Eastern Conservation Science Team Member Profile:



Arlene Olivero Sheldon

Freshwater Ecologist/Spatial Analyst Eastern Conservation Science Boston, MA

Arlene just celebrated her 20th year at TNC!

When you were little, what did you want to be?

Growing up, I really wanted to be a small animal veterinarian. I really loved animals, especially my dog and my cat. I almost pursued it, but my dad thought that if I was interested in medicine, I should study to be a doctor, so I could help people. I thus entered University of Michigan as a Biology major instead of Michigan State as a pre-vet major, but human medicine was just not for me, and in my sophomore year I transferred to the UM School of Natural Resources where I found my passion in classes about fish, wildlife, and trees. And ultimately it all worked out, as what we do helps people too, and my dad gained a deep appreciation for nature and conservation as helping nature and people.

Why did you choose your profession?

I have always been really interested in plants and animals. I grew up in the city of Detroit in a very urban area without a lot of exposure to "wild nature", but even there I appreciated the diversity of plants, birds, and their amazing will to survive and flourish and add beauty to the surroundings. I also loved watching *Nature* on PBS and reading my grandmothers old *National Wildlife* magazines which she would send to our house – and in these ways got a vicarious window into many super amazing places and parts of nature. After my freshman year at college, I wrote an application for a Student Conservation Association position saying it was my dream to visit and work in a National Park – and I got placed at Isle Royale National Park in Lake Superior; the least-visited National Park in the Lower 48. Here on this amazing island I went camping for the first time in my life and discovered another world of beauty and peace. I thought it was the most beautiful place in the world, and knew I wanted to work in/for nature after spending two summers as an SCA intern there. It was also at Isle Royale that I was first introduced to GIS and the value of mapping for conservation planning and basic navigating in the backcountry. I have a terrible internal sense of direction, and I found much passion in learning more about creating maps to help people, aid conservation planning, and convey useful information about the ecological systems around.

What's one project that you're working on right now?

I am really excited to be working with the Freshwater Resilience CODA core team. We are looking at what methods we can use to define and map freshwater resilience across diverse regions of North America. I am enjoying learning new things from the team, and it is rewarding to see our Northeastern pilot freshwater resilience work being further built upon and refined into a method that could be applied to provide a robust perspective on North American freshwater ecosystem resilience.

What was an accomplishment from last year that you're proud of?

I am really proud of the Resilient and Connected Landscapes project in the Central US that we just finished last month (you can read more about it in the newsletter). It was challenging and rewarding to move from the east into the new Central U.S. geography. We worked hard to learn about the ecosystems in this new geography, explore new methods, and complete the project. The most interesting part of this analysis for me was working on a new modeling technique using Circuitscape to model downslope movement for climate relief. I had never used Circuitscape before and it was a great chance to learn a new mapping and modeling skill and apply it to our conservation planning questions.

How do you spend your free time?

These days I enjoy spending my free time playing with my kids (Elizabeth, 9 and Abigail,6). I also spend a lot of time walking our dog, gardening, and our family (minus the dog of course) all sing in the Cambridge Science Chorus.



Tell us about your newest family member.

In August, we adopted a 3-year-old hound-mix from Texas. She is very sweet and the kids love her. Coincidentally, she came to us with the same name as my eldest daughter (Elizabeth). Two Elizabeths would have been too confusing, so we shortened the dog's name to Lizzy. Lizzy brings a lot of fun, love, and excitement to our house. My favorite place to hike near Boston is the White Mountains. My kids and I had a nice trip there this summer. We may not make it to the top of every mountain but that doesn't much matter. We enjoy whatever we come across – the streams, the wetlands, the waterfalls, the exposed rock, the salamanders. There is always so much to see and explore.

What is one of your favorite things about fall?

I love fall hiking, Halloween, garden harvest, and fall soup making. This year my garden did quite well, and I had the pleasure of growing Adirondack Blue potatoes for the first time. We have harvested quite a few and my kids are taking well to eating purple potatoes. I haven't tried making my favorite potato leek soup with these purple potatoes yet, however.

Interview conducted by Melissa Clark, November 2018





Flowers and rocky coast of Lake Superior on Isle Royale National Park. Photo Credit: ©Mark Godfrey