

# Harrison B Goldspiel

 <https://hgoldspiel.github.io> | [harrison.goldspiel@maine.edu](mailto:harrison.goldspiel@maine.edu) 

## Education

University of Maine	Orono, ME
PhD Candidate, Ecology & Environmental Science	Sep 2021–Present
SUNY College of Environmental Science and Forestry	Syracuse, NY
MSc, Ecology	Jan 2016–May 2018
Brandeis University	Waltham, MA
BA, Environmental Studies	Aug 2009–May 2013

## Peer-reviewed publications

8. Goldspiel, HB, Hoffmann, KE, Charney, ND. 2025. Light at the end of the funnel: Taxonomic biases of trapping methods for studying wetland-breeding amphibians at variable depths. *Journal of Herpetology* 59.1: 1–10. <https://doi.org/10.1670/2460810>
7. Gould, E, Fraser, HS, Parker TH, Nakagawa, S, Griffith, SC, Vesk, PA, Fidler, F, Hamilton DG, ... Goldspiel, HB, et al. 2025. Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. *BMC Biol.* 23.35. <https://doi.org/10.1186/s12915-024-02101-x>
6. Goldspiel, HB, Hoffmann, KE, Charney, ND. 2023. *Ambystoma laterale-jeffersonianum* complex (Unisexual *Ambystoma*). Longevity. *Herp. Review.* 54.4: 614–615.
5. Goldspiel, HB, Barr, B, Badding, J, Kuehn, D. 2023. Snapshots of nature-based recreation across large rural landscapes: Insights from geotagged photographs in the northeastern United States. *Environmental Management* 71.2: 234–248. <https://doi.org/10.1007/s00267-022-01728-2>
4. Tapia, WA, Goldspiel, HB, Gibbs, JP. 2022. Introduction of giant tortoises as a replacement “ecosystem engineer” to facilitate restoration of Santa Fe Island, Galapagos. *Restoration Ecology* 30.1: e13476. <https://doi.org/10.1111/rec.13476>
3. Kuehn, D, Gibbs, JP, Goldspiel, HB, Barr, B, Sampson, A, Moutenot, M, Badding, J, Stradtman, L. 2020. Using social media data and park characteristics to understand park visitation. *Journal of Park and Recreation Administration.* <https://doi.org/10.18666/JPRA-2019-10035>.
2. Goldspiel, HB, Cohen, JB, McGee GG, and Gibbs, JP. 2019. Forest land-use history affects outcomes of habitat augmentation for amphibian conservation. *Global Ecology and Conservation* 19: e00686. <https://doi.org/10.1016/j.gecco.2019.e00686>.
1. Goldspiel, HB, Newhouse, AE, Powell, WA, and Gibbs, JP. 2019. Effects of transgenic American chestnut leaf litter on growth and survival of wood frog larvae. *Restoration Ecology* 27.2: 371–378. <https://doi.org/10.1111/rec.12879>.

## Book chapters

2. Tapia, WA, Goldspiel, HB, Sevilla, C, Málaga J, Gibbs, JP. 2021. Santa Fe Island: Return of Tortoises via a Replacement Species. In: Gibbs, JP, Cayot, L, Tapia, WA, editors. *Galapagos Tortoises, 1<sup>st</sup> Edition*. Academic Press, Cambridge, MA.

1. Gibbs, JP and **Goldspiel, HB**. 2021. Population Biology. In: Gibbs, JP, Cayot, L, Tapia, WA, editors. *Galapagos Tortoises, 1<sup>st</sup> Edition*. Academic Press, Cambridge, MA.

## Reports

- Tapia, WA, **Goldspiel, HB**, Sevilla, C, and Gibbs, JP. 2021. Protocolo para Monitoreo Ecológico en la Isla Santa Fe, Galápagos. Galápagos Conservancy y Dirección del Parque Nacional Galápagos através de la Iniciativa para la Restauración de las Tortugas Gigantes Puerto Ayora, Galápagos, Ecuador. 28 Pages.
- Tapia, WA, **Goldspiel, HB**, Sevilla, C, and Gibbs, JP. 2019. Evaluación de la población de tortugas gigantes de la isla Española (*Chelonoidis hoodensis*) y la necesidad de mantener un programa de reproducción y crianza inicial en cautiverio. Report prepared for the Galapagos National Park Directorate. GTRI, Galapagos Conservancy. 47 Pages.
- Pérez-Juan, CM, **Goldspiel, HB**, Cuevas, J, and Tapia, WA. 2019. Estudio preliminar sobre la presencia y distribución de *Chelonoidis porteri* en las fincas de la zona sudeste colindantes al Parque Nacional Galápagos. Report prepared for the Galapagos National Park Directorate. GTRI, Galapagos Conservancy. 5 Pages.

