources, University of Wyoming
- 2015-2017 **Career development and entrepreneurial mentorship, thesis mentoring, and grant writing mentoring**, for several students in the Masters' of Fine Arts Creative Writing Program and the Master's in English Program, University of Wyoming
- 2009-2010 **Supervisor**, Anna Semple, master's degree projects, through Missoula Urban Demonstration Project Youth Education Program (YEP!) program development, advertising, volunteer recruitment and training, and program delivery, Global Youth Development Program, University of Montana
- 2009 **Supervisor**, Allison Pak, undergraduate internship, "2009 Carbon Footprint Assessment of Missoula Urban Demonstration Project, Climate Change Studies Program, University of Montana
- 2005-2006 **Supervisor**, Sage Stowell, undergraduate project, development of an introductory packet for required field journaling component of place-based, multidisciplinary minor degree program, Wilderness and Civilization Program, Wilderness Institute, University of Montana

### **Notable Informal Teaching**

- 2016-2017 Mentor/co-facilitator, Summer Institute and Learning Actively Mentoring Program, Science Initiative, University of Wyoming
- 2016-2017 Co-instructor, co-facilitator, and co-developer, Summer Teaching Institute, Art Museum, University of Wyoming

- 2015-present Art-science integration workshop facilitator, nature drawing workshop facilitator, Biodiversity Institute, University of Wyoming
- 2015 Instructor, multi-day nature sketching/field journal workshop. Glacier Institute; Glacier National Park, Montana.
- 2015 Instructor, “Sketching for Scientists” professional development workshop for faculty and “Drawn to Nature” student research experience workshop. Harvard University Forest, Harvard University, Petersham, Massachusetts.
- 2008-2009 Conservation Educator, Boone and Crockett Club Conservation Education Program, Boone and Crockett Club, Dupuyer, Montana
- 2008 Instructor/assistant coordinator, Conservation Across Boundaries (2-week teacher training course focused on using field research techniques in science classrooms), Boone and Crockett Club Conservation Education Program, Boone and Crockett Club, Montana
- 2005-2010 Field journal instructor, Wilderness and Civilization Program, Wilderness Institute, University of Montana
- 2005-2007 Curriculum development and outdoor education, place-based/field journal curriculum, Watershed Education Network, Missoula, Montana
- 2005 Certified Interpretive Guide, National Association of Interpreters

## INVITED TALKS, WORKSHOPS, PRESENTATIONS, AND SEMINARS

### Professional Presentations & Posters

1. **Merkle, B.G.**, P. Lunzer., B. Barber, M. Bourque. 2017. “Establishing a Baseline: Documenting How Ecological Concepts are Represented in Children's Books.” Annual meeting of the Ecological Society of America. Fort Lauderdale, FL.
2. **Merkle, B.G.** 2017. “Drawn to Science: Using the Arts to Investigate Social, Conservation and Ecological Relationships.” Poster for Center for Global Studies research colloquium, University of Wyoming, Laramie, WY.

### Plenaries, Symposia, and Invited Lectures

2018

3. **Lead organizer, speaker/panelist**, Inspire/Ignite session: INS 9: Talking about the Hard Stuff: Using the Science of SciComm to Effectively Engage and Communicate about Ecology. Ecological Society of America Annual Meeting; New Orleans, LA. Co-organizers: J. Purrenhage, University of New Hampshire; A. Hettinger, UC Davis, Bodega Marine Laboratory.
4. **Co-author:** Hettinger, A., **B.G. Merkle**, and J. Purrenhage. The ESA Communication and Engagement Section: Working to recognize, empower, and professionalize diverse efforts to strengthen the role of science in society, in INS 5 Expanding Ecology: Your ESA Sections and Chapters Focused on Diversity, Equity, and Inclusion. Ecological Society of America Annual Meeting, New Orleans, LA.
5. **Invited symposium speaker**, “A Wyoming Case Study: How Using Facebook for Transparent SciComm Helped Researchers Avoid Politicizing Migration Research and Conservation.” Society of Wetland Scientists Annual Meeting; Denver, CO.

6. **Invited speaker**, WiMSE Women in STEM panel. Women in Math, Science, and Engineering (WiMSE) Career Panel; Laramie campus of Laramie Community College; Laramie, WY.
7. **Invited speaker**, “Sharing Migration Science”. Annual Cooperators Meeting, Wyoming Cooperative Fish and Wildlife Research Unit; University of Wyoming; Laramie, WY.

2017

8. **Invited Ignite speaker/panelist**, “Drawn to Science: Exploring Historical and Contemporary Synergies Between Drawing, Creativity, and Science” in INS 7: Ecological Art-Science Collaborations. Ecological Society of America Annual Meeting, Portland, OR.
9. **Invited plenary**, “Drawn to Science: How Changes in Communication and Associated Technology Through Time Have Shaped How We Engage with the Public and Each Other.” American Fisheries Society (western division) Annual Meeting; Missoula, MT.
10. **Invited symposium speaker/panelist**, “Drawn to Illustrations: Tips and Techniques for Enhancing Your Approach to Visuals.” American Fisheries Society (western division) Annual Meeting; Missoula, MT.
11. **Invited webinar**, “Drawn to Illustration: Tips for Working with an Illustrator.” Textbook and Academic Authors Association; online.
12. **Invited speaker**, “The Ecologically True Story of the Tortoise and the Hare.” Ignite talk for “Insight: Legends.” Wyoming Humanities Council; Cheyenne, WY.

