

Anna Thonis

PhD Candidate, Ecology & Evolution, Stony Brook University

anna.thonis@stonybrook.edu
annathonis.com | @annainthefield

EDUCATION

Ph.D. Ecology & Evolution 2018 –	Stony Brook University Dissertation: <i>Uncovering patterns of competition, demography, and distributions in Puerto Rican anoles</i> Advisor: Dr. H. Resit Akçakaya
M.S. Biology 2018	Rensselaer Polytechnic Institute Thesis: <i>Climate-induced Distributional Shifts for Puerto Rican Anoles</i> Advisor: Dr. Brad Lister
B.S. Environmental Science 2017	Rensselaer Polytechnic Institute Dual Degree with Sustainability Studies Advisor: Dr. Richard Bopp

APPOINTMENTS

Instructor of Record 2023	Stony Brook University Landscape Ecology (BIO 319 / BEE 574) <i>3-credit course; cross-listed for undergraduate and graduate students</i>
Adjunct Professor 2023	Fordham University Principles of Geographic Information Systems (GIS) <i>4-credit course for graduate students</i>
Instructor 2022, 2023	Institute for Advanced Computational Science, Stony Brook University Professional Development Seminar for National Science Foundation Research Experience for Undergraduates (NSF REU): Data + Computing = Discovery!

PEER-REVIEWED PUBLICATIONS

**student*

Thonis, A., Stansfield, A., and Akçakaya, H.R. Unravelling the role of tropical cyclones in shaping present species distributions. *Accepted to Global Change Biology*.

Thonis, A. and Akçakaya, H.R. (2024). Experimental evidence that competition strength scales with ecological similarity: A case study using *Anolis* lizards. *Oecologia*. [doi:10.1007/s00442-023-05507-6](https://doi.org/10.1007/s00442-023-05507-6).

Thonis, A., Ford, B.*, Hunter, M., Fung, K.*, Ozcelik, C.*, Werni, C.*, Ye Pan, Z.*, and Prowant, L.P. (2024). Eastern box turtle (*Terrapene carolina carolina*) health and shell damage in an urban landscape. *Chelonian Conservation and Biology*. [doi:10.2744/CCB-1563.1](https://doi.org/10.2744/CCB-1563.1).

Thonis, A. (2023). *Anolis cuvieri* (Puerto Rican Giant Anole). Reproductive ecology. [*Herpetological Review*](#). 54(3):463-464.

Thonis, A., Carlo Mejias, D.*, Rivera Figueroa, N.*, and Velez Torres, E.* (2023). *Diploglossus pleii* (Puerto Rico galliwasp). Courtship behavior. [*Herpetological Review*](#) 54(2):295.

Thonis, A., Ceballos, R.M., Tuen, A.A., and Levesque, D. (2020). High upper limits and a large thermoneutral zone in a small tropical mammal. *Journal of Physiological and Biochemical Zoology* 93: 199-209. [doi:10.1086/708467](#).

Thonis, A. and Lister, B. (2019). Predicting climate-induced distributional shifts for Puerto Rican anoles. *Copeia* 107(2): 262-269. [doi:10.1643/CH-18-046](#).

PUBLICATIONS IN-PREP

Thonis, A., and Akçakaya, H.R. The implications of using range maps in macroecological models of species richness.

GRANTS AND AWARDS

Fellowships

STRIDE Fellowship, 2020 – 2022 (\$68,000)

Two-year fellowship awarded through Stony Brook University's Institute for Advanced Computational Science (funded by a grant through the National Science Foundation).

[STRIDE](#): Science Training and Research to Inform DEcisions.

Graduate Student Research Fellowship, 2021 (\$500)

Center for Latin American and Caribbean Studies, Stony Brook University

To provide research funds and support to graduate students conducting research in any discipline in Latin America or the Caribbean.