## Science writing

- Edna and AI. 2025. *Spire: The Maine Journal of Conservation and Sustainability* Vol. 9.

## Professional work experience

Dept. of Wildlife, Fisheries, & Conservation Biology, UMaine (<https://umaine.edu/wle/>) Orono, ME  
Graduate Research / Teaching Assistant (20 hrs per week) Sep 2021–Present

- Developing novel monitoring techniques for cryptic species in forested wetlands
- Studying landscape genetic patterns of threatened salamanders in the northeastern US
- Teaching students basic field and data methods for terrestrial and aquatic ecosystems

Environmental Design and Research (<https://www.edrdpc.com/>) Syracuse, NY  
Environmental Analyst (40 hrs per week) Apr–Aug 2021

- Performed wetland and stream delineations for renewable energy development projects
- Wrote wildlife reports for permitting applications pursuant to Chapter XVIII (NYS ORES)

Galapagos Conservancy ([www.galapagos.org](http://www.galapagos.org)) Galápagos, Ecuador  
Biologist (40 hrs per week) Sep 2018–Jul 2020

- Assisted in planning seven field expeditions to remote islands
- Designed and implemented ecological monitoring plans for threatened island species
- Researched trends and interactions in tortoise populations, plant communities, and climate

Department of Environmental and Forest Biology, SUNY-ESF ([www.esf.edu](http://www.esf.edu)) Syracuse, NY  
Research Assistant / Graduate Teaching Assistant (20–40 hrs per week) Jan 2016–Jun 2019

- Designed research and analyzed data on restoration outcomes for forest plants and wildlife
- Investigated human dimensions of nature recreation and conservation in the USA and Siberia
- Taught basic sampling and identification methods for plants, amphibians, and reptiles

Sierra Streams Institute (SSI) ([www.sierrastreamsinstitute.org](http://www.sierrastreamsinstitute.org)) Nevada City, CA  
AmeriCorps member, River Scientist (40 hrs per week) Nov 2014–Oct 2015

- Monitored long-term ecological research sites in the northern Sierra Nevada foothills
- Organized and led community initiatives for ecological research, restoration, and education

**Archbold Biological Station ([www.archbold-station.org](http://www.archbold-station.org))**

Venus, FL

Restoration Ecology &amp; Herpetology Research Intern (40 hrs per week)

Mar–Oct 2014

- Monitored amphibian, reptile, and invertebrate populations in Florida scrub habitats
- Collected and managed data on wetland hydrology and biochemistry in seasonal ponds
- Investigated effects of fire management and feral hogs on wetland communities

**Suburban Ecology Project, Brandeis University ([www.brandeis.edu](http://www.brandeis.edu))**

Waltham, MA

Research Intern in Forest Ecology and Management (20 hrs per week)

Jan–May 2013

- Surveyed plant and land cover profiles of long-term forest monitoring plots in Weston, MA
- Apprenticed on education-based maple sugar, firewood, and conservation programs

**Teaching and mentoring experience**

Teaching Assistant:

- Problem Solving in Conservation Biology (SUNY-ESF, Spring 2016)
- Dendrology (SUNY-ESF, Fall 2016, Fall 2017)
- Herpetology (SUNY-ESF, Spring 2017)
- Ecology Lab (UMaine, Fall 2022, Fall 2023, Fall 2024)

Instructor:

- Field Herpetology (one-day module) (SUNY-ESF, Summer 2016, Summer 2021)
- Conservation Biology (guest-lecturer, social ecological systems) (UMaine, Spring 2022–2024)

Mentored various undergraduate students in the field and lab, including:

- **SUNY-ESF:** Noah Garwood, Caden Richardson, Cassie Schlosser, Britton Conway, Alyssa Dugan, Allie Sholk, Monica Banghart, Alyssa Dugan, Vivan Steinbaugh, James Lee, Tim Bova
- **University of Maine:** Emma Winiarski, Lilia Membrino, Caroline Clemmer, Aidan Fogg, Alamea Banks, Ashton Groneman, Brendan Harris, Kiley Chen, Oluwadamilola Kolawole, Jaidyn Negley, Astrid Niles, Sarah Costa, Meaghan Erlebach

**Invited talks**

**Goldspiel, HB.** 2025. Exploring the capacity of eDNA for studying cryptic salamanders and vernal pool biodiversity in Maine. *Maine Association of Wetland Scientists*, Spring 2025 Meeting.