2016

13. **Symposium co-organizer**, “Re-envisioning the Laboratory: University of Wyoming Sci-Art Symposium.” University of Wyoming; Laramie, WY.
14. **Invited seminar**, “Drawn to Entrepreneurship.” University of Wyoming, Master’s of English Literature program; Laramie, WY.
15. **Invited seminar**, “Drawn to Science: Exploring Historical and Contemporary Synergies between Drawing, Creativity and Science.” University of Wyoming Zoology and Physiology Department; Laramie, WY. ([view video](#))

2015

16. **Co-presenter**, “GNSI Drawing Toolkit Project.” Lockett, E.C., M.B. Hinrichs, and **B.G. Merkle**. Guild of Natural Science Illustrators Annual Conference; Arcadia University, Glenside, PN.

### **Institutes & Workshops: Science Communication & Art-Science Integration**

2018

17. **Lead organizer, lead facilitator**, workshop about “Demystifying the Media: Communicating Your Science with the Press.” Ecological Society of America Annual Meeting; New Orleans, LA. Contributing facilitator, co-organizer: A. McRae-Crerar, University of Pennsylvania. Co-organizers: C. Looby, Kean University; J. Varner, University of Utah; L. Calle, Florida Atlantic University; K. Burke, American Scientist Magazine (Sigma Xi)
18. **Lead organizer, lead facilitator**, workshop about “Demystifying the Media: Communicating Your Science with the Press.” University of Wyoming Science Communication Initiative; University of Wyoming; Laramie, Wyoming. Contributing facilitator: R. Edie, University of Wyoming.
19. **Invited; lead facilitator**. “Drawn to Science through Storytelling” workshop and talk. Harmony School and Centennial School. Harmony School, Laramie, WY.

2017

20. **Invited instructor, co-facilitator**, Summer Teaching Institute, professional development training & program for k12 educators, University of Wyoming Art Museum; Laramie, WY. 2017. Co-facilitators:

K. Christensen (lead), H. Bender, A. Vetter, D. Tuthill, K. Wagner, B. Barber, University of Wyoming.

2016

21. **Invited workshop**, “Drawn to Wildlife-Sketching for Scientists.” Wyoming chapter of The Wildlife Society Annual Meeting; Cody, WY.
22. **Co-organizer, workshop mentor**, “Science Communication Mentoring and Project Review” workshop. Ecological Society of America Annual Meeting; Fort Lauderdale, Florida. Co-organizers: C. Hart (lead), Harvard University; H. L. Menninger, North Carolina State University; M. G. Mehling, Chatham University
23. **Co-development**, “Drawn to Science” professional development training & program for k12 educators. Summer Teaching Institute, University of Wyoming Art Museum; Laramie, WY. Co-developers: K. Christensen (lead), H. Bender, D. Tuthill, University of Wyoming.
24. **Invited workshop**, “Drawn to Science: Using analog technology (art!) to teach and learn science.” University of Wyoming Ellbogen Center for Teaching and Learning; Laramie, WY.

2015

25. **Instructor**, “Drawn to Natural History” workshop. Ecological Society of America Annual Meeting; Baltimore, MD.
26. **Co-organizer, co-instructor**, “Communicating Science Vividly” workshop. Ecological Society of America Annual Meeting; Baltimore, MD. Co-organizers: M. G. Mehling (lead), Chatham University; C. Hart, Harvard University.
27. **Invited workshop**, “Drawn to Science” k12+ teacher training. Wyoming Department of Education, Roadmap to STEM Annual Conference; Sheridan, WY.
28. **Invited workshop**, “Drawn to Life” visual note-taking workshop for elementary school science students. Private workshop organized by parents, Alberta, Canada.
29. **Invited workshop**, “Sketching for Scientists” professional development workshop. Harvard University Forest; Petersham, MA.
30. **Invited workshop**, “Drawn to Nature” student workshop. Harvard University Forest, Petersham, MA.

2014

31. **Co-organizer, co-instructor**, “Beyond the Written Word: Advancing Ecology Communication Through Multimedia” workshop. Ecological Society of America Annual Meeting; Sacramento, CA. Co-organizers, co-facilitators: Chris Creese (lead), UCLA; C. Hart, Harvard University; H. L. Menninger, North Carolina State University.
32. **Invited workshop**, “Drawn to Science & Sustainability.” Chatham University; Pittsburgh; PN.

#### **Natural History, Field Journaling, Photography, etc.**

33. **Invited workshop**, “Drawn to the Outdoors: Observational Drawing Basics” and “Drawn to the Outdoors: Keeping a Field Journal and Drawing Outdoors.” 2017. Wyoming Outdoor Council’s 50<sup>th</sup> anniversary celebration. 2017.
34. **Invited workshop**, “Drawn to Biodiversity.” University of Wyoming Biodiversity Institute. 2016.
35. **Invited workshop**, “Visual journaling.” University of Wyoming Haub School of Environment and Natural Resources, Art & Environment class; Laramie, Wyoming. 2016.
36. **Invited workshop**, “Drawn to Water with Wyoming Girl Scouts.” University of Wyoming Biodiversity Institute; Laramie, Wyoming. 2015.
37. **Invited workshop**, “Drawn to Biodiversity.” University of Wyoming Biodiversity Institute; Laramie, Wyoming. 2015.

