

A.Z. Andis Arietta

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Education

PhD. Yale University | 2016-2022 (expected)
School of Forestry & Environmental Studies
Dissertation: Evolutionary dynamics of rapid, microgeographic adaptation in a vernal pool amphibian metapopulation
Committee: D.K. Skelly, A.P. Hendry, T.J. Near, C.W. Dunn

M.Sc. University of Montana | 2014-2016
Department of Environmental Studies
Thesis: Performance of road crossing structures from relative movement rates of large mammals
Committee: L. Broberg, M.P. Huijser, N.G. Dawson
Honors: Wyss Foundation Scholar, Leonard and Sandy Sargent Fellow

B.S. Northland College | 2005-2008
Environmental Studies
Honors: *Magna Cum Laude*, Academic Excellence Scholarship

Professional experience

Museum Assistant for Vertebrate Zoology | 2016 – present
The Peabody Museum of Natural History | New Haven, Connecticut

Research Consultant | 2017
Sitka Conservation Society | Sitka, Alaska

Conservation Consultant | 2015
The Nature Conservancy | Missoula, Montana

Wilderness Conservation Coordinator, Communications Director | 2010 – 2016
Sitka Conservation Society | Sitka, Alaska

Owner/Designer | 2011 – 2017
Nunatak Design

Senior Expedition Guide | 2015 – present
National Geographic/Alaska Discovery | Gustavus, Alaska

Publications

Published articles

* Indicates undergraduate mentee, **Né Arietta

- 2020 **AZA Arietta**, LK Freidenburg, M Urban, S Rodrigues, A Rubinstein, DK Skelly. 2020. Phenological delay despite warming in wood frog (*Rana sylvatica*) reproductive timing: a 20-year study. *Ecography* 43(12): 1791-1800. doi : 10.1111/ecog.05297

- K Gahm*, **AZA Arietta**, DK Skelly. *In press*. Temperature-mediated tradeoff between development and performance in larval wood frogs (*Rana sylvatica*). *Journal of Experimental Zoology A*.
- BL Bodensteiner, GA Agudelo-Cantero, **AZA Arietta**, AR Gunderson, MM Muñoz, JM Refsnider, EJ Gangloff. 2020. Thermal adaptation revisited: how conserved are thermal traits of reptiles and amphibians? *Journal of Experimental Zoology A*. doi: 10.1002/jez.2414
- AZA Arietta**, A Rubinstein, LK Freidenburg, PNK Johnson*. 2020. Aberrant coloration (hypomelanism) in multiple wild populations of *Rana sylvatica* associated with early mortality and developmental delay. *Northeastern Naturalist* 27(4): 641-648. doi: 10.1656/045.027.0404
- 2019 JL Richardson, GS Silveira, I Soto-Medrano, **AZ Arietta**, C Mariani, AC Pertile, T Carvalho-Pereira, JE Childs, A Ko, F Costa, A Caccone. 2019. Significant genetic impacts accompany an urban rat control campaign in Salvador, Brazil. *Frontiers in Ecology and Evolution* 7(115). doi: 10.3389/fevo.2019.00115
- 2018 **AZ Andis****. 2018. A new, noninvasive method of batch-marking amphibians across developmental stages. *Herpetology Conservation and Biology*. 13(2), 423-432.
- 2017 **AZ Andis****, MP Huijser, L Broberg. 2017. Performance of arch-style road crossing structures from relative movement rates of large mammals. *Frontiers in Ecology and Evolution*. 5(122). doi.org/10.3389/fevo.2017.00122
Press: [The Wildlife Society](#), [The Missoulian](#)
- 2016 **AZ Andis****, R Dvorak, L Ronald. 2016. Thoughts from the future. *International Journal of Wilderness*. 22(2): 21-24.
- Book chapters**
- 2020 DK Skelly, **AZA Arietta**, M Lambert. "Green frogs thrive in the suburbs." *Feral Atlas: the more-than-human Anthropocene*, edited by Anna L. Tsing, et al., Stanford University Press, 2020. doi.org/10.21627/2020fa
- Peer-reviewed Natural History Notes**
- 2018 **AZ Andis**. 2018. *ANAXYRUS BOREAS* (= *BUFO BOREAS*) (Western Toad). USA: ALASKA: The Unorganized Borough: Middle Island, Barrier Islands group. Geographical Distribution Record. *Herpetological Review*. 49(4): 706

Posters

- 2018 AZ Andis. 2018. A new, noninvasive method of batch-marking amphibians across developmental stages. *Joint Meeting of Ichthyologists and Herpetologist*. Rochester, New York.
Recognition: Victor Hutchinson Student Poster Award from the Society for the Study of Amphibians and Reptiles
- 2015 AZ Andis, J Drygas, V Watson. 2015. Streamflow related impairments in the Clark Fork and Kootenai basins. *Clark Fork Symposium*. Missoula, Montana.