**Goldspiel, HB.** 2021. Restoring giants: conservation successes and challenges for island rewilding in Galápagos, Ecuador. *Department of Integrative Biology, University of Texas-Austin*.

**Conference presentations**

**Goldspiel, HB,** Kubel, JE, Grey, EK, Charney, ND, Blanco-Ortiz, P, Kaganer, A, Davis, S, Stoeckle, M. 2024. “Using eDNA to study unisexual *Ambystoma* dynamics across the northeastern US.” Talk at Northeast Partners in Amphibian & Reptile Conservation, 28–30 July 2024, Winter Harbor, ME, USA.

**Goldspiel, HB,** Kubel, JE, Grey, EK, Charney, ND, Blanco-Ortiz, P, Kaganer, A, Davis, S, Stoeckle, M. 2024. “Using eDNA to study unisexual *Ambystoma* dynamics across landscapes.” Talk at the unisexual *Ambystoma* symposium at Society for the Study of Amphibians & Reptiles, 26–30 June 2024, Ann Arbor, MI, USA.

**Goldspiel, HB,** Hoffmann, K, Charney, ND. 2023. “Deep-water funnel traps improve capture rates of cryptic salamanders in the *Ambystoma laterale* complex.” Poster at Northeast Partners in Amphibian & Reptile Conservation, 25 July, 2023, Middletown, CT, USA.

- Goldspiel, HB**, Kubel, JE, Grey, EK, Charney, ND, Blanco-Ortiz, P, Kaganer, A, Davis, S, Stoeckle, M. 2023. "Disentangling a cryptic salamander complex with eDNA: a landscape assessment tool for the *Ambystoma laterale-jeffersonianum* complex." Talk at the Joint Meeting of Ichthyologists & Herpetologists, 15 July, 2023, Norfolk, VA, USA.
- Goldspiel, HB**, Kubel, JE, Grey, EK, Charney, ND. 2022. "Disentangling a cryptic salamander complex with eDNA: a landscape assessment tool for unisexual *Ambystoma* and their sperm-hosts." Poster at the Maine chapter of The Wildlife Society, Dec 2, 2022, Orono, ME, USA.
- Goldspiel, HB**, Kubel, JE, Grey, EK, Charney, ND. 2022. "Disentangling a cryptic salamander complex with eDNA: a landscape assessment tool for unisexual *Ambystoma* and their sperm-hosts." Poster at the Maine-eDNA Symposium, Dec 1, 2022, Orono, ME, USA.
- Goldspiel, HB**, Barr, B, Badding, J, and Kuehn, D. 2022. "Using crowdsourced photography and automated image classification to understand spatiotemporal patterns of nature-based recreation in the Northern Forest, USA." Talk at the North American Congress for Conservation Biology. July 19, 2022. Reno, NV, USA.
- Goldspiel, HB**, Tapia, WH, Cayot, LJ, Rueda, D, Sevilla, CS, Shoemaker, KT, and Gibbs, JP. 2020. "From near-extinction to recovery: conservation successes and challenges for the Española tortoise (*Chelonoidis hoodensis*) in Galápagos, Ecuador." Talk at the Latin American Congress for Conservation Biology. July 1–3, 2020. Virtual.
- Goldspiel, HB**, Nagel, LD, Schlesinger, MD, Waddell, J, Curatolo, J, and Gibbs, JP. 2019. "Long-term effects of landscape restoration on amphibian populations: Insights from a decade of monitoring constructed vernal pools in central New York." Talk at the New York State Wetlands Forum. April 2–3, 2019. Saratoga Springs, NY, USA.
- Goldspiel, HB**. 2017. "Spatial and historical drivers of pool-breeding amphibian occupancy in central New York." Poster at the Student Conference for Conservation Science. October 11–13, 2017. New York, NY, USA.
- Goldspiel, HB**. 2017. "Spatial and historical drivers of pool-breeding amphibian occupancy in central New York." Poster at the Joint Meeting of Ichthyologists & Herpetologists. July 12–16, 2017. Austin, TX, USA. (*best poster in Ecology, Natural History, Distribution and Behavior*)