38. **Invited workshop**, “Drawn to Biodiversity.” University of Wyoming Biodiversity Institute; Laramie, Wyoming. 2015.
39. **Invited workshop**, “Drawn to Natural History.” Glacier Institute; Glacier National Park, Montana. 2015.
40. **Invited workshop**, “Drawn to Natural History.” Morrin Centre; Quebec City, Quebec, Canada, 2014.
41. **Invited workshop**, “Drawn to Books” workshop for children’s book camp. Morrin Centre; Quebec City, Quebec, Canada. 2014.
42. **Developed workshop**, “Croquez les Mythes” Greek mythology sketching workshop. Musée de la civilization; Québec City, Canada. 2014.
43. **Invited workshop**, “Photos that Click” photography professional development. US Consulate; Québec City, Canada. 2014.

## **MEDIA COVERAGE**

1. Mandryk, Courtney and **B.G. Merkle**. Artist Feature: Bethann Garramon Merkle. Root & Star magazine. [www.rootandstar.com](http://www.rootandstar.com). 30 August 2018. ([link](#))
2. Sneath, S. Scientists made art of what they study. Hilarity ensued. *The Times-Picayune*. New Orleans, LA, 6 August 2018. Quoted me.
3. Sneath, S. Scientists’ child-like drawings of the creatures they study are going viral. Here’s why. [www.nola.com](http://www.nola.com). New Orleans, LA. 3 August 2018. Quoted me ([link](#)).
4. Newman, E. Downtown mural reaches completion. *Laramie Boomerang*. Laramie, WY, 17 August 2018. Article about collaborative mural project to which I contributed ([link](#)).
5. UW student scientists connect individual research with local murals. *Gillette News Record*. Gillette, WY, 27 January 2018. Article about student work in course I designed and taught ([link](#)).
6. Chaney, R. Science offers solutions as well as problems, fisheries experts maintain. *Missoulian*. Missoula, MT, 23 May 2017. Article includes photo of me preparing for plenary talk at American Fisheries Society (western division) annual meeting ([link](#)).
7. Nadeau, S. Bethann Merkle crosses continents in search of tortoise and hare. *Quebec Chronicle-Telegraph*. Quebec City, Quebec, Canada, 4 May 2016. ([link](#))
8. White, J. A. “Drawn to Biodiversity” workshop combines observation with curiosity. *Wyoming EPSCoR*. Laramie, WY, 8 March 2016.
9. Christy, M. Snow in Tucson. *Arizona Daily Star*. Tucson, AZ, 1 January 2015. Featured photo of me doing field sketches for book illustration commission ([link](#)).
10. Nadeau, S. Drawn to Natural history and science through art. *Quebec Chronicle-Telegraph*. Quebec City, Quebec, Canada, 17 September 2014 ([link](#)).
11. Martinsen, M. Drawing class offered. *Choteau Acantha*. 23 April 2014, Choteau, MT. Article featuring drawing class I offered ([link](#)).
12. 18<sup>th</sup>-century scientist sewed tiny pants for frogs. Boingboing.net. 26 March 2014. Viral sharing of article I illustrated ([link](#)).
13. Davis, L. Why 18<sup>th</sup> century biologists made copulating frogs wear tiny pants. Io9.gizmodo.com. 26 March 2014. Viral sharing of article I illustrated ([link](#)).
14. Out & About: The week in arts and entertainment. *Missoulian*. 14 May 2010, Missoula, MT. Article mentions drawing workshop I taught for the Watershed Education Network ([link](#)).
15. Gerber, M. Outdoors briefs for Thursday, May 13: Learn to protect Clark Fork waters. *Missoulian*. 13 May 2010, Missoula, MT. Article mentions drawing workshop I taught for the Watershed Education Network ([link](#)).
16. Cohen, B. Missoulians flock to sun, sustainability at Caras Park. *Missoulian*. 18 April 2010. Article quotes me as project director of organization which coordinates annual Earth Day celebration ([link](#)).
17. Martinsen, M. Community group working on garden. *Choteau Acantha*. 8 April 2009. Article quotes me re community development gardening project I co-facilitated ([link](#)).

18. Martinsen, M. Hospital benefit auction Sept. 26. *Choteau Acantha*. 23 September 2009. Article about juried auction which included my photography ([link](#)).
19. Tuesday at the fair. *Missoulian*. 10 August 2009. Article mentions “Dirt on Composting” workshop I co-facilitated ([link](#)).
20. Martinsen, M. 2008. Community picks 4 action plans. *Choteau Acantha*. 31 December 2008. Article quotes me, participant and co-facilitator in multi-year community development process ([link](#)).
21. Martinsen, M. Shadows of the Past auction to benefit new meds system. *Choteau Acantha*. 19 September 2007. Article about juried auction which included my photography ([link](#); auction follow-up article [here](#)).
22. Thornton, N. Don't miss Teton County courthouse gala Dec. 2. *Choteau Acantha*. 29 November 2006. Article about centennial celebration, juried artwork included my illustration ([link](#)).
23. Thornton, N. Rural permit regulations to be revised. *Choteau Acantha*. 21 June 2006. Article quotes me ([link](#)).

