Vester Station adds new depth to Marine Science program

BY CHRIS WADSWORTH

Call it chemistry class Southwest-Florida style.

A professor and a handful of students – most wearing shorts, sandals and sunglasses – cruise down the Imperial River in Bonita Springs in a pontoon boat. Every few hundred yards, the boat idles to a stop while the glove-clad passengers deftly fill jugs with water and plunge a giant claw into the mucky river bottom.

Then they examine the claw's contents, take samples and fill out labels while an electronic GPS device records the group's precise location and a student scribbles details on a tiny tablet.

"It's better when you can get hands-on and do something like this rather than just read about it," says graduate student Andrew Griffith, 24. "It makes a lot of the textbook stuff click in your mind a little easier."

Welcome to Assistant Professor Ai Ning Loh's Marine Chemistry class at Florida Gulf Coast University. It's a course that is taking on new meaning for students and faculty this spring thanks to the launch of the Norm and Nancy Vester Marine and Environmental Science Research Field Station – or Vester Station for short.

"The students who are attracted to a marine science or environmental science program are people who love to be out in the field," says Loh. "Having a field station like this … is just great."

Located just off Bonita Beach Road on Little Hickory Island along Fish Trap Bay, where the Imperial River empties into Estero Bay, the Vester Station comprises three buildings perched on a spit of land framed by water on three sides. Just 12 miles from the FGCU campus, the property was once a fish house, then an old Florida-style resort. Today the space holds a classroom, laboratories, offices and boat docks plus apartments for visiting researchers.

"With housing on campus being very tight, the ability to house visiting scientists was very limited," says Professor Aswani Volety, chair of the school's Department of Marine and Ecological Sciences. "This way we can invite collaborators from all over the world."

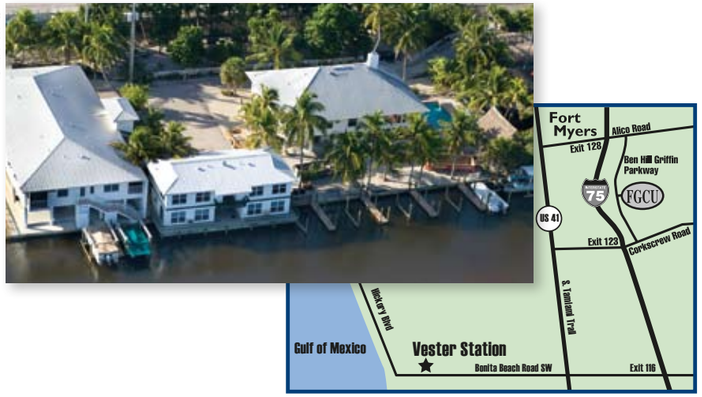
The department has an exchange program with University of Brest, France, and expects to finalize another this summer with Bangor University in Wales, Volety says.

Norm and Nancy Vester live on the site. The couple used to operate the property as the Bonita Beach Plantation Resort, but decided to sell it to FGCU at more than $1 million below its appraised value in order to

PHOTOS BY GARTH FRANCIS

Clockwise from top: An FGCU science class heads out from the Vester Station. Vicki Oehm and Assistant Professor Ai Ning Loh take in the scenery on the Imperial River. In the Vester Station lab, Ai Ning Loh shows students where they will be sampling along the Imperial River. Students Vicki Oehm and Chris Gardner examine the contents of the sediment grab sampler.

AERIALS BY BOB KLEIN



Aerial photos of the Vester Station show its proximity to Bonita Beach Road and scenic Fish Trap Bay.

help the University achieve its dream of creating a research facility on Estero Bay.

"We're so very lucky to have the Vesters be able to see what the future holds for this area and why something like this is so important and so necessary," says Bob Wasno, the station's education and resource coordinator.

The launch of the Vester Station is the realization of a dream for Volety and his FGCU colleagues. They easily tick off a list of how the station is changing the way the Marine Science and Environmental Science programs function.

- With the campus landlocked, students now have regular access to marine environments at the Vester Station. No more mixing a product called "Instant Ocean" to try to replicate seawater in aquariums and tanks.
- No more transporting boats by trailer back and forth from the campus to boat ramps around the county. There is room for 11 boats at the Vester Station.
- Mangroves, sea grasses, oyster beds and the Gulf of Mexico are all within a short boat ride from the station. All are subjects of studies at the University, but previously were hard to reach.

"Without running seawater and the space for large-scale experiments on campus, we were somewhat limited in some of our research," Volety says. "Now, having more space and access to seawater and marine ecosystems, the scope of research can be expanded."

The students using the Vester Station this semester may be focused on their samples of river bottom, but they already see the difference the facility makes in their studies.

Rachel Sommer is a senior majoring in marine science with a minor in biology. The 24-year-old hopes to eventually work rescuing and rehabilitating injured and endangered marine mammals, but she has also enjoyed learning about the water quality and sediments in Estero Bay.

"Working from the station definitely allows you to get a lot more accurate readings," says Sommer. "Things don't have time to sit and … you don't have to freeze it and take it back to the labs at the school."

Originally from Cleveland, then Tampa, Sommer says she was drawn to FGCU for its marine science program.

"A lot of wanting to be in this type of program is wanting to be outdoors and not be stuck in a classroom, so I think this will have a lot of pull for potential students," she says.

