Connor J. Hughes

508-577-7470 / ConnorHughes926@gmail.com
Sundquist Science Building A134. 8th St. Clarksville, TN. 37040.
Personal Website: cjhughes926.github.io

EDUCATION:

Austin Peay State University, Center of Excellence for Field Biology — Clarksville, TN
Masters of Science in Biology — May, 2022
Concentrating on the Spatial Ecology of Reptiles and Amphibians
Cumulative GPA: 4.0

University of Massachusetts Amherst, College of Natural Sciences — Amherst, MA
Bachelors of Science in in Natural Resource Conservation — May, 2020
Concentration in Wildlife and Fisheries Ecology and Conservation
Certificate in Geographic Information Systems and Technologies
Cumulative GPA: 3.6

Bristol County Agricultural High School — Dighton, MA
Major in Natural Resource Management and Conservation. — June, 2016
Cumulative GPA: 3.9

PUBLICATIONS AND REPORTS:

Hughes, C. J., J. B. Stalker, and C. M. Gienger. (2021) Natural History Notes. *Heloderma suspectum* (Gila Monster) Hibernation. Herpetological Review 52(4): 858.

Hughes, C. J. and C. M. Gienger. (2021) Geographic Distribution. *Crotalus horridus* (Timber Rattlesnake). Herpetological Review 52(4): 797.

C. M Gienger, Jocelyn B. Stalker, **Connor J. Hughes,** Brandon T. Brown and Jason L. Jones. (2021). Gila Monster Spatial Ecology and Habitat Use. Final Project Report – 2019-AUSTINPEAY-1997B. Desert Conservation Program, Clark County, NV.

Stalker, J. B., **C. J. Hughes**, J. S. Gorrell, and C. M. Gienger. (*In preparation.*) Natural History Notes. *Pseudotriton ruber* (Red Salamander) Nesting. Herpetological Review.

Hughes, C. J. and Sutherland, C. (*in preparation.)* Bathymetric variability affects nesting site selection in Loggerhead Sea turtle (*Caretta caretta*) on Cumberland Island National Seashore, GA.

PRESENTATIONS:

Grady, J., **C. Hughes**, J. Stalker, W. Redmond, R. Blanton, and C. M. Gienger (2021). Updating the Amphibian and Reptile Atlases of Tennessee. Presented at the 2021 Tennessee Herpetological Society Conference, Chattanooga, TN.

Stalker, J., **C. Hughes**, J. Jones, and C. M. Gienger (2021). Effects of estimator and sampling regime on home range size of a long-lived lizard. Presented at the 2021 Tennessee Herpetological Society Conference, Chattanooga, TN

Hughes, C. J. (2020). Assessing Heloderma suspectum population variation using on a spatially-explicit niche model. Presented at the 2020 Austin Peay State University Graduate Student Symposium, Clarksville, TN.

Hughes, C. (2017). Significant site level differences between persistence and absence in historical populations of *Urocitellus beldingi*. University of Massachusetts Spring GIS Symposium.

GRANTS AND FUNDING:

2021: Austin Peay State University - Graduate Student Research Support Grant

---

PROFESSIONAL ACCREDITATION AND AWARDS:

The Wildlife Society: Associate Wildlife Biologist Accreditation — Awarded 2020

The Wildlife Society: P.F. English Memorial Award — Awarded 2020

FIELD EXPERIENCE:

Gila Monster Telemetry Technician — Las Vegas, NV
Austin Peay State University, Center of Excellence for Field Biology — Apr 2021-Aug 2021

- Monitored daily movements of several *Heloderma suspectum* using radio telemetry: often climbing steep, uneven, and rocky terrain in order to reach animals locations and working in extreme heat and collected detailed high precision data on movements
- Safely handled live venomous reptiles under permit to collect standardized measurements on animals including snout vent length, head width, mass, tail volume, and blood samples
- Surveyed field sites for new *H. suspectum* individuals and reported any other species of interest incidentally encountered in standardized report forms, preformed standardized road cruising surveys collecting data concerned with species distribution across the county

Amphibian Monitoring Technician — Turners Falls, MA
USGS Northeast Amphibian Research and Monitoring Initiative — Apr 2020-Aug 2020

- Marked hundreds of Red Spotted Newt (*Notophthalmus viridescens*) using colored elastomer implants for future identification in a long-term mark recapture study, newts captured using minnow traps and by standardized dipnet surveys
- Swabbed captured *N. viridescens* to send for lab testing of *Batrochytrium dendrobatidis* and *Batrachochytrium salamandrivorans*, following strict biosecurity and disinfection protocol for equipment and clothing at all sites
- Preformed visual and dip net surveys identifying amphibian species presence and abundance at vernal pools across National Wildlife refuges in Western MA, study pools were found using handheld GPS units, and surveys consisted of egg mass counts, flipping cover, and identifying adult and larval amphibians dip netted around the rim of pools. Standardized hydrological measurements taken on ephemeral pools

Turtle Telemetry Technician Amherst, MA
American Turtle Observatory Apr 2019-Sept 2019

- Monitored the bi-daily movements of 60+ individuals of three species of endangered turtles using radio telemetry: navigating difficult terrain, working independently in the field often in areas with no cell reception, in all weather conditions
- Acquired coordinates for each tracked individual three times a week using a handheld GPS unit, and recorded data regarding habitat variables, including plant community, for each individual's location. Maintained extensive online database with this project information.
- Notched and collected standardized data for any additional turtles encountered to add to thesites data base

Wildlife Technician St. Marys, GA
Cumberland Island National Seashore May 2018 - Aug 2018

