

# Harrison B Goldspiel

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## Education

### University of Maine

PhD Candidate, Ecology & Environmental Science

Orono, ME

Sep 2021–Present

### SUNY College of Environmental Science and Forestry

MSc, Ecology

Syracuse, NY

Jan 2016–May 2018

- Thesis: *Forest Legacy Effects on Amphibian Populations: Integrating Land and Life Histories in Conservation*

### Brandeis University

BA, Environmental Studies

Waltham, MA

Aug 2009–May 2013

- Minor in Health: Science, Society and Policy (HSSP)

## Peer-reviewed publications

8. Goldspiel, HB, Hoffmann, KE, Charney, ND. *In review*. Light at the end of the funnel: Taxonomic biases of aquatic funnel traps and glow sticks for studying wetland-breeding amphibians. *Journal of Herpetology*.
7. Gould, E, Fraser, HS, Parker TH, Nakagawa, S, Griffith, SC, Vesk, PA, Fidler, F, Hamilton DG, ... Goldspiel, HB, et al. *In review*. Same data, different analysts: variation in effect sizes due to analytical decisions in ecology and evolutionary biology. *BMC Biology*.
6. Goldspiel, HB, Hoffmann, KE, Charney, ND. 2024. *Ambystoma laterale-jeffersonianum* complex (Unisexual *Ambystoma*). Longevity. *Herpetological Review*.
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. <https://doi.org/10.1016/B978-0-12-817554-5.00020-4>

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.  
<https://doi.org/10.1016/B978-0-12-817554-5.00026-5>

## 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.

## 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 multi-day 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 plant and wildlife spp.
- 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)

Instructor:

- Field Herpetology (one-day module) (SUNY-ESF, Summer 2016, Summer 2021)

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, and James Lee
- **University of Maine:** Emma Winiarski, Lilia Membrino, Caroline Clemmer, Aidan Fogg, Alamea Banks, Ashton Groneman, Brendan Harris, Kiley Chen, and Oluwadamilola Kolawole

**Invited talks**

**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 given at Northeast Partners in Amphibian and Reptiles Conservation (NEPARC), 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 given in the unisexual *Ambystoma* symposium at Society for the Study of Amphibians and Reptiles (SSAR), 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 presented at Northeast Partners in Amphibian and Reptile Conservation (NEPARC), 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 given at the Joint Meeting of Ichthyologists and Herpetologists (JMIH), 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 presented 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 given at the North American Congress for Conservation Biology (NACCB). 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 given at the Latin American Congress for Conservation Biology (LACA). 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 given 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 presented 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 presented at the *Joint Meeting of Ichthyologists and Herpetologists*. July 12–16, 2017. Austin, TX, USA. (*best poster in Ecology, Natural History, Distribution and Behavior*)

## Honors and awards

### 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 Grant (Summer 2017) \$500
- GSA Research Grant (Summer 2017) \$500

### Norcross Wildlife Foundation

- Research Equipment Grant (Summer 2015) \$3000

## Professional memberships

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:** *Animal Cons.*, *Global Ecol. & Cons.*, *Ecol. Indic.*, *Herp. Cons. & Biol.*, *Herp. Review*, *Journal of Herpetology*, *Journal of Fish and Wildlife Mgmt.*, *Northeastern Naturalist*

### Outreach:

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

### University of Maine Graduate Student Government

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

### 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, informal group for workshopping and troubleshooting data science problems for conservation groups 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 (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 (NOLS, July 2019–2022)
- CPR & First Aid (NOLS, 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, Microsoft Office
- Spanish proficient (10+ years)