## IMAGES

### Illustration, photography, and design

My illustrations, screen prints, monotype prints, and award-winning photography are in private collections, have had gallery representation, and have been displayed in solo and group shows, a solo natural history exhibition, and juried auctions, in the USA and Canada.

My images and graphic design services have been used by 40+ individuals and entities including the following:

1. *American Scientist* (Sigma Xi, the Scientific Research Society)
2. *BC Nature* (Federation of British Columbia Naturalists)
3. Biodiversity Institute, University of Wyoming
4. Boone and Crockett Club
5. *Camas – A Journal of the West*
6. Center for Forest Research/Centre d'étude de la forêt, Université Laval
7. Ecological Society of America's Communication and Engagement Section
8. Environmental Studies Program, University of Montana
9. *Fair Chase*, Boone & Crockett Club
10. Garden City Harvest
11. Glacier Institute
12. Guild of Natural Science Illustrators
13. Harvard University Forest
14. *Montana Outdoors*, Montana Fish, Wildlife & Parks
15. *Mother Earth News*
16. Oregon State University Press
17. Science Initiative Summer Teaching Institute and Learning Actively Mentoring Program, University of Wyoming
18. *The Globe and Mail*
19. The Nature Conservancy
20. *The Wildlife Professional*
21. The Wildlife Society's Student Development Working Group
22. University of New Mexico Press
23. Parks Canada
24. Sturgeon River Bison Stewards
25. Summer Teaching Institute, University of Wyoming Art Museum
26. University of Wyoming

27. University of Wyoming Racoon Project
28. US Consulate in Québec City
29. Watershed Education Network
30. *Western Confluence*
31. Western Division of the American Fisheries Society
32. Wilderness Institute, University of Montana
33. Wyoming Chapter of The Wildlife Society
34. Wyoming Migration Initiative

My image products include conservation, scientific, and education illustrations and photography for books, multi-media, social media, and editorial projects such as:

- aquatic macro-invertebrate illustrations for a wetland field guide
- photography of prescribed burns and wildlife for Prince Albert National Park, Canada
- scientists in action photographed for a wide range of publications and scientists' own use
- conservation education for newspapers, blogs, and organization outreach
- wildlife and wildlife habitat illustrations for outreach about crossbill evolution
- book about bighorn sheep conservation
- book about ungulate migration in Wyoming
- logo for racoon cognition/citizen science research project;

## **GRANTS**

I have contributed to \$444,000 of successful grants.

### **Grants on which I have been PI or co-PI (\$22,000)**

- 2017 Ecological Society of America, Long-Range Planning Grant. "Communication and Engagement Section capacity building, outreach, and recruitment." (\$2,000)
- 2016 University of Wyoming, American Heritage Center Student Research Award. "Ecological Concepts in Children's Books: Portrayal of Ecology in Turn-of-the-Century Children's Westerns." (\$500)
- 2016 University of Wyoming, Biodiversity Institute Art Grant. "An Ecological Story Book: Writing and Illustrating the Ecologically True Story of the Tortoise and the Hare." (\$3,000)
- 2016 University of Wyoming, Center for Global Studies research travel grant. "An Ecological Story Book: Writing and Illustrating the Ecologically True Story of the Tortoise and the Hare." (\$2,500)
- 2016 University of Wyoming, Creative Writing Program travel grant. "An Ecological Story Book: Writing and Illustrating the Ecologically True Story of the Tortoise and the Hare." (\$700)
- 2016 University of Wyoming, Creative Writing Program research grant. "An Ecological Story Book: Writing and Illustrating the Ecologically True Story of the Tortoise and the Hare." (\$1,200)
- 2016 University of Wyoming, Haub School of Environment and Natural Resources creative activities grant. "An Ecological Story Book: Writing and Illustrating the Ecologically True Story of the Tortoise and the Hare." (\$1000)
- 2015 University of Wyoming, College of Arts and Sciences International Studies Grant (\$1,500)

- 2015 University of Wyoming, Creative Writing Program research travel grant. “An Ecological Story Book: Writing and Illustrating the Ecologically True Story of the Tortoise and the Hare.” (\$600)
- 2013 Greening Sacred Spaces – issued to the Anglican Diocese of Quebec’s Green Ministries Initiative for “Cathedral Green Audit.” (\$1,500)
- 2013 TD Environment Foundation – issued to the Anglican Diocese of Quebec’s Green Ministries Initiative for “Putting the Gardens back into des Jardins: A Community Greening Project in the heart of Old Quebec.” (\$5,000)
- 2012 Peter Gzowski Invitational (PGI Canada) – issued to Quebec City Reading Council for the “Lifelong Learning Program, advisory committee, and website support” which I coordinated and developed from an occasional activity into a monthly senior continuing education program. (\$1,500)
- 2010 New Belgium Environmental Stewardship Grant – issued to Missoula Urban Demonstration Project, of which I was Program Director, for “Sustainable Agriculture and MUD’s Youth Education Project.” (\$1,000)

