

Student Reflection

Alicyn Murphy

Alicyn Murphy is a Masters of Environmental Science and Management student at the University of Rhode Island and holds a Bachelors of Fine Arts from New Hampshire Institute of Art. Alicyn spent the summer interning with the Napatree Point Conservation Area.



This past Spring I took my first steps in the Masters of Environmental Science and Management program at University of Rhode Island. My undergrad degree is in fine art which gives me a unique perspective as well as plenty of opportunity to play catch-up. In order to begin to bridge the gap I felt between myself and my peers hailing from science programs, this summer I had the good luck to have the the opportunity to participate in conservation land stewardship activities in the Napatree Point Conservation Area. My focus was on bat activity. My contribution to the summer stewardship activities fits into the ALPINE vision of conservation through academic collaboration. Monitoring is key to being able to deploy successful conservation and stewardship practices; many organizations collaborate to make the summer monitoring programs at Napatree Point possible, including the URI Coastal Institute, the University of Connecticut, and University of Massachusetts Amherst. The results of the monitoring programs that are compiled at the end of each summer season into The State of Napatree Report. All of these reports are made available online [<http://portal.napatreepoint.info/>].



In order to ascertain the bat activity on Napatree Dr. August and I set up a Petterson D500x bat detector in a grove of pitch pine. The Petterson is an ultrasound recording system designed to pick up high frequency sounds, which makes it well-suited for bat calls. We set it to run from roughly dusk until dawn. It is left unattended for about a week at a time—at which point we swap the memory card. Each detection is converted into a sound file that I then process with the software SonoBat. I run commands that scrub out sounds that aren't bat calls and identify by species the ones that are. I can then generate reports from Sonobat that show how many bats of each species passed by the detector while hunting, complete with date and time.

Dr. Charlie Brown of the Rhode Island Department of Environmental Management introduced us to the SonoBat software. I also accompanied him on two “extracurricular” bat monitoring activities that allowed me to have real-world encounters with these amazing little mammals. The first was an exit count, conducted at dusk, of a nest colony of little brown bats in Arcadia park in Southeastern Rhode Island. Four of us flanked the known exits and held counters. I stood gazing into the lowering light, straining my eyes and my ears, hoping to spot bats emerging. It was only as bats were taking wing from the vertical face of the barn that I began to finally see their distinct silhouettes.

The second activity I joined in on was mist netting. The mist nets were raised 25 feet in the air, stretched across a dirt road that cuts through Great Swamp Preserve. Bats fly right into the fine black mesh where they instantly struggle mightily, and quickly become very tangled up. When we let down



the nets and the naturalists reached out with gloved hands the bats went berserk, squeaking frantically and biting fiercely. The minute that each bat was safely untangled from the netting the naturalist positioned it at the mouth of a cardboard envelope. Each bat slipped inside and was comforted and quieted by the dark, close space. They were then weighed, sexed, measured and banded. They were checked for signs of white nose syndrome. I couldn't resist asking if I could take photos; when I had permission, I snapped a few of each bat that was netted. At ALPINE I met people in so many different programs and professions hailing from so many different disciplinary backgrounds. Their kindness and willingness to share their varied experiences with me is something I will not soon forget. Surrounded

by such intelligent and accomplished people I felt unsure that I had anything to contribute. But our workshop leader Jim Levitt encouraged us to consider our strengths, and he specifically mentored me to incorporate my background in the arts into my summer work. This resulted in the illustrations included, drawn from the photos I took that night in the woods.