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Josh Einis (Sharon, Mass.)

He plays baritone sax in the high school and community bands, writes poetry he hopes to publish and composes music in his spare time, and has two pygmy goats named Ethel and Lucy. Josh Einis of Sharon, Mass. also likes nature, biology and marine science. A senior at Sharon High School, Einis spent five weeks this summer pursuing those interests as a high school intern at the Woods Hole Science Aquarium, part of NOAA's Northeast Fisheries Science Center in Woods Hole, Mass.

"Doing collecting trips and working at the touch tanks was a great experience for me in interacting with the public. I had to learn how to teach many age groups at once," Einis said of the many opportunities he found for pursuing his strong interest in teaching. "Being able to teach basic concepts to the kids and then switch to more advanced concepts for the adults in a half a second was a challenge. It only confirmed my enthusiasm for teaching the sciences."

The annual internships provide students with the opportunity to work with a professional staff caring for a collection of about 140 species of fish and invertebrates common to the continental shelf from Maine to North Carolina, two harbor seals named LuSeal and Bumper, and sometimes sea turtles held for rehabilitation and eventual release. The interns learn about marine animal husbandry, aquarium operations, conservation, and public education. They are also trained to serve as assistant naturalists on public collecting walks to local harbors and estuaries.

Einis began his summer internship at the Aquarium July 6 and also participated in the Aquarium's Careers in Marine Science Seminar July 27 to August 7. The career seminar students get training in marine animal husbandry and basic aquarist chores, hear presentations from scientists working in a variety of marine fields, go on collecting trips, visit other Woods Hole science institutions, and go on field trips to the New Bedford waterfront, Whaling Museum and Buttonwood Park Zoo and Nantucket's Maria Mitchell Association Aquarium. The seminar is designed to give students an idea of what people working in Woods

Hole do, and how different areas of science contribute to the larger effort to understand the marine world and to manage marine resources wisely.

Along with the other summer interns Einis performed the daily chores of running an aquarium, like cleaning tanks and feeding the fish. While it wasn't his favorite activity, he understands that it is all part of the operation. He enjoyed giving talks about the Aquarium's two harbor seals, LuSeal and Bumper, during the twice daily public education programs and learned about potential careers in marine science during visits to neighboring research facilities in Woods Hole.

Einis said he found animal training particularly fascinating because it incorporates psychology and teaching. "It's the teaching frontier that I never thought of. Seeing and understanding basic psychology at work in the seal training, the repetitive positive reinforcement of desired behaviors, was amazing," he said. "A highlight of the internship was personally training the seals; that moment when I realized that the seals were actually responding to me. In fact, I was so inspired that I developed a training plan for my pygmy goats with the strong guidance of the aquarium's lead aquarist, Rachel Metz. At the Buttonwood Zoo, we saw all sorts of animals trained with the same principles: bison, elephants, otters, and others, so I said, 'why not my goats?'"

Einis is a soccer referee in the spring and fall, a math tutor for elementary school students, and says he is "an abstract thinker." His summer experience introduced him to other high school students from Massachusetts to Montana, and was a great opportunity to see what his future career path might be.

"I met a lot of very interesting people," Einis said of the internship. "It has helped me gain some new skills, learn more about marine animals and their environment, and do some things I never had the opportunity to do before. The high school interns worked as a team with college interns and Aquarium staff, and we had a lot of fun at the same time. It was a great way to spend the summer."

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Related links:

Woods Hole Science Aquarium: <http://aquarium.nefsc.noaa.gov/>

Aquarium Blog: <http://whaquarium.wordpress.com/>