Presentations

- 2020 AZ Andis Arietta, DK Skelly. "Warming, phenology, and development in the wood frog: a 20-year study" *World Congress of Herpetology*. Dunedin, New Zealand.
- 2019 AZ Andis Arietta, MP Huijser, D Spencer, B Walder. "Do we need an ethic of road ecology?" *International Conference on Ecology and Transportation*. Sacramento, California.
- Recognition: ICOET Aspiration Award for Most Outstanding Lightning Talk Presentation
- AZ Andis Arietta, DK Skelly. "The Evolution of Intrinsic Rates: Can adaptation counteract climate change?" *Evolution Conference*. Providence, Rhode Island.
- 2019 AZ Andis Arietta. "Feeling the Squeeze: Late-season advancement and early-season delays in the phenology of a common amphibian." *Northeast Natural History Conference*. Springfield, Massachusetts.
- 2018 AZ Andis Arietta. "A performance assessment of highway crossing structures for large mammals." *Student Conference on Conservation Science*. New York, New York.
- Recognition: Best Speed Talk in the category of Outstanding Research in Land Use and Stewardship, courtesy of Lincoln Institute for Land Policy and Harvard Forest
- AZ Andis Arietta. "A frog's-eye view of evolution in a changing world." *UQAM Aquatic Ecology Seminar*. Université du Québec à Montréal, Quebec, Canada.
- AZ Andis and DK Skelly. "Rapid, microgeographic divergence in a vernal pool amphibian metapopulation." *Joint Meeting of Ichthyologists and Herpetologists*. Rochester, New York.
- 2015 AZ Andis. "Streamflow related impairments in the Clark Fork and Kootenai Basins." *American Water Resources Association Annual Conference*. Missoula, Montana.
- AZ Andis, R Dvorak, L Ronald. "Wilderness values and future stewards: Exploring differences between generations." *National Wilderness Workshop*. Missoula, Montana.
- AZ Andis, D Shepard, L Ronald. "Social media rodeo: A hands-on workshop for wilderness luddites and technological troglodytes." *National Wilderness Workshop*. Missoula, Montana.
- 2014 AZ Andis, B Hamilton. "Giving Wilderness a voice in the digital age: Lessons for new media campaigns." *50th Anniversary of the Wilderness Act Conference*. Albuquerque, New Mexico.
- AZ Andis. "Shifting conceptions of Wilderness in Alaskan nature writing: A survey of three centuries." *50th Anniversary of the Wilderness Act Conference*. Albuquerque, New Mexico.
- AZ Andis (panelist). "Seeing green: The economic benefits of wilderness." *50th Anniversary of the Wilderness Act Conference*. Albuquerque, New Mexico.
- 2013 AZ Andis, LE Oakes, K Hood. "Science and stewardship to protect and sustain Wilderness values." *World Wilderness Congress*. Salamanca, Spain.
- AZ Andis. "Creation, strategy, implementation, COMMUNICATION: Effective communication for non-profits." *National Wilderness Stewardship Alliance Annual Conference*. Big Bear, California.
- 2012 AZ Andis. "Unique ways partners can contribute to Wilderness stewardship." *National Forest Foundation; online webinar series*.
- 2011 AZ Andis. "Partnering with non-traditional user groups for Wilderness stewardship." *National Wilderness Stewardship Alliance Annual Conference*. Las Vegas, Nevada.

