

Amanda Lyons

Permanent Address:

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Objective: To gain scientific research experience with the goal of working in and contributing to the field of coastal ecology

Education: **Brown University**, Providence, Rhode Island
Bachelor of Science in Biology, Expected May 2020

Major Subjects:**Completed:**

Genetics
Turtle Physiology
Coastal Ecology and Conservation
Ecology
Plant Physiology and Genetics
Organic Chemistry (I and II)
Statistics
Electricity and Magnetism

Current:

Marine Biology
Ecological and Evolutionary Genomics

Work Experience: **Coastal Conservation Research Program Intern, May-August 2018**
The Wetlands Institute, Stone Harbor, NJ

- Measured, weighed, and PIT (passive integrated transponder)-tagged diamondback terrapins (*Malaclemys terrapin*) as part of ongoing mark-recapture program
- Conducted daily patrols along 38 miles of coastal roads, safely crossing nesting female terrapins and collecting roadkill terrapins with viable eggs
- Conducted eggectomies to remove viable eggs from roadkill females and incubate them as part of TWI's ongoing headstarting program
- Built predator exclosures over terrapin nests on TWI property
- Performed everyday turtle husbandry, feeding and water changes
- Worked with an online mark-recapture database to record and manipulate data
- Conducted independent project comparing modified commercial crab

traps vs. fyke net as methods for trapping diamondback terrapins in tidal creeks (analyzed catch per unit effort, sex ratio, average size trends)

- Presented results of independent project at TWI Intern Symposium
- Gave poster presentation at 2018 Mid-Atlantic Diamondback Terrapin Working Group meeting in Tuckerton, NJ

- Participated in horseshoe crab censuses, identifying male and female horseshoe crabs and turning over stranded crabs as part of reTURN the Favor program in the Delaware Bay
- Assisted in tracking terrapins through the saltmarsh for TWI radio telemetry project
- Participated in black skimmer chick banding
- Assisted in laughing gull counts on Ring Island
- Assisted in comparison of efficacy of crab traps utilizing different types of bycatch reduction devices
- Seined for and measured local fish species
- Participated in Bioblitz at Whitesbog Village, NJ

Skills:

Ecology/Organismal Biology Skills: measuring, weighing, and PIT-tagging turtles; eggectomy (removal of eggs from roadkilled turtles); setting and retrieving fyke net, crab traps; seining; salinity testing using a refractometer; visual analysis of saltmarsh degradation, coastal ecosystem zonation; analysis of scientific papers; bird identification (coastal birds, northeastern region); turtle identification; coastal plant identification

Molecular Biology/Chemistry Skills: DNA extraction; RNA extraction; PCR; gel electrophoresis; vacuum filtration; IR spectroscopy; ¹H NMR; ¹³C NMR; thin layer chromatography; gas chromatography-mass spectroscopy

Familiarity with Microsoft Office (Excel, Word, Powerpoint)

Certifications:

NJ Driver's License, NJ Boating Safety Certificate

Related Experience:

- Attended Rhode Island diamondback terrapin stakeholders' meeting in October 2018 to discuss developing genetic analyses of RI terrapin populations
- Attended Autumn 2017 Raptor Weekend hosted by RI chapter of the Audubon Society

Activities:

Brown University Birding Club, Isshin Kempo Karate (1st dan), Shotokan Karate (1st kyu), Kendō, Le Salon Français French Conversation Table, Japanese Conversation Table

Interests:

Birdwatching, hiking, wildlife photography, travel, martial arts, writing (poetry, fiction), foreign languages (French, Japanese), guitar, visual arts