



Undergraduate Researchers Excel at FSU Ecology Conference

Boca Raton, Fla. (March 9, 2016) — Biological Sciences senior Rachael Shanker won first place for her talk on niche partitioning of two different species of octopus at the recent Southeastern Ecology and Evolution Conference (SEEC) at Florida State University. Sarah Mitchell, a senior studying Geology and in the Biological Sciences Honors Thesis Program, won runner-up for her talk on utilizing ground penetrating radar on gopher tortoise nests. Undergraduates Brian Cooney, Laura De Souza and Kent Haizlett also presented at the conference.

Shanker's project, part of Ph.D. student Chelsea Bennice's research, examines what octopuses are eating to determine if they're sharing a food source, therefore competing for food — or if they're consuming different foods, thereby reducing competition with each other. Her research, part of the Honors Program, is looking at when the two species are eating to see if they're feeding at the same time or if they feed at different times, thereby reducing interference between the two species. Randy Brooks, Ph.D., of the Biological Sciences Department, is Shanker's faculty advisor and Bennice is Shanker's mentor.

"The SEEC was a great opportunity to network with other scientists in my field as well as broaden my knowledge of the field of ecology as a whole," Shanker said. "It was also a great opportunity to practice presenting my research and the feedback received during the conference was important in allowing me to better my presentation and research."

Runner-up Mitchell's project uses ground penetrating radar, which is similar to sonar in the way that it uses radio waves to reflect off of different surfaces to create a type of image; it is used through the ground rather than through a fluid.

"We are hoping to better understand what ground penetrating radar is capable of, as well as use it as a non-invasive and non-harmful way to locate the threatened gopher tortoise nests, which could lead to better conservation of the animal," Mitchell said. Mitchell credits Master's student Jessica Huffman as key to her success, along with Evelyn Frazier, Ph.D., FAU Terrestrial Ecology lab research advisor and her teaching assistants, who enhanced her knowledge of research, writing and presenting.

Senior Biology Honors Thesis program student Brian Cooney presented his research on the blood borne parasites that gopher tortoises carry and ticks that are potentially infecting them. Like other FAU undergraduate students, Cooney cited the presentation, feedback and networking afforded at SEEC to be highly beneficial.