# Nicole A Freidenfelds

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Educat Teache M.S. B.S.	ion er Certification: Secondary Biology & Chemistry Natural Resources: Wildlife Ecology Biology with Chemistry minor	Sacred Heart University, Griswold, C University of New Hampshire, Durha Eastern Connecticut State University	ım, NH
<b>Professional Experience</b> University of Connecticut, Storrs, CT <i>Visiting Assistant Extension Educator: Natural Resources &amp; the Environment</i>		sources & the Environment	08/2019 – present
Capitol	Region Education Council, Hartford, CT Per Diem Certified Education Specialist: Science		09/2018 – 01/2019
Univers	sity of Connecticut, Storrs, CT Laboratory Manager: Ecology and Evolution		08/2012 - 07/2014
MA Nat	tural Heritage Endangered Species Program, Westb Independent Contractor: Box Turtle Surveys	orough, MA	06/2012 – 06/2012
Rice Un	niversity, Houston, TX Laboratory Manager: Ecology and Evolution		08/2011 - 04/2012
Pennsy	lvania State University, University Park, PA Laboratory Manager: Ecology and Evolution		04/2008 - 08/2011
Safe Ha	arbor, Wellfleet, MA Environmental Consultant		10/2007 – 03/2008
Nationa	al Park Service, Cape Cod National Seashore, Wellfle Biological Technician (GS-5)	eet, MA	02/2007 – 09/2007
Tolland	<b>ng Experience</b> High School, Tolland, CT (Biology, Chemistry, Environmental Science)		08/2015 – 06/2019
	Board of Education, Tolland, CT <i>Tutor</i> (Biology, Integrated Science, Botany, Chemi	stry)	08/2014 – 06/2015
	ity of New Hampshire, Durham, NH g Assistant (Wildlife Techniques, Freshwater Resou	irces)	09/2004 – 05/2006
<ul> <li>Professional Development</li> <li>Culturally Responsive and Equitable Evaluation Virtual Learning Series – eeVAL</li> <li>Environmental Education for Sustainability – Mass Audubon</li> <li>Community Engagement Fellows: Beyond Boundaries – Western Washington University Center for Community Learning</li> <li>Co-Designing Conservation with Communities – Conservation Psychology Coaching Service</li> <li>Advanced Placement Environmental Science Workshop – TAFT Educational Center</li> <li>NGSS Curriculum-Writing Workshops (Biology &amp; Chemistry) – Capitol Region Education Council</li> <li>Our Changing Forests Summer Institute for Teachers – Harvard Forest</li> </ul>			

- Redesigning for NGSS JASON Learning
- Building with Biology; Should We Edit the Genome? Center for Research on Interface Structures and Phenomena
- The Secret World Inside You AMNH Educator Evening

## **Organizations & Outreach**

- UConn Institute of the Environment Belonging, Equity, Diversity & Inclusion (BEDI) Committee (2023-present)
- Connecticut Outdoor & Environmental Education Association Board Member (2021-present)
- 4-H Adventures in STEM (2019)
- Sisters in STEM (2019)

## **Grants & Awards**

- 2023 Environmental Education Grant Community Foundation of Eastern Connecticut: Lead (\$60k)
- 2023 Environmental Education Grant U.S. Environmental Protection Agency: Lead (\$133k)
- 2023 Teaching Enhancement Grant UConn CAHNR: Team (\$13k)
- 2022 Environmental Education Grant Community Foundation of Eastern Connecticut: Lead (\$30k)
- 2021 Facilitators' Choice Recognition STEM for All Video Showcase: Team
- 2021 STEM Achievement Organization Award Connecticut Science Center: Organization
- 2020 Excellence in Land Conservation Connecticut Land Conservation Council: Organization
- 2020 Public Choice Recognition STEM for All Video Showcase: Team
- 2019 David & Nancy Bull Extension Innovation Award UConn CAHNR: Team (\$5k)
- 2019 Provost's Award for Excellence in Community Engaged Scholarship UConn: Team
- 2017 Education and Outreach Grant Society for the Study of Evolution: Individual (\$900)