**Grants to which I contributed (\$422,000)**

*Issued to organizations to which I contributed grant writing support or no PI or co-PIs were indicated.*

- 2017 National Endowment for the Humanities, Creating Humanities Communities program – issued to High Plains American Indian Research Institute (\$300,000)
- 2011 City of Missoula, under the US Department of Housing and Urban Development (HUD) Community Development Block Grant program – issued to Missoula Urban Demonstration Project, of which I was Program Director, for “Land Purchase to Relocate and Expand Tool Library and Truck Share Programs.” (\$96,000)
- 2010 Missoula Community Foundation – issued to Missoula Urban Demonstration Project for “General Operations.” (\$13,600)
- 2010 High Stakes Foundation grant – issued to Missoula Urban Demonstration Project for “Organizational Development, Site Redesign Charette, and AmericCorps Position Support.” (\$5,900)
- 2010 City of Missoula, Office of Neighborhoods, Neighborhood Large Project Grants – issued to Missoula Urban Demonstration Project for “MSU-CDC Fee for Conceptual Design of Northside Neighborhood Center.” (\$3,000)
- 2009 Patagonia – issued to Missoula Urban Demonstration Project for “Coffee 2 Compost Program Capacity Building.” (\$2,500)
- 2009 Western Montana Community Foundation – issued to Missoula Urban Demonstration Project for “Advertising MUD Sustainability Workshop Series on Local Radio Stations.” (\$500)
- 2009 Simmons Media – issued to Missoula Urban Demonstration Project for “Advertising MUD Sustainability Workshop Series on Local Radio Stations.” (\$500)



## PROFESSIONAL ACTIVITIES & SERVICES

### Invited Section Editor

2018-present “Communicating Science” section in *The Bulletin of the Ecological Society of America*. Recruited to edit this column, which will now include my “Writing Science” column, in August 2018 by *Bulletin* Peer Review Specialist Sarah Schneider. Commission confirmed by editor-in-chief Edward A. Johnson in September 2018.

### Invited Column

2018-present “Writing Science” advice column in *The Bulletin of the Ecological Society of America*. Recruited to write this column in April 2018 by editor Edward A. Johnson.

### Invited Reviews

2010-present *Journal of Agriculture, Food Systems, and Community Development*, 9 reviews  
2018-present *Connected Science Learning*, 1 review

### Contributing editor

2018-present *The Journal of the Guild of Natural Science Illustrators*

### Appointments & Leadership Roles

2018-2019 **Past Chairperson**, Communication and Engagement Section of the Ecological Society of America  
2018-present **Director**, Wyoming Science Communication Initiative, University of Wyoming  
**Member**, Committee for Inclusive Future Meetings, Ecological Society of America, convened by 2019 Meetings Chair, Ryan McEwan  
**Member**, Science Communication and Science Writing Curriculum Committee, Wildlife and Fisheries Biology and Management program, University of Wyoming  
2017-2018 **Chairperson**, Communication and Engagement Section of the Ecological Society of America  
2017-present **Member**, Committee on Diversity and Education, Ecological Society of America  
**Invited Lead**, Training Section, “Strategy Development: Increasing the Impact of Public Engagement Within and Beyond ESA,” Ecological Society of America (4-person committee funded by ESA; I am leading a team of ~10 people to develop a white paper about training for science communication and engagement within ESA)  
2017 **Co-founder; workshop and seminar committee chair; director**, UWyo Science Communication Initiative (WySCI), University of Wyoming  
2016 **Chairperson-elect**, Communication and Engagement Section, Ecological Society of America  
2015-present **Co-founder; co-coordinator**, Enhanced Broader Impacts through Science-Art Synergy Initiative (EBI)  
2015 **Secretary**, Communication and Engagement Section, Ecological Society of America  
2015-2017 **Planning committee member**, Art-Science Symposium, Art Museum, University of Wyoming; only student selected for committee comprised of faculty/staff from numerous UW departments  
2014-present **Co-founder, Section editor-in-chief, and Section webmaster**, Communication and Engagement Section, Ecological Society of America  
2006-2007 **Co-founder, coordinator**, Students of Wilderness and Civilization, an officially recognized student organization and alumni network, University of Montana, Missoula, Montana

- 2003-2004 **Student representative**, “Great Grub Committee,” the weekly university food systems advisory committee, Montana Tech of the University of Montana
- 2003-2004 **Vice-president**, Residence Hall Association