Research

Excellence in Ecology & Evolution Award, SBU Ecology & Evolution, 2023 (\$1,000)

Roger Conant Grants in Herpetology – Field Research category, Society for the Study of Amphibians and Reptiles (SSAR), 2023 (\$500)

Honorable Mention (2nd place), E.E. Williams Research grant – Ecology category, the Herpetologists' League (2022)

Cost of Education Grant, Stony Brook Ecology & Evolution, 2022 (\$400)

Seed Grant, Association for Tropical Biology and Conservation (ATBC), 2022 (\$1,000)

Excellence in Ecology & Evolution Award, SBU Ecology & Evolution, 2021 (\$500)

Michael Dee Grant, Herpetological Conservation International, 2021 (\$1,200)

Robert Sokal Research in Statistical Biology Award, SBU Ecology & Evolution, 2021 (\$400)

Theodore Roosevelt Memorial Grant, American Museum of Natural History, 2021 (\$2,037)

Robert Sokal Research in Statistical Biology Award, SBU Ecology & Evolution, 2020 (\$680)

Excellence in Ecology & Evolution Award, SBU Ecology & Evolution, 2020 (\$700)

Awards/Travel

President's Award for Excellence in Teaching by a Graduate Student, Stony Brook University, 2023 (university-wide award, \$1,000)

Distinguished Travel Award, Graduate Student Organization, Stony Brook University, 2023 (\$1,750)

Resource Access Project grant, Graduate Student Organization, Stony Brook University, 2023 (\$1,000)

Departmental Service Award, Stony Brook Ecology & Evolution, 2023

Conservation Leadership Award, Stony Brook Ecology & Evolution, 2022
Professional Development Award, SBU Grad. Student Employment Union, 2020 (\$670)
Anole Annals Photo Competition, 2nd place, 2020
Stony Brook Ecology & Evolution, Recruitment Fellowship, 2018 (\$2,000)
Best Graduate Poster Presentation Award, Rensselaer's Graduate Symposium, 2018
Charlotte Magnum Student Support Award for travel to SICB conferences, 2017 and 2018
W. A. Tarr Award, awarded for scholarship and leadership in the Earth Sciences, 2017
Phalanx, Rensselaer's Leadership Honor Society, 2017

ORGANIZED MEETINGS, EVENTS, SYMPOSIA, AND WORKSHOPS

Meeting Organizer	Caribbean Chapter Meeting, Partners in Amphibian and Reptile Conservation 5-6 April 2024 Arecibo, Puerto Rico meeting website
Co-organizer & Speaker	Ethical, Inclusive, Culturally Aware Fieldwork Workshop hosted by the University of California Davis 27 February 2024 Virtual
Co-organizer & Moderator	Event: Navigating the Grad School Interview hosted by the Diversity, Equity, and Inclusion Committee of the Society for the Study of Amphibians and Reptiles 18 January 2024 Virtual
Symposium Organizer	Towards the Improved Implementation of Species Distribution Models (SDMs): Moving from an Art to a Science Ecological Society of America (ESA) Annual Meeting 6-11 August 2023 Portland, OR
Workshop Co-lead	Interactive, Reproducible, and Accessible Species Distribution Modeling for Conservation with Wallace Student Conference on Conservation Science (SCCS-NY) 4 October 2023 American Museum of Natural History, New York

TEACHING ASSISTANTSHIPS

2023 – 2024	Statistics & Data Analysis , Stony Brook University (2 semesters, 45 students/class)
2018 – 2022	Landscape Ecology , Stony Brook University (3 semesters, ~24 students/class)
2020	Fundamentals of Biology: Organisms to Ecosystems , Stony Brook University (1 semester, ~800 students overseen by three graduate TAs)
2019	Applied Ecology , Stony Brook University (1 semester, ~24 students)

MENTORSHIP AND TRAINING

67 students in total

2019 – 2023	Puerto Rico Field Assistants (38) : Marco A. Acosta Leon*, Paola A. Amador Hernández, Jeilyn D. Arbelo Santiago, Valerie Barreto Bermúdez, Yeissette Burgos, Julio Campis Díaz, Luis Carrero*, Daniela Carlo Mejías*, Thomas Clayton*, Miguel José Costas Sabatier*, Marta Crespo Umpierre, Edgardo Cruz,
-------------	--

