This spring, a Northern State University group studied all aspects of aquatic life on San Salvador Island, Bahamas – from sea grass to snails to salt-tolerant trees.

Students made long-lasting memories, and they also developed an excitement for research.

“It’s cool when students are so excited to be developing and carrying out research,” said Dr. Alyssa Anderson, assistant professor of biology, who led the trip.

Students need those research skills, she said – from the ability to think through the scientific process to the ability to write and convince others of the importance of their work.

“In order for students to be successful at biology, they need to have a well-grounded research experience as a component of their career,” Anderson said.

FIRST TRIP OF ITS KIND

Eight students went on the March 4-15 Bahamas study abroad trip over spring break. It was the first of its kind at NSU in that it includes an entire four-credit course. Early in the semester, students developed their own research projects and put together proposals for what they would work on while in the Bahamas.

While on San Salvador, the students (April Moeller, Cierra Martin, Kate Wollman, Lexy Teerink, Malerie Henschel, Misti Ward, Nathan Roberts and Samantha Bahr) carried out various projects. Those included analyzing diversity of invertebrate communities associated with mangrove forests, examining the impact of the invasive Australian Pine on dune plant diversity, exploring species associated with tide pool communities, recording reef fish diversity and behavior, and investigating night-active insect diversity and richness. Anderson and Janne Jockheck Holt led the trip to Gerace Research Centre, which was built as the laboratory component of Anderson’s Marine and Island Ecology course.

In addition to their research, the students also identified local flora and fauna that they learned about prior to the trip, and spent time exploring sandy beach communities, sea grass meadows, coral reef ecosystems, inland scrub forest habitats and local conservation issues. They also visited historical sites – notably, San Salvador Island is thought to be the location where Christopher Columbus first made landfall in the New World.

Upon return, students analyzed data and presented findings at the NSU Undergraduate Research Forum on April 9.

‘THIS TRIP WAS PERFECT’

Wollman, a sophomore from Pierre who is double majoring in biology and environmental science, said the whole trip was incredible.

“I love to be outside, so this trip was perfect. I enjoyed the hiking and snorkeling every day,” Wollman said. “I learned different ways to conduct research by helping other students on the trip. I have never snorkeled before, so learning about all of the different marine organisms up close was awesome. Learning about the history of the island was so interesting.”

Wollman and her research partner studied the diversity of invertebrates in tide pools based on algae cover on San Salvador Island.

She said she would definitely recommend this trip to others.

“It was such an amazing experience,” she said. “Going to the Bahamas and conducting research is a unique opportunity that students from NSU do not get here in the Midwest.”

Wollman said along with relating to biology, the timing of this trip was perfect for her. She hopes NSU is able to offer more study abroad trips over spring break.

FACULTY INVOLVE STUDENTS IN RESEARCH

Also while on San Salvador, Anderson was able to collect some samples of Chironomidae. These tiny aquatic flies are the focus of much of her own research.

All of Northern’s science faculty members try to integrate students into research when they can, Anderson said.

“If students are interested, we’re interested,” she said.

NSU has an enthusiastic group of faculty members who want to pass along that excitement for research onto students.

“If we can move our own research forward with students helping out, that’s a bonus.”