### **Facilitation & Community Development**

- 2012-2015 **Consultant**, Green Ministries of the Anglican Diocese of Québec, Québec City, QC. Strategic planning and communications, web development, grant writing, and community garden design.
- 2011-2012 **Committee member**, Produce Safety Alliance (Cornell University) for committees on Train the Trainers and Education Outreach Program Delivery.
- 2010 **Steering committee member**, homeWORD Sustainability Tour, Missoula, MT.
- 2009-2010 **Steering committee member**, Burns Street Square Community Kitchen/Café, Missoula, MT. Also a Business Plan and Visioning **sub-committee member**.
- 2008-2009 **Co-founder, facilitator, and webmaster**, GROW Choteau, Choteau, MT. Co-founded community initiative offering gardener mentoring program, community classes and feasibility assessment for establishing a community garden; facilitated organizational planning phases including mission and vision statement development and program idea prioritization; developed logo, color scheme, website and program materials; co-facilitated first season of mentoring and classes.
- 2008-2009 **Co-instructor**, Leadership Plenty/Horizons, Choteau, MT. Nine-week leadership skills course for community members; participated in 18-month community development project sponsored by Northwest Area Foundation.
- 2007 **Garden Manager**, Missoula Urban Demonstration Project, Missoula, MT. Student intern for urban organic gardening demonstration site and education program.
- 2006-2007 **Survey and community facilitation intern**, National Parks Conservation Association, Choteau and Missoula, MT, co-developed Rocky Mountain Front (RMF) distribution network for the film *There’s a Freedom Here: Choices and Change on the Rocky Mountain Front*; collaborated with Wilderness Institute to develop, administer and analyze follow-up survey; co-coordinated public meeting and showing of the film
- 2005 **Co-founder, coordinator**, Missoula Non-profits Together for Sustainability, Missoula, MT. As a student inter, co-founded communication network for sustainability-oriented community non-profits.
- 2004-2007 **Volunteer coordinator**, Great Bear Foundation, Missoula, MT. Coordinated volunteers for city-wide fruit gleaning project aimed at reducing human-black bear conflicts.

### **Co-Organizer, science communication and engagement conference sessions**

- 2018 **WK 29: The 1-pager: A Practical Tool for Translating Research Into Action.** Ecological Society of America annual meeting, New Orleans, LA. Co-organizers: A. Hettinger (lead), UC Davis, Bodega Marine Laboratory; S. M. Anderson, Presidential Management Fellow; J. Purrenhage, University of New Hampshire.
- WK 35: Building Scientist-Community Partnerships and Best Practices: Lessons from New Orleans Post-Hurricane Katrina and Other Extreme Events.** Ecological Society of America annual meeting, New Orleans, LA. Co-organizers: A. M. Aramati Casper (lead), Washington State University; Kennedy F. Rubert-Nason, Madison Area Technical College; Melissa Varga, Union of Concerned Scientists; Theresa Harris, American Association for the Advancement of Science; Brian R Shmaefsky, Lone Star College; Leanne M. Jablonski, Marianist Environmental Education Center; Annaliese Hettinger, UC Davis, Bodega Marine Laboratory; Sam Davis, Dogwood Alliance; George A. Middendorf, Howard University.

2016 **IGN 1 - Up-Goer Five Challenge: Using Common Language to Communicate Your Science to the Public.** Ecological Society of America annual meeting, Fort Lauderdale, FL. Co-organizers: Holly L. Menninger (lead), North Carolina State University; Clarisse M. Hart, Harvard Forest (Harvard University); Madhusudan Katti, California State University, Fresno.

### **Memberships**

Ecological Society of America (since 2013), Guild of Natural Science Illustrators (since 2013), National Association of Science Writers (since 2015; membership is by application only), Urban Sketchers International (since 2012)

### **Certifications & Leadership Training**

**Certified LeadershipPlenty® Trainer**, certified by LeadershipPlenty®; U.S.A.-based nation-wide program trains emerging community leaders, applying adult education principles to communication- and collaboration-related leadership skills development.

**Certified Master Gardener**, certified by Montana Extension Services (Montana State University); specialization in organic, cold-climate and water-wise gardening practices

**Certified Interpretive Guide**, certified by National Association for Interpretation, a multi-disciplinary professional organization of educational interpreters.

### **Contributed Blogging & Social Media**

Invited curator, @IAmSciArt account, Twitter. Curator of popular (6,534 followers), rotating curator account, first week of 2017.

Blogging for Communication & Engagement Section of Ecological Society of America, commnatural.com, Crastina (Contemporary Science Communication platform, Sweden), ecologicallytruestory.org, Ecotone (ESA blog), Early Career Ecologists, fruitrootleaf.com, foodiequebec.com, and The Volta Blog.

Social media account management and/or contributions for: Communication & Engagement Section (ESA), commnatural.com, Missoula Urban Demonstration Project, Morrin Centre, Quebec Chronicle-Telegraph, and Wyoming Migration Initiative.

### **INFORMATION TECHNOLOGY & SOFTWARE SKILLS**

Adobe (Acrobat Pro, Photoshop); Google (Blogger, Calendar, Docs/Drive, Google+, Groups, Picasa, Reader, Sites); Microsoft Office (Excel, Outlook, Photo Editor, Power Point, Publisher, Word); Social Media (Facebook, Flickr, MailChimp, Ning, Pinterest, Tumblr, Twitter); Other (Box, Dabble, Dropbox, Email 1 & 1, GoDaddy, Hover, Skype, SurveyMonkey, Weebly, WordPress)

### **LANGUAGES**

English native language; excellent spoken and written capacity  
French intermediate spoken and written capacity (functional fluency)  
HTML basic/intermediate capacity

### **FIELD EXPERIENCE**

2015-2016 **Research volunteer**, Rocky Mountain Amphibian Survey, Wyoming  
2013 **Research assistant**, free-range bison study, Saskatchewan, Canada