- Surveyed the 18.5 miles of beach each morning for Sea Turtle emergences, assessing each emergence, identifying species and probing the sand for a nesting chamber. Collected a genetic sample from each nest and followed standard protocols, and relocated nests laid too low on the shoreline and susceptible to washover back to the dune line
- Created and presented public education programs on sea turtles and project specifics for all ages, encouraging the public to engage with wildlife in a way that does not disrupt nesting.
- Assisted other biologists with a variety of other wildlife projects on the island, including locating and flagged gopher tortoise burrows and setting up pitfall traps for mark recapture, monitoring nesting shorebird populations of Oystercatchers Plovers and Terns, assisting in banding, and Live-Trapping raccoons and other nest predators

Fisheries Technician Sitka, AK
US Forest Service Sitka Ranger District May 2017 – Sept 2017

- Identified and counted pacific salmonid species as they were passed through a weir, marking 20% of passed sockeye salmon for recapture by clipping the adipose fin, and anesthetizing some salmonids for data collection, including sex, mass, standard length, and scale samples.
- Followed bear safety protocol, working safely in proximity with bears and other hazardous wildlife, practiced safe firearms handling techniques
- Lived in and operated remote field camp in close proximity to a team of coworkers for up to 10 days at a time, used critical thinking skills and the limited resources available in the field to solve problems on the fly, operated skiff with outboard motor and larger drop bow to commute to field sites, and communicated with forest service base and other team members using handheld radios

---

<u>DATA ANALYST EXPERIENCE:</u>

Data Analyst Turners Falls, MA
USGS Northeast Amphibian Research and Monitoring Initiative Apr 2020 – *Present*

- Extensive cleanup of several thousand observations worth of data from several years of agency work across the northeastern US, tracking down missing pieces of information needed for analyses by contacting project leaders across the agency
- Coding various analyses, primarily in R and WinBugs, to assist with research going on within the agency, collaborating with a team of researchers within the agency to guide the goals of these analyses and then working independently to carry them out
- Currently preparing a manuscript to reflect some of these analyses

GIS Technician Amherst, MA
University of Massachusetts Amherst Clean Energy Extension. Sept 2018-Jan 2019

- Prepared visual database of local solar potential based on provided parameters, created an interactive map that was visually appealing and easy for stakeholders to understand, and a comprehensive final table outlining solar potential by town and by site classification
- Collaborated with stakeholders to understand the projects goals and needs, met biweekly with project facilitator to reassess project goals and timeline as needed
- Wrote up step by step workflow so that this process could be applied to other towns

---

INSTITUTIONAL SERVICE AND LEADERSHIP EXPERIENCE:

Research Assistant Clarksville, TN
Austin Peay State University Department of Biology. August 2021 – *Present*

- Conducted literature review and assisted in manuscript preparation for several ongoing projects in the department including assisting in preparing deliverables for previous grant contracts
- Entered and cleaned data and preformed analysis using R, Excel, ESRI software, and other database management tools
- Maintained clean databases and a well annotated library of code so that collaboration with other faculty and other partners and stakeholders was easily accomplished

Teaching Assistant for Biology 1011: Intro to Biology Lab for Non-Majors Clarksville, TN
Austin Peay State University Department of Biology. August 2020 – May 2021

- Oversaw students learning via online lab modules through the Hayden-Mcneil lab platform, all labs were taught virtually during the COVID-19 Pandemic.
- Graded student's quizzes and lab reports providing them with extensive online feedback
- Communicated with students via email, zoom, and D2L to help facilitate learning and clarify any unclear material in the course and strengthen students understanding of the covered concepts

Teaching Assistant for NRC 585: Introduction to GIS Amherst, MA
University of Massachusetts Amherst Geosciences Department. Sept 2017 – May 2020

- Oversaw in class lab work, answered students' questions on the lab, rubrics, or ArcMap in general, troubleshooted software issues with ArcMap.
- Graded student's lab and midterm assignments using online software, providing extensive online feedback to students with incorrect answers.
- Updated lab rubrics as needed, and kept a detailed record of areas of struggle to help focus future in class discussions

Student Leader of the UMass Student Chapter of The Wildlife Society Amherst, MA
University of Massachusetts Amherst Vice President 2017-2019 : President 2019-2020

- Organized club events including career development workshops, guest speakers, community involvement activities, and club trips all with the intention of involving and educating students on local flora and fauna, and increasing members skills in the field.
- Led club meetings and facilitates group discussion and student involvement
- Effectively communicated with and delegated tasks to other members of the officer team

Greenhouse Technician and Caretaker Dighton, MA
Bristol County Natural History Museum June 2015 - June 2016

- Care and upkeep of captive wildlife and flora associated with cooperative research, headstarting projects, and museum exhibits, including a variety of protected fishes, amphibians, reptiles, and grasses, many of which are species of special concern in the state
- Used scientific instruments including electronic scales and calipers to collect biological data, keeping detailed lab notes and records of the results
- Followed standardized biosecurity protocols put in place when dealing with lab space containing sensitive species, and safe specimen handing techniques unique to each species.

PROFESSIONAL GOALS AND RESEARCH INTERESTS:

Professional Objective: A career in wildlife ecology and conservation with a skillset focused on spatial ecology and population modeling.

Special interest in population movements and response to anthropogenic impacts including changing climate, habitat loss and fragmentation, and introduced invasive species. There are a wide variety of species that interest me, and I look to apply my skills GIS technologies and quantitative statistics (R) to help better understand any and all wildlife populations. I am however especially interested in herpetofauna and tend to focus any personal research in that area.