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Ecological Associates keeps tabs on our turtles

BYLINE: BILL CHURCH BJ contributor

Bob and Erik are best known as the turtle guys.

Yes, monitoring and protecting the endangered sea turtles are still a big part of their business, Ecological Associates, but Bob Ernest and Erik Martin provide 20 services.

Ecological Associates is best known as an environmental consulting firm with long experience in working on marine, estuary, coastal projects. Add land to the list.

Ernest, 61, and Martin, 58, are marine biologists with more than 30 years of professional experience. They once worked for Applied Biology, another consulting firm in the same building they occupy today, a block off Jensen Beach Boulevard.

Ernest was the local manager when Applied Biology decided to pull out of Florida. He and Martin saw a need for their services, realized they had good contacts and potential clients, and decided to start their own company with just one employee, another biologist.

Since their primary work with Applied Biology had been with sea turtles, they sought and won a multi-year project from the Florida Department of Environmental Resources and Martin County to study the effect of beach re-nourishment on the turtles. This contract began their long and ongoing relationship with Martin County.

Today, Ecological Associates marks and monitors turtle nests on South Hutchinson Island from Normandy Beach in St. Lucie County to the Martin County tip of the island.

They also do turtle work for many counties, including Indian River, Volusia, Palm Beach, St. Johns and Walton.

Much of Martin's work centers on beachfront lighting management to prevent spillover of light from condominium buildings and their parking lots to the beach. When baby turtles hatch and scramble from their nests, they follow the light of the ocean horizon to the sea. Land light can confuse them and lead them in the wrong direction.

"Every hour baby turtles wander around without finding the ocean greatly reduces their chance of survival," Ernest said.

Counties have applied for federal grants to evaluate lighting problems, devise ordinances against light on the beach, and provide resources, like correct lighting fixtures, to fix the problem.

Martin has light management projects underway in Sea Island, Georgia and John's Island in Indian River County.

"We were involved in some of the earliest lighting evaluations to determine if lights were having a bad effect on turtle hatchlings, Martin said. "We learned we could modify lights to provide for safety of people while not harming turtles."

While counties can crack down on violators through ordinances, Martin says most beach dwellers have been very cooperative. Often, they didn't know of the problem and will pay for necessary changes to protect the baby turtles.

Intentionally harming sea turtles is a federal crime. To allow some long-standing practices to continue while also protecting the turtles, however, the federal government can give permits to allow minimal unintentional harm to the endangered species.

Daytona Beach has such a permit, for example, to allow continued driving on its beach, a major draw for tourists, and uses Ecological Associates to devise plans that minimize harm to the turtles. The company is doing a similar project in Walton County.

"We really enjoy sea turtles," Ernst said. "While loggerheads are starting to decline in number, greens and leatherbacks are increasing. It's rewarding to help save an endangered animal."

Turtle work is seasonal, mainly from March to October. As the firm has grown, it has filled the rest of the year with other work.

Ernest and Martin have always targeted the public sector. They provide water quality studies needed by municipalities for their state and federal permits. They're now doing more land-based work, such as identifying and marking vegetation which might be affected by an expansion or construction project, or marking the boundaries of wetlands.

"We provide a full array of services to advise municipalities on managing the environment," Ernest said. "We try to do things to improve projects, to improve the value of projects."

Ernest knows that current property tax debates and local budget woes may impact future projects, especially discretionary work. His firm's monitoring work will continue, however, because much of it is required by permits.

Ecological Associates has also done work for Florida Power & Light and other utilities. The firm measures and monitors warm water discharges from power plants.

The environmental company saw a big spurt in business about one-and-one-half years ago when new federal regulations set numeric standards for the amount of aquatic life, including fish and plankton, that power plants could draw in with their cooling water.

As a result, power companies needed new data. Ecological Associates stepped in with quantification and monitoring. This work involves looking at plankton through microscopes allowed the firm to establish its current lab, where hundreds of samples are

processed and organisms are sorted and identified, a field known as taxonomy.

"The lab grew out of our power plant work and allowed us to expand our offerings and offer new core-market services," Ernst said. "We now work as a subcontractor analyzing samples for other environmental companies. Not a lot of companies do taxonomy, so there's a huge potential for business."

Taxonomy now makes up about half of EAI's revenues, work with turtles about 40 percent and the other 10 percent comes from assorted consulting, including water quality studies to contain and treat water going into the Indian River estuary.

Ecological Associates was profitable from the start, according to Ernest. After many years with annual revenues around \$500,000, the figure shot up to \$1.5 million last year thanks to the power plant work. Unfortunately, a federal court has remanded the new, tougher regulations and utilities are re-evaluating their programs. Ernest expects revenues to decline next year, but sees lots of potential business on the horizon.

EAI now has 10 full-time employees, nine of whom are biologists, and an equal number of part-time workers.

Although Ernest spends about 60 percent of his time on administrative tasks, he participates in larger projects and manages all projects. For example, he is lead scientist directing the preparation of Walton County's Habitat Conservation Plan for sea turtles and beach mice.

As scientific director, Martin spends the majority of his time managing turtle-related projects and provides technical oversight of most aspects of EAI's laboratory operations.

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