2008-2010 **Capture assistant**, urban black bear study, Montana  
2012 **Research volunteer**, kestrel nest box study, Quebec, Canada  
2009 **Research volunteer**, for study of road impacts on painted turtles, Montana  
2008-2009 **Research volunteer**, for Rocky Mountain Front phenology study, Montana  
2004 **Research assistant**, survey for Trout Unlimited Montana Streamflow Fund, Montana

## **EMPLOYMENT HISTORY**

### **Associate Academic Professional Research Scientist**

Wyoming Migration Initiative, University of Wyoming, Laramie, Wyoming, 2017-present

Experience & Applied Skills: illustration; press release, article, and social media writing; photography; teaching scientists and grad students (workshops and semester-long courses); lesson planning; curriculum development; classroom management; discussion facilitation; student motivation and coaching; editing (in the context of helping students learn to self-edit and editing colleagues' manuscripts and outreach drafts); digital, print, and social media communication for public education and outreach, including social media; collaboration and self-direction; interpersonal and supervisory skills; grading and providing informal feedback and assessments; grant writing to fund creative and outreach/public engagement activities; co-leading establishment of a University of Wyoming Science Communication Initiative focused on enhancing SciComm skills within the University of Wyoming community; launching WMI's first educational curriculum initiative with partners including the Teton Science School, the Wyoming Geographic Alliance, the Science and Math Teaching Center, and the University of Wyoming Art Museum. Grant writing to fund creative and outreach/public engagement activities.

### **Writing Instructor (Instructor of Record)**

Graduate Teaching Assistantships while a Master of Fine Arts candidate in the Creative Writing Program (nonfiction concentration), University of Wyoming, Laramie, Wyoming, 2015-2017

Experience & Applied Skills: teaching undergraduate students in composition and science writing courses; lesson planning; curriculum development/course curriculum redesign; classroom management; discussion facilitation; student motivation and research skills coaching; editing (in the context of helping students learn to self-edit); multi-tasking; accounting for various learning styles, interests and backgrounds simultaneously; digital and print communication; collaboration and self-direction; interpersonal and supervisory skills; grading and providing informal feedback and assessments; facilitating student development of critical thinking skills; enhancing student awareness and appreciation of close reading, critical thinking and articulate writing when engaging with texts in a range of genres; study of, engagement with, and implementation of the field of writing studies, pedagogy, and associated best practices; co-teaching and coordination of supporting instructor/instructor roles

### **Assistant Editor, Journalist, Photojournalist**

*Quebec Chronicle-Telegraph*, Quebec City, Quebec, Canada, 2012-2014

Experience & Applied Skills: co-managing assignments, production, editing and community outreach; coordinator for 250th anniversary of the newspaper; photographing and writing about community events, cultural activities and newsworthy endeavors; composition of 3-5 articles weekly (500-800 words) with photos and captions; interpersonal skills; writing; photography; meeting tight deadlines; working remotely (telecommuting); bi-lingual communication requirements (English-French); interviewing; community networking; social media relations

### **Science Editor and Writer**

CORDIS, Greece; I worked remotely. 2014

*Cordis is an information portal devoted to European Union-funded research, technological development and innovation.*

Experience & Applied Skills: weekly transformation of 1-3 research reports into reader-friendly briefs; meeting tight deadlines; working remotely (telecommuting); addressing multi-lingual communication challenges; international coordination; writing and editing based on source material typically written by scientists whose first language was not English.

### **Communications coordinator**

Literacy Quebec, Quebec City, Quebec, Canada, 2012-2014

*LQ is a provincial-level 'umbrella' organization responsible for serving as liaison between provincial government and community-based member organizations providing English-language adult literacy services in a predominantly French-speaking province.*

Experience & Applied Skills: facilitating and executing re-development of website and online communications platforms; providing IT support for development of online tutor training resource website; development and execution of communications plan, including media relations, press releases and member updates; maintenance of website and Facebook page; IT training and capacity-building for staff and board of directors; updating internal policies and procedures; developing communications materials appropriate to LQ's provincial role and responsibilities; telecommuting; working in collaboration with nonprofit board of directors; bi-lingual communication requirements (English-French)

### **Communications, programs & volunteer coordinator**

Quebec City Reading Council, Quebec City, Quebec, Canada, 11/2011-11/2013

*QCRC is a community-based organization providing English-language adult literacy services in a predominantly French-speaking province.*

Experience & Applied Skills: Supporting adult literacy students; coordinating volunteers, tutors, adult learners, and family literacy program participants; coordinating outreach and logistics for two family literacy programs; co-coordinating tutoring program; coordinating Lifelong Learning Program (a continuing education program for English-speaking seniors operated in collaboration with partner community organizations); learning about international nonprofit management and funding constraints; successful grant writing; website and Facebook page maintenance; updated organization's email newsletter system; experience with challenges and opportunities associated with working in a minority language environment; community networking and partnership building with public, private and government partners; streamlining and standardizing program management protocols; working remotely (telecommuting); working in collaboration with nonprofit board of directors; bi-lingual communication requirements (English-French)

### **Cultural events & volunteer coordinator**

Morrin Centre, Quebec City, Quebec, Canada, 8/2011-11/2011 (seasonal)

*MC is an English-language cultural heritage nonprofit in the French-speaking provincial capital.*