Teaching

Instructor of Record

- 2015 Sp. Science, Writing, and Rhetoric | WRIT 201, U. Montana (3 credits)
Website: sites.google.com/site/writ201andis/
- 2014 F. College Writing | WRIT 101, U. Montana (3 credits)
Website: sites.google.com/site/writ101andis/
- 2012 Su. Forest Ecology and Wilderness Policy | Knox College (6 credits)

Teaching Assistant

- 2020 F. Wetlands Ecology, Conservation, & Mgmt | FES 723, Yale (3 credits)
- 2019 F. Wetlands Ecology, Conservation, & Mgmt | FES 723, Yale (3 credits)
- 2018 F. Field Science: Environment & Sustainability | EVST 234, Yale (3 credits)
- 2017 F. Wetlands Ecology, Conservation, & Mgmt | FES 723, Yale (3 credits)
- 2017 Sp. Ecology and the Future of Life | EVST 271, Yale (3 credits)

Guest Lecturer

- 2020 Sp. Natural Science Research Methods | ENV 550, Yale (1 section)
- 2018 F. Wildlife Bio. and Mgmt. | BIO 479, Providence College (1 section)
- 2017 F. Plant Ecophysiology | FES 652, Yale (1 section)
- 2015 F. Watershed Conservation Mgmt | ENSC 540, U. Montana (1 section)
- 2015 F. Sci. Approaches to Env. Problems | ENSC 501, U. Montana (1 section)
- 2015 F. Applied Ecology | ENSC 360, U. Montana (1 section)
- 2015 Sp. General Genetics | BIOB 375, U. Montana (1 section)

Funding

Grants

2020	Society of Wetland Scientists	\$1000
2020	Yale Institute for Biospheric Studies, Small Grants Program	\$4000
2020	Yale Institute for Biospheric Studies	\$2032
2019	Yale Natural Lands Project	\$13,980
2019	Yale Institute for Biospheric Studies	\$2,400
2018	Yale Center for Teaching and Learning Digital Education Innovation Grant	\$1,000
2018	Yale Institute for Biospheric Studies	\$4,000
2017	Schiff Fund for Wildlife	\$2,000
2017	Yale Institute for Biospheric Studies	\$4,000
2016	Yale Natural Lands Project	\$2,500
2016	NWSA "Boots-on-the-Ground" Grant	\$5,000
2014	National Forest Foundation Wilderness Stewardship Grant	\$29,700
2013	National Forest Foundation Wilderness Stewardship Grant	\$29,000
2013	U.S. Forest Service Special Project Grant	\$18,000
2012	National Forest Foundation Wilderness Stewardship Grant	\$31,000
2012	U.S. Forest Service Special Project Grant	\$7,400
2011	National Forest Foundation Wilderness Stewardship Grant	\$27,000

Awards

2018	Kohlberg Donohoe Research Fellowship	\$3,000
2017	Kohlberg Donohoe Research Fellowship	\$1,000
2015	Wyss Fellowship	\$5,000
2015	Leonard and Sandy Sargent Fellowship	\$5,000
2015	Dawson Award	\$500
2007	Parsonage Fund	\$1,500

Leadership & Service	<p>Society for the Study of Evolution Graduate Student Advisory Council 2018 - present Council Member</p> <p>National Wilderness Stewardship Alliance 2010 – 2016 Founding Board Member</p> <p>Alaska Wilderness Recreation and Tourism Association 2013 – 2014 Board Member</p>
Journal Reviewer	<p>Nature Scientific Reports; Global Change Biology; PeerJ; Journal of Zoology; Copeia; European Journal of Ecology</p>
Outreach	<p>Public presentations</p> <p>2020, May 20. Peabody Museum of Natural History Speaker's Bureau. "How to avoid terrible presentations."</p> <p>Skype-a-Scientist:</p> <p>2020, May 12. Comstock STEM Academy. Kalamazoo, MI. 6th grade.</p> <p>2020, May 13. Comstock STEM Academy. Kalamazoo, MI. 7th grade.</p> <p>2020, May 14. Comstock STEM Academy. Kalamazoo, MI. 8th grade.</p> <p>Non-academic articles authored</p> <p>AZ Andis. 2016, February. Climate of change: Exploring the complexities of climate change in Southeast Alaska's kingdom of ice. <i>Adventure Kayak Magazine</i>. [Feature article]</p> <p>AZ Andis. 2015, Spring. Launch: Treasures of Alaska's Tongass. <i>Adventure Kayak Magazine</i>.</p> <p>Photography/photo essays</p> <p>2017, Fall. Watercolors. <i>Paddling Magazine</i>. 17</p> <p>2016. Sin barreras. <i>US National Whitewater Center, Explore Journal 6</i> [Digital feature, written by C Brown]</p> <p>2016, Spring. Watercolors. <i>Paddling Magazine</i>. 21</p> <p>2015, March. Current. <i>Paddling Magazine</i>. 30</p> <p>2015. Ecuador's Jondachi River: Threatened paddling classics. <i>Canoe and Kayak Magazine</i>. (8) [Digital feature, written by C Brown]</p> <p>2014, Spring. Extreme measures: Paddle-powered science. <i>Adventure Kayak Magazine</i>. 44-53 [Feature article by N Schulman]</p> <p>2013, December. Dispatch. <i>Canoe and Kayak Magazine</i>. 11</p> <p>Film</p> <p><i>The Meaning of Wild</i>. 2014. B Hamilton and AZ Andis [Associate producer] www.meaningofwild.com Length: 30min Courtesy viewing: http://www.pioneerstudios.org/mow-private-screener/</p> <p><u>Awards:</u> Winner Best Alaska Award Alaska International Film Awards 2014, Jury Award and Audience Award Big Bear Lake International Film Festival 2014, Official Selection</p>