Chris Gardner agrees.

"There are only so many places in the country where you can study this type of program and be out in such a unique environment," he says. "It will be a great aid to recruiting."

Gardner, 28, is a Washington, D.C. native who spent four years in the Marine Corps and fell in love with ships and the sea. He's hoping to combine that passion with what he's learning at FGCU and its Vester Station to launch a career in industrial shipping.

"I want to help make (shipping companies) more environmentally friendly," Gardner says. "I want to make sure they are not polluting the water … and not doing any damage to the oceans."

Ultimately, everyone in Southwest Florida stands to benefit from the work and studies at the Vester Station.

Donna Price Henry, dean of the College of Arts and Sciences, says the Vester Station "is a critical piece of our mission statement. As we founded our programs, they were designed to not only serve the community through access to higher education, but also to serve the community as a resource to the area. The station is one critical way that we can do that.

"This facility will give us the ability to invite noted research scientists to come here and work with our faculty on coastal watershed issues. This will benefit not only the University, but the region as well."

From left, students Chris Gardner, Mike Banach and Fritz Hoeflein deploy the sediment grab sampler.

PHOTOS BY GARTH FRANCIS

FGCU research associate Vincent Encomio examines the larval stages of mollusks at the Vester Station lab.

Students Brian DeSanti and Josh Grimes record salinity, temperature, dissolved oxygen and pH readings from an electronic probe.

Successful projects there could result in new ways to improve marine environments in the Caloosahatchee River, the Ten Thousand Islands and the Everglades.

It also could help the very waters that lap and splash at the docks of the Vester Station itself.

"(Estero Bay) received very, very low grades based on its water quality compared to other bodies of water around Florida," says Wasno. "This facility is something that is going to allow students to come in here and do focused research that will hopefully go towards turning this bay around and re-creating it into the jewel it used to be."

– Chris Wadsworth is a freelance writer who lives in Fort Myers.

Projects under way or planned for Vester Station

- Effects of red tide on marine organisms
- Restoration of oyster reefs
- Restoration of mangroves
- Restoration of sea grasses
- Research into the role of nutrients in the development of macro-algae and red tides
- Effects of water contaminants on marine organisms and the transfer up the food chain
- Assessment of sediment transport and its implications on beach erosion and larval transport
- Mapping of aquatic vegetation and oyster reefs
- Study of the impact of fresh water inflow on marine organisms, including bivalves, fish and crustaceans
- Historical assessment of the environment prior to human habitation
- Analysis of the effect of rising sea levels on the Southwest Florida coastline and coastal ecosystems
- Refining techniques in restoration science
- Everglades restoration

Source: Aswani Volety

Norm and Nancy Vester at the Vester Marine and Environmental Science Research Field Station

Couple nurture nature, University with Bonita property

BY KAREN FELDMAN

While Norm and Nancy Vester escaped Cape Cod winters in balmy Bonita Springs over the past several years, they kept crossing paths with Florida Gulf Coast University students.

They met a young woman who did bookkeeping for one of their friends. Others served them in area restaurants and retail businesses.

"We kept meeting absolutely fine young people who were working their way through college," says Norm Vester.

So when the couple decided that it was time to sell their sprawling waterfront property, known as the Bonita Beach Plantation Resort, they wanted FGCU to have it. They sold it to the University for more than $1 million less than its appraised value.

"We knew we didn't want to sell it for a big profit, then have it torn down and rebuilt," says Nancy Vester.

The result is FGCU's new Norm and Nancy Vester Marine and Environmental Science Research Field Station along Fish Trap Bay just off Bonita Beach Road.

PHOTOS BY GARTH FRANCIS

Professor Aswani Volety, chairman of FGCU's Department of Marine and Ecological Sciences, speaks at the dedication of the Vester Station.

The couple will continue to live on the property for several years, sharing it with FGCU researchers and students. The Vesters view it as a symbiotic relationship.

They no longer have to run a resort, but can still enjoy the idyllic setting while FGCU gets a prime waterfront location with boat slips, a lab, office space and apartments for visiting researchers.

"To see young people coming out here, that's exciting," says Nancy Vester.

University officials are equally enthused.

"We could not be as responsive to the needs of Southwest Florida without the generosity of people like the Vesters and others who see the promise of the role a comprehensive state university can play in enhancing the region's quality of life," says President Wilson G. Bradshaw.

Norm Vester says he hopes that as more people visit the site, they will become interested in FGCU's work and make contributions of their own.

"The fact that the University has this facility will perhaps have people think about it more seriously," he says.

Getting people to the property doesn't seem to be a challenge.

"When we have receptions, everyone comes," says Nancy Vester. "And everybody who comes here just loves it."

Beyond helping students learn, the Vesters hope that the research center plays a pivotal role in helping improve local waters.

"We have a deep-down desire to find a solution for the red tide mess," Norm Vester says, referring to the toxic algae that bloom periodically, killing fish and animals that eat them. "If the University can do that and get the proper credit for it, it will really enhance its reputation."

> "We have a deep-down desire to find a solution for the red tide mess."
> — Norm Vester

FGCU President Wilson G. Bradshaw thanks the Vesters at the center's dedication.

The Vester Station provides a scenic setting for a sunset reception.