Experience & Applied Skills: Developed advisory committee and piloted programming for cultural program targeting seniors; coordinated volunteer recruitment, screening and assignments; coordinated English Language Discussion group (enhanced communication with participants and increased staff/organizational sense of commitment to program); contributed to improved collaboration and communication with community-based business and nonprofit partners; updated organization's email system from payment-based Constant Contact to free, user-friendly MailChimp (established templates, enhanced use of this system as an e-newsletter, improved accessibility of email updates by providing clear subscription information to staff, volunteers, organization members and the public); coordination and outreach for events including small evening concerts and author readings, a large cultural weekend open house event and a 3-day literary festival; maintenance of Facebook page; work in a minority language environment; exposure to international nonprofit management and funding; community networking and partnership building; public and internal

communications enhancement; streamlining and standardizing program and volunteer management protocols; bi-lingual communication requirements (English-French)

### **English as a Second Language instructor**

Berlitz Language Centre, Quebec City, Quebec, Canada, 1/2011-8/2011

Experience: Taught or enhanced English-language communication skills of adult professionals; adult education in a foreign language; bi-lingual communication requirements (English-French)

### **Founder, CEO, teaching artist, science communicator**

CommNatural science & sustainability communication consulting, 2011-present

Experience & Applied Skills: writing and editing; publishing a monthly newsletter; client recruitment, management, and retention; project management, public speaking and teaching; business management; grant writing; market research and business marketing; digital and print communication, working remotely (telecommuting); bi-lingual communication requirements (English-French); blogging; website maintenance; collaboration and self-direction; community networking; social media relations; writing, photography, and illustration; meeting tight deadlines; interviewing

### **Sustainability & education programs director**

MTCC AmeriCorps VISTA at Missoula Urban Demonstration Project, Missoula, Montana, 7/2009-12/2010

Experience: Managed and improved sustainable life skills demonstration site; managed and enhanced adult education program (development of advance planning, evaluation and outreach mechanisms); developed and managed youth education program curriculum and program implementation; developed scheduling forms, financial record-keeping process and program and volunteer participation tracking system; developed and maintained new public website, new internal communication website and Facebook page; facilitated board relationship-building and visioning retreat; facilitated new database development; managed membership renewal efforts; facilitated development of comprehensive outreach strategy (monthly e-newsletters, year-long radio campaign, public speaking events, engaging up-to-date outreach materials, public TV broadcasts of education programs); managed six education and resource-sharing programs; co-wrote successful grant applications and fundraising appeals; Internal and public communications; meeting management; work project coordination; working with a wide range of skills and opinions to achieve commonly valued outcomes; community collaboration and partnership building; budget planning and management; site and facilities management; office management; workshop series coordination; adult and youth curriculum development; board coordination and development; fundraising; membership development and cultivation; working in collaboration with nonprofit board of directors; personnel recruitment, training and management (paid staff and volunteers, including site residents, ~50+ individuals)

### **Conservation educator and curriculum developer**

Boone and Crockett Club Conservation Education Program, Dupuyer, Montana, 12/2007-5/2009

Experience & Applied Skills: facilitated and instructed multi-day education programs for k-12 students, college students and educators; instructed >2000 k-12 students and >1000 adults in >100 education programs; developed portfolio of program photographs; designed community outreach flyers and updated program brochure, created illustrations as required, and developed program newsletter; represented program in Front Range Conservation Education Group and Crown of the Continent Ecosystem Education Consortium; Program coordination; curriculum development, including lesson plans, activities, and teaching aids; group management; natural history and place-based education for adults and youth; photography, graphic design and illustration; regional multi-agency collaboration; grant writing, maintenance of education facility and science labs; lived and worked on-site at isolated 6,000-acre conservation-ranch property

### **Naturalist, Artist-in-Residence, place-based education curriculum developer**

Watershed Education Network, Missoula, Montana, 2005-2007

Experience & Applied Skills: natural history illustration for wetland field guide; developed educational field journal template and associated curriculum; instructed watershed ecology and field journaling programs for schools and summer camps; designed new organization logo; helped develop retail line featuring new logo; worked directly with field and executive directors; collaborated with volunteers; working in collaboration with nonprofit board of directors

### **Community Garden Manager**

University of Montana and Garden City Harvest, Missoula, Montana, 2007

Experience & Applied Skills: Coordinated >70 gardeners and additional volunteers; cultivated six 15'x15' community food aid plots; developed participant demographics tracking system; researched and wrote history of 25 year-old garden; facilitated collaboration between University of Montana (UM), UM student government association (financial sponsor), and Garden City Harvest (community garden network); liaison to UM South Campus development committee; designed and oversaw installation of garden interpretive sign; gardener survey development, distribution and analysis; community outreach; budget development, management, and fundraising

### **Ranch Assistant**

The Nature Conservancy's Pine Butte Guest Ranch, Choteau, Montana, 2006

Experience & Applied Skills: Garden planning, cultivation and grounds maintenance; co-developed and co-coordinated biodiesel production (including collecting used oils from local businesses); natural history education; guest management; meal planning and preparation; coordinating with chef, ranch manager, and staff naturalists

### **Environmental Engineering Department assistant**

Montana Tech of the University of Montana, 2003-2004

Experience & Applied Skills: coordinated and implemented campus recycling project, collected all paper recycling from campus weekly; aided with departmental administrative and outreach tasks