Big Sky Documentary Film Festival 2014, Official Selection Breckenridge Festival of Film 2014, Official Selection Tacoma Film Festival 2014, Official Selection The American Conservation Film Festival 2014, Official Selection G2 Green Earth Film Festival 2014, Official Selection Environmental Film Festival in the Nation's Capital 2014, Official Selection Environmental Film Festival Melbourne 2014, Official Selection Life Sciences Film Festival Prague 2014

Synopsis: *The Meaning of Wild* is a half hour documentary film that takes viewers on a journey through one of our nation's wildest landscapes, the Tongass National Forest of Southeast Alaska. The film follows wildlife cameraman Ben Hamilton as he travels by boat, plane, kayak and foot to capture and share the true value of Wilderness. Along the journey, Ben encounters bears, calving glaciers, ancient forests, and harsh seas, but it's the characters he meets along the way that bring true insight to his mission. Filmed in stunning High Definition, *The Meaning of Wild* highlights never before captured landscapes while provoking reflection about their importance to us all. Ultimately, the film celebrates the fiftieth anniversary of the Wilderness Act and seeks to share these national treasures and inspire the next generation of wilderness advocates.

"Tongass Wilderness; Our Wilderness" 2013.
AZ Andis [Filmmaker]

Awards: Winner One-Minute Wild film contest, World Wilderness Congress, Salamanca, Spain.

Synopsis: A short film, shot in South Baranof Wilderness Area, explores how designated Wilderness is integral to all people.

Press

Schulman, N. 2015, May. "7 Rules Every Outdoorsperson Should Follow."
TheClymb.com.

Canfield, J. 2014, Sept. 29. "Proposed Film/Photo Regs in Wilderness Areas Come Under Fire." KTOO-Juneau.

Goff, M. 2014, Feb. 16. "Sitka Nature." KCAW-Sitka.

Schulman, N. (2014, Feb.) "Extreme Measures: In Alaska a new breed of scientists are using kayaks to aid ecological understanding of stewardship." Adventure Kayak Magazine.

Buckles, J. 2013, Oct. 22. "The Untamed Tongass." WRNC-Ashland.

Jans, N. 2013, July. "Wilderness on Ice: Seeing the wonder and power of Hubbard Glacier." Alaska Magazine.

Jans, N. 2010, Oct. "Counting Wilderness." Alaska Magazine.

Leadership training

Training Resources for the Environmental Community (T.R.E.C.), *Fundraising for the Future*, Non-profit Fundraising Training | 2013

T.R.E.C., *Major Gifts and Legacy Donations*, Fundraising Training | 2012-2013

Midwest Academy, *Organizing for Social Change*, Community Organizing Training | 2011

National Outdoor Leadership School expedition, Leadership Training | 2005

Sierra Club Student Coalition, *Summer Leadership Training*, Organizing Training | 2003

**Skills and
Certifications**

Digital design, photography and video communications

Programming languages: R, Python 2

Design software:

Adobe: InDesign, Photoshop, Lightroom, Premier, Illustrator, AfterEffects, Encore, and Audition.

Open source: GIMP2, Scribus, InkScape

Wilderness First Responder and CPR certified

American Canoe Association L4 Open-water Kayak Instructor

Leave-no-Trace Master Educator