Saving the Big Blues

UF group among first U.S. students in international whale research study

For some, a week at the beach means relaxing by the water during the day and enjoying a nice dinner at a full-service resort in the evening. For others, it means waking up at the crack of dawn, skipping a morning shower, loading a small but functional research vessel, looking for large mammals and sleeping in tents on a deserted island – with a possible visit from scorpions and rattlesnakes.

It may sound like a crash course in survival, but in February 2007, seven UF students were the first student group from the United States to take part in an international blue whale research study, working under the direction of world-renowned whale researcher Jorge Urban, Ph.D., on the Sea of Cortez.

Students on the trip included biology alumna Tonya Keiffer '06; graduate student Brian Labuhn; May 2007 graduates Bretta Bauman, biology and pre-veterinary major, Laura Sass, adult/young adolescent science education major, and Susan Young, biology major; and undergraduate students Lauren Bisson, senior biology major, and Molly Smith, junior adult/young adolescent science education major.

Led by faculty member Gwynne Rife, Ph.D., associate professor of biology, the group arrived in La Paz, Mexico, the capital of the Baja California Sur state, Feb. 17 to meet their hosts – representatives from Ecology Project International (EPI). The organization partners students and scientists, working to improve and inspire science education and conservation efforts worldwide, through field-based student-scientist partnerships. Dwight Moody, Ed.D., professor of biology, also accompanied the group.

During the first part of the trip, UF students joined two EPI representatives, Urban, three members of Urban's research team and three crew members to conduct a whale observation study. From the research boat Pez Sapo, translated as "Toad Fish," teams of four rotated through one-hour "guardias," or watches, to look for whale blows. Three team members stood watch for 15 minutes each at different posts while a fourth team member recorded data.

When a whale blow was spotted, Urban and other team members boarded small boats called pangas and headed out to the whale.

By Brianna (Martin) Patterson '03

"It was thrilling," said Young. "You would get in and wait around for the whale to surface again for a breath and then race over to it before it dove back down. My last trip in the panga was amazing. We spent over an hour in the panga trying to spot one, but when we did, we were 10 feet from a blue whale! Getting that close and seeing the largest animal on the planet made the trip for me."

Once the researchers were close enough, they shot the whale with a hollow-ended arrow, capturing a piece of the skin and blubber from which to draw data such as DNA, levels of contaminants and reproduction information. From a small piece of the epidermis, researchers are also able to identify what the whale ate within the last 60 days.

In addition to 16 blue whales, the group saw Bryde's whales, a rare sighting, bottlenose dolphins, long-beaked dolphins, great white sharks, manta rays and sea lions.

"This was a real, authentic research trip. What these students did will actually be used as part of a worldwide project," said Rife, who plans to offer an in-depth public presentation about the experience in the fall.

After four days of whale watching, the group spent some time immersed in Mexico's culture. Part of that included preparing presentations about their research for students at Loreto University, located in Baja, Mexico. UF students prepared posters and presented in Spanish, which proved to be challenging because most of the students had no background in the Spanish language until arriving in Mexico just days before.

The final two nights of the trip were spent in El Santuario, an eco-retreat on the edge of the bay of Ensenada Blanca, where students explored the outdoors and sang traditional Mexican songs by the campfire.

Both undergraduate and graduate students who participated used their experiences as the basis for presentations during UF's Symposium for Scholarship and Creativity April 17. Kieffer, who was enrolled in the graduate program during the 2006-2007 academic year, and Labuhn presented "Becoming an Excellent Science Teacher: How Our Research Experience in Baja Mexico Will Support Our Future Teaching." Bauman, Bisson, Sass, Smith and Young presented "Baleen Whales of Baja."


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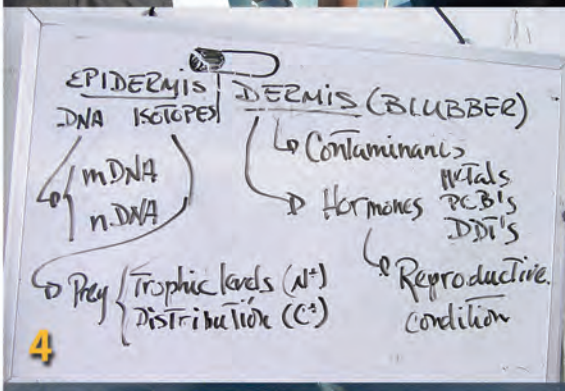

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1. Front row, left to right: Ursela (research team member), Lauren Bisson, Molly Smith, Susan Young, Lucia Campellanos (EPI) and Dwight Moody. Back row, left to right: Wesley and Betsy (research team members), Laura Sass, Bretta Bauman, Brian Labuhn, Tonya Kieffer, Gwynne Rife, Ron Stoner and Sam Rose (EPI).

2. Every day for four days, 19 people boarded the research vessel Pez Sapo. The boat driver also served as the cook, and only three people could fit in the tiny kitchen.

3. UF students completed research under the direction of world-renowned whale researcher Jorge Urban, Ph.D., who coordinates the Marine Mammal Research Program at the Universidad Autónoma de Baja California Sur in La Paz, Baja California Sur, Mexico.

4. Each evening, students had class with Urban, who talked about his research and explained the many pieces of vital information that can be drawn from a small piece of whale blubber, which was collected with a hollow-ended arrow.

5. One morning, a group of wild dolphins was swimming around the Pez Sapo. Students jumped into the water to join them and instead of being scared away, the wild dolphins swam under and around the students.