### **Professional Workshops & Presentations**

- 2023 Connecticut Outdoor & Environmental Education Association Workshop. Virtual. Freidenfelds, N. Environmental Education Messaging.
- 2023 Connecticut Land Conservation Conference. Wesleyan, CT. Cane, C., Cisneros, L., **Freidenfelds, N.**, Gichuru, L., and Seldon, S. *Culturally-relevant youth mentorship for inclusive environmental action*.
- 2022 Connecticut Outdoor & Environmental Education Association Annual Conference. Simmons, J., **Freidenfelds, N.**, Campbell, T., and Volin, J.C. *Measuring the impact of an informal science education program.*
- 2022 National Science Foundation STEM for All Video Showcase. Freidenfelds, N., Campbell, T., Chadwick, C., Cisneros, L., Dickson, D., Simmons, J., and Volin, J.C. *Impacts of intergenerational community conservation*. https://stemforall2022.videohall.com/presentations/2495
- 2022 American Chemical Society New Haven Local Section Seminar Series. Virtual. Cisneros, L. and **Freidenfelds**, N. *Program design principles to support teen-adult conservation efforts*.
- 2022 NARST Annual International Conference. Vancouver, BC. Simmons, J., Campbell, T., Moss, D.M., Volin, J., Arnold, C., Cisneros, L.M., Chadwick, C., Dickson, D., and Freidenfelds, N. Intergenerational Family Learning in Conservation Science.
- 2021 National Science Foundation STEM for All Video Showcase. **Freidenfelds, N.**, Campbell, D., ... Volin, J.C. *Socially-Distanced Community Conservation Partnerships*. <u>https://stemforall2021.videohall.com/presentations/2079</u>
- 2020 National Science Foundation STEM for All Video Showcase. Campbell, T., Arnold, C., Chadwick, C., Cisneros, L., Dickson, D., **Freidenfelds, N.**, Moss, D.M. Rodriguez L., Simmons, J. and Volin, J.C. *Designing for intergenerational community conservation*. https://stemforall2020.videohall.com/presentations/1788
- 2020 CT GIS Day. Virtual. Freidenfelds, N.A. *Team-Up to Apply Geospatial Tools toward Local Environmental Action*.
- 2020 North American Association for Environmental Education. Virtual. **Freidenfelds, N.A.**, ... and Willig, M. Investigating Human Impact on Local Water Resources: An NGSS-Designed Approach.
- 2020 North American Association for Environmental Education. Virtual. Cisneros, L.M., **Freidenfelds, N.A.**, Campbell, T., Volin, J., Chadwick, C., Dickson, D., Moss, D. and Simmons, J. *Program Design Principals to Support Teen-Adult Community Partnerships' Conservation Efforts*.
- Ecological Society of America. Virtual. Cisneros, L.M., Volin, J.C., Simmons, J., Campbell, T., Chadwick, C., Dickson,
   D., and Freidenfelds, N.A. Conservation in action: supporting teen-community partnerships and demonstrating collective environmental impacts.
- 2010 Alabama Partners in Amphibian and Reptile Conservation. Andalusia, AL. **Freidenfelds, N.A.**, and Langkilde, T.L. *Consequences of envenomation: red imported fire ants have delayed effects on survival but not growth of native fence lizards*.
- 2005 Joint Meeting of Ichthyologists and Herpetologists. Tampa, FL. **Freidenfelds, N.A**., and Babbitt, K.J. *Initial response* of wood frogs (Rana sylvatica) to experimental manipulation of buffer widths around vernal pools in Maine.