## Honors and awards

### University of Maine College of Earth, Life, and Health Sciences

- Graduate Service Award (Spring 2025)

### University of Maine Graduate School

- Chase Distinguished Research Assistantship (Spring 2025): \$20,000

### The Wildlife Society, Wetland Working Group

- Wetland Habitat and Research Scholarship (Fall 2024): \$500

### Maine Association of Wetland Scientists

- Research Stipend (Spring 2024): \$2000

### University of Maine Graduate Student Government

- Graduate Student Travel Grant (Spring 2023): \$421
- *Senator of the Year* Award (Spring 2023)

### Society for the Study of Amphibians and Reptiles

- Victor Hutchinson Student Poster Award in Ecology (Summer 2017)

### Chicago Herpetological Society

- Graduate Student Research Grant (Summer 2017): \$500
- SUNY-College of Environmental Science and Forestry**
- OIGS Travel Grant (Summer 2017): \$500
  - GSA Travel & Research Grants (Summer 2017): \$1000
- Norcross Wildlife Foundation**
- Research Equipment Grant (Summer 2015): \$3000

## Professional memberships

Northeast Partners in Amphibian and Reptile Conservation	2021–Present
The Wildlife Society	2020–Present
The Ecological Society of America	2017–Present
Society for Conservation Biology	2017–Present
Society for the Study of Amphibians and Reptiles	2016–Present

## Service

**Peer-review:** *Ambio*, *Animal Conservation*, *Biological Journal of the Linnean Society*, *Ecological Indicators*, *Global Ecology & Conservation*, *Herpetological Conservation & Biology*, *Herpetological Review*, *Journal of Herpetology*, *Journal of Fish and Wildlife Management*, *Northeastern Naturalist*

### Outreach:

- Maine Master Naturalist Program (visiting lecturer in Herpetology)
- Bangor Land Trust (lead vernal pool walks on BLT properties)

### Northeast Partners in Amphibian and Reptile Conservation (NEPARC)

- Steering Committee (Nov 2024–Present)

### University of Maine Department of Wildlife, Fisheries, and Conservation Biology

- Seminar Committee (Jan–Dec 2024)

### University of Maine Graduate Student Government

- Senator (Jan 2023–July 2023)
- Liaison Officer (Nov 2023–Nov 2024)

### University of Maine Graduate Workers Union–UAW

- Organizing Committee (Sept 2022–Present)
- Elections Committee (Sep 2023–Present)

### Coding Club (Dept. Wildlife, Fisheries, and Conservation Biology, University of Maine)

- Facilitator and co-instructor, led workshops on data visualization and reproducibility (Fall 2022)

### Data Science Workshop Series (Ecology and Environmental Sciences, University of Maine)

- Facilitator and co-instructor, led workshop on reproducibility and GitHub (Spring 2023)

### Spire: The Maine Journal of Conservation and Sustainability

- Editor (Fall 2022–Present)

### Galapagos statsbeeRs (2019–2020)

- Co-founder of collaborative data science group for conservation partners in the Galapagos

### Sierra Nevada AmeriCorps Partnership (2014–2015)

- AmeriCorps member; watershed science, education, and conservation

## Other experience

### Tutoring

- RStudio, Data Visualization, Statistics, Ecology

### Bike & Build ([www.bikeandbuild.org](http://www.bikeandbuild.org))

- Fundraised over \$4,600 and raised awareness about affordable housing issues in the US
- Rode from New Hampshire to Vancouver, BC (3767 mi.), with 30 other cyclists in 2013
- Facilitated discussions about affordable housing and bike safety in towns across the US

## Additional skills and certifications

- Wilderness First Responder (July 2019-2022)
- CPR & First Aid (July 2019-2022, 2023–Present)
- Multi-day backpacking and backcountry trip planning (10+ years, 1000+ miles)
- Wetland/stream delineations (100+ hours)
- Software: RStudio, ArcGIS, QGIS, GitHub, MEGA, Geneious, Camelot, Microsoft Office
- Spanish proficient (10+ years)