Jesús Cruz Torres, Camille Hernández Andújar, Alondra del Mar Valle Hernández*, Claudia del Pilar Cruz Rivera, Eljosel Jiménez Lorenzo*, Alondra Myredis Caro Ruiz*, Sebastián Lima Rosado, Ian C. Matos, Juliana B. Nazario Ortiz*, Arixel X. Ortiz Martínez, Rosanie A. Pérez Salas*, Charlene Pérez Santos, Onellis Pineiro, Debora Pozzi Maldonado*, Alanis Quiñones Vega*, Zulymar Ramos de Trinidad, Alondra Sofía Rivera Amador, Joyce Rivera Bonilla, Nicole Rivera Figueroa*, Julia I. Suárez Durán*, Angelica Victoria Rodriguez Roman, Alejandro Rodriguez, Adriana Vásquez Custodio, Edgardo Vélez Torres*, Armando Vera Colón*, Antonio Villafañá Rosado
**student assisted for more than one field season*

- 2023 **Mark-recapture data entry with Stony Brook undergraduate students (8):** Christopher Alamia, Isabella Pimienta, Taylor Rooney, Somay Oklu, Soyoung Park, Chloe Lee, David Lee, Se Yoon Kim
- 2020 – 2022 **Long Island Eastern Box Turtle project with Stony Brook undergraduate students (7):** Brittany Ford, Kristi Fung, Melissa Hunter, Jaime Mangalathu, Cosku Ozelik, Zhen Ye Pan, Christopher Werni
- 2021 – 2022 **High School Women in Science and Engineering (WISE) Mentor Program through Bellport High School in Brookhaven, NY (5):** Madison Boehler, Emma Butler, Ryann Christie, Sara Eldaroudy, Margret Fuentes
- 2020 – 2021 **High School Women in Science and Engineering (WISE) Mentor Program through Comsewogue High School in Coram, NY (9):** Kaylin Doxey, Taryn Dyckman, Claire Lin, Aqsa Majid, Jamie Noble, Isabella Puleo, Samantha Schwab, Margaret Velasco, and Victoria Vital

TALKS

- 2024 **Three Minute Thesis (3MT), Stony Brook University, New York**
Hurricanes affect the lizards, too
- 2024 **Long Island Natural History Conference, New York**
Eastern Box Turtle (*Terrapene carolina*) shell damage and health in an urban landscape
- 2023 **New York Species Distribution Modeling Discussion Group, New York**
Using GBIF data in macroecological models of species richness
- 2023 **Ecological Society of America, Portland, OR**
Using spatially- and temporally-explicit species distribution models to explore the role of tropical cyclones in shaping Puerto Rican *Anolis* lizard distributions
- 2022 **New York Species Distribution Modeling Discussion Group, New York**
The role of tropical cyclones in shaping distributions of Puerto Rican anoles
- 2022 **Ecological Society of America, Montreal, Canada**
Markers of competition between three Puerto Rican *Anolis* species
- 2022 **Association for Tropical Biology and Conservation, Cartagena, Colombia**
Markers of competition between three Puerto Rican *Anolis* species
- 2022 **Asociacion Estudiantes de Biología, Univ. Puerto Rico Mayaguez, virtual**
From field experiences to graduate school
- 2022 **Stony Brook Department of Ecology and Evolution Annual Retreat**
Markers of competition between three Puerto Rican *Anolis* species

2021	Asociacion Estudiantes de Biologia, Univ. Puerto Rico Humacao , virtual From field experiences to graduate school
2021	Stony Brook STRIDE Brown Bag Lunch , New York Lessons learned: Assembling and leading an undergraduate research team
2021	Asociacion Estudiantes de Biologia, Univ. Puerto Rico Arecibo , virtual Experiencia con investigaciones de campo y escuela graduada
2021	Geek Talks, übergeek Brewing Company , New York How to catch a lizard and why we want to
2021	Northeast Natural History Conference , virtual Eastern Box Turtle (<i>Terrapene carolina</i>) shell damage and health in an urban landscape
2020	Australian Herpetological Society , virtual Competition and climate change: Understanding the future of Puerto Rican anoles
2020	Nature Talks, Moustache Brewing Co. , virtual How to catch a lizard and why we want to
2019	Herpetology Seminar Series , virtual Competition and climate change: Understanding the future of Puerto Rican anoles
2018	Caribbean Partners in Amphibian and Reptile Conservation , Jamaica Predicting climate-induced distributional shifts for Puerto Rican anoles
2018	Rensselaer Polytechnic Institute Graduate Research Symposium , New York Predicting climate-induced distributional shifts for Puerto Rican anoles
2018	Society for Integrative and Comparative Biology , California Predicting climate-induced distributional shifts for Puerto Rican anoles
2017	Society for Integrative and Comparative Biology , Louisiana High upper limits and a large thermoneutral zone in a small tropical mammal