### **Publications**

- Freidenfelds, N.A., J. Deitloff and T. Langkilde. In review. Lessons from Lizards: Adaptation to Invasive Ants. Lessons in Conservation.
- Cisneros, L., Campbell, T., **Freidenfelds**, N., Lindemann, A., Elliot-Famularo, H., Chadwick, C., Dickson, D., & Park, B. 2023. Eco-digital storytelling: Engaging historically excluded populations in environmental action through mentoring, geospatial technology, and digital media storytelling. *Frontiers in Education*. 7:1083064. [10.3389/feduc.2022.1083064]
- Simmons, J., Campbell, T., Moss, D. M., Volin, J. C., Arnold, C., Cisneros, L. M., Chadwick, C., Dickson, D. & Freidenfelds, N. 2022. 'Part of our DNA': intergenerational family learning in informal science. *International Journal of Science Education, Part B Communication and Public Engagement*. [10.1080/21548455.2022.2099032]
- Freidenfelds, N. A., Cisneros, L. M., Cabaniss, A. D., Colby, R., Meadows-McDonnell, M., Arnold, C., Campbell, T., Chadwick, C., Dickson, D., Moss, D., Simmons, J., Singh, A. K., & Volin, J. C. 2022. Pivoting during a pandemic: Transforming inperson environmental STEM field programs into immersive, experiential distance learning. *Connected Science Learning*. 4(2).
- Cisneros, L. M., Simmons J., Campbell T., **Freidenfelds N.,** Arnold C., Chadwick C., Dickson D., Moss D., Rodriguez L., & Volin J. C. 2021. Program design principles to support teen-adult community conservation efforts. *Frontiers in Education*, 6,674667. [10.3389/feduc.2021.674667]
- Urban, M.C., **N.A. Freidenfelds** and J.L. Richardson. 2020. Microgeographic divergence of functional responses among salamanders experiencing antagonistic selection from apex predators. *Proceedings of the Royal Society B*. 287: 20201665. [10.1098/rspb.2020.1665]
- Freidenfelds, N.A., Cisneros, L.M., Rodriguez, L., Byung-Yeol, P., Campbell, T., Arnold, C., Chadwick, C., Dickson, Moss, D., Volin, J. and M. Willig. 2020. Investigating Human Impact on Local Water Resources & Exploring Solutions. *The American Biology Teacher*. 82(9): 613–617. [10.1525/abt.2020.82.9.613]
- Freidenfelds, N.A. 2019. Community connections through conservation. *Connecticut Wildlife*. 39(6):16-18.
- MacLeod, K.J, **N.A. Freidenfelds**, G.M. Leighton, and T. Langkilde. 2019. Tree selection is linked to locomotor performance and associated noise production in a lizard. *Journal of Zoology*. 307(3):195-202. [10.1111/jz0.12632]
- Gallagher, A.J., P.F. Trull, M.S. Faherty, **N. Freidenfelds**, J. Heimbuch and M.J. Cherry. 2019. Predatory behaviors of coyotes (*Canis latrans*) living in coastal ecosystems. *Ethology Ecology & Evolution*. 31(2):198-204. [10.1080/03949370.2018.1521874]
- Urban, M.C., J.L. Richardson, **N.A. Freidenfelds**, D.L. Drake, J.F. Fischer and P.P. Saunders. 2017. Microgeographic adaptation of wood frog tadpoles and potential evolutionary resilience to an expanding predator. *Copeia*. 105(3):451-461. [10.1643/CG-16-534]
- Graham, S.P., **N.A. Freidenfelds**, C.J. Thawley, T.R. Robbins and T. Langkilde. 2017. Are Invasive Species Stressful? The Glucocorticoid Profile of Native Lizards Exposed to Invasive Fire Ants Depends on the Context. *Physiological and Biochemical Zoology*. 90(3):328-337. [10.1086/689983]
- Snyder, K.T., **N.A. Freidenfelds** and T.E.X. Miller. 2014. Consequences of sex-selective harvesting and harvest refuges in experimental meta-populations. *Oikos*. 123:309–314. [10.1111/j.1600-0706.2013.00662.x]
- Urban, M.C., J.L. Richardson and **N.A. Freidenfelds**. 2014. Plasticity and genetic adaptation mediate amphibian and reptile responses to climate change. *Evolutionary Applications*. 7:88–103. [10.1111/eva.12114]
- Robbins, T.R., N.A. Freidenfelds and T. Langkilde. 2013. Native predator eats invasive toxic prey: evidence for increased incidence of consumption rather than aversion-learning. *Biological Invasions*. 15:407–415. [10.1007/s10530-012-0295-9]
- Freidenfelds, N.A. 2012. Natural history notes: *Acris crepitans* (Northern Cricket Frog). Fire Ant Envenomation. *Herpetological Review* 43:117.
- **Freidenfelds, N.A.**, T. Robbins and T. Langkilde. 2012. Evading invaders: the effectiveness of a behavioral response. *Behavioral Ecology* 23:659–664. [10.1093/beheco/ars011]
- Graham, S.P., **N.A. Freidenfelds**, G.M. McCormick and T. Langkilde. 2012. The impacts of invaders: Basal and acute stress glucocorticoid profiles and immune function in native lizards threatened by invasive ants. *General and Comparative Endocrinology* 176:400–408. [10.1016/j.ygcen.2011.12.027]
- **Freidenfelds, N.A.**, J.L. Purrenhage and K. Babbitt. 2011. The effects of clearcuts and forest buffer size on post-breeding emigration of adult wood frogs (*Lithobates sylvaticus*). *Forest Ecology and Management* 261:2115–2122. [10.1016/j.foreco.2011.03.005]
- Langkilde, T. and **N.A. Freidenfelds**. 2010. Consequences of envenomation: red imported fire ants have delayed effects on survival but not growth of native fence lizards. *Wildlife Research* 37:566–573. [10.1071/WR10098]
- Freidenfelds, N.A. and T. Langkilde. 2009. Natural history notes: *Sceloporus undulatus* (Eastern Fence Lizard). Diet. *Herpetological Review* 40:439.
- Lance, S.L., C. Hagen, T.C. Glenn, **N.A. Freidenfelds** and T. Langkilde. 2009. Development and characterization of seventeen polymorphic microsatellite loci in the eastern fence lizard, *Sceloporus undulatus*. *Conservation Genetics Resources*

1:233–236. [10.1007/s12686-009-9057-0]

- Skelly, D.K., S.R. Bolden, L.K. Freidenburg, **N. Freidenfelds**, and R. Levey. 2007. *Ribeiroia* infection is not responsible for Vermont amphibian deformities. *EcoHealth* 4:156–163. [10.1007/s10393-007-0103-7]
- Skelly, D. K., S.R. Bolden, M.P. Holland, L.K. Freidenburg, **N.A. Freidenfelds**, and T.R. Malcolm. 2006. Urbanization and disease in amphibians. *in* Collinge, S.K., and C. Ray, (eds.). Disease Ecology: Community structure and pathogen dynamics. Oxford University Press. 264 p.