PROFESSIONAL SERVICE AND AFFILIATIONS

Service

2023 –	Organizer, IUCN Anoline Lizard Specialist Group (ALSG) <i>Currently working to re-establish the IUCN ALSG</i>
2023 –	Co-organizer , New York Species Distribution Modeling Discussion Group <i>Regular meetings to discuss SDMs at the American Museum of Natural History</i>
2023 –	Student Representative , Diversity, Equity, and Inclusion (DEI) Committee, Society for the Study of Amphibians and Reptiles (SSAR)
2022 –	Student Representative , Conservation Committee, Association for Ichthyology and Herpetology (ASIH)
2023	Student Representative , Stony Brook Department of Ecology & Evolution Graduate Program Executive Committee
2019 – 2023	Student Representative , Stony Brook Department of Ecology & Evolution Faculty Meetings
2022	Student Representative , Stony Brook Department of Ecology & Evolution Graduate Program Bylaws Committee
2021 – 2023	Mentorship Program Coordinator , Stony Brook Department of Ecology & Evolution
2019 – 2022	Organizer , joint lab meetings for the Akçakaya and D’Andrea Lab Groups

Manuscript Review

2022 – **Associate Editor**, [Reptiles and Amphibians](#)
2022 – **Reviewer**, Biological Conservation; Ecography; Ecological Informatics; Journal of Ecology & Evolution; Ichthyology and Herpetology (*formerly Copeia*), The British Herpetological Journal; Captive and Field Herpetology

Affiliations

2022 – Ecological Society of America (ESA)
2022 – IUCN SSC Young Professionals Group
2020 – Herpetologists' League
2019 – Association for Tropical Biology and Conservation (ATBC)
2019 – International Union for the Conservation of Nature (IUCN), Species Survival Commission (SSC), Climate Change Specialist Group (CCSG)
2019 – Society for the Study of Amphibians and Reptiles (SSAR)
2019 – Association for Ichthyologists and Herpetologists (ASIH)
2018 – Partners in Amphibian and Reptile Conservation (PARC)
2017 – 2019 Society for Integrative and Comparative Biology (SICB)

FIELD WORK EXPERIENCE

2019 – **Puerto Rico:** Captured, measured, tagged Puerto Rican *Anolis* lizards. Over 3,500 unique anoles tagged to date. Recruit and lead team of University of Puerto Rico undergraduate biology students every field season.

2023 – **Long Island, New York:** Assisting the Department of Environmental Conservation with Eastern tiger salamander (*Ambystoma tigrinum*) vernal pool surveys

2016 **Sarawak, Malaysia:** Captured individuals of the lesser tree shrew (*Tupaia minor*) using locally-made cage traps baited with fruit. Took morphometric measurements of all captured individuals and inserted PIT tags.

2015 **Nosy Be, Madagascar:** Conducted independent research on the brumation behavior of the lizard *Zonosaurus rufipes* during northern Madagascar's annual temperature decline. Collaborated with Malagasy locals to collect abundance data on 180+ species of reptiles, amphibians, birds, butterflies, and lemurs.

2014 **Lake George, New York:** Aided in data collection on the invasive zebra mussel (*Dreissena polymorpha*) and Asian clam (*Corbicula fluminea*) in Lake George

MEDIA

2023 Blog post, *Anole Annals*, [Re-establishing the IUCN SSC Anole Specialist Group](#)
2022 TV Series, Herpetological Expert, [Season 2 Battle of the Alphas](#)
2022 Podcast, *At Risk* with Nathan Kim, [What Field Work is Like?](#)
2021 Podcast, *At Risk* with Nathan Kim, [Lizards!](#)
2021 TV Series, Herpetological Expert, [Season 1 Battle of the Alphas](#)
2020 Online article, [GWISE interviews LACS Fellowship winner Anna Thonis](#)
2020 Online article, [Michael Dee grant award winner interview](#)
2020 Podcast, [Storytellers of STEM](#) with Rachel Villani