

# UNC Institute of Marine Science

By Barbara Milhaven

The Institute of Marine Science (IMS) on Bogue Sound in Morehead City is “an off-campus research laboratory, teaching, outreach and service unit of UNC—Chapel Hill.” According to their excellent website, the University of North Carolina—Chapel Hill on-campus Department of Marine Sciences and the institute here in Morehead City have achieved international recognition for their research and training of young scientists as well as sharing their findings worldwide.

A recent tour of the Institute of Marine Science conducted by graduate student Carter Smith on a cold, sunny day found things to be rather quiet, and, except for Ms. Smith’s office, most of the offices and laboratories we passed seemed to be unoccupied.

Outdoors we viewed fish tanks with water too cold to be occupied by fish and an oyster shell reef made for reducing erosion along the shoreline. We also saw a pile of oyster shells, the result of a call that went out at one point for county residents to collect and drop them off. Some of you may have contributed these oyster shells to the IMS and might like to know that some of them have been used to build the oyster reef, which can be viewed from the IMS revetment (bulkhead) at low tide. A large pile of oyster shells remains for some future projects.

Ms. Smith explained that the fish tanks we saw were part of the site’s complex indoor/outdoor seawater system. Later we were to see the indoor tanks, which were labeled for each leading scientist. Ms. Smith pointed out the indoor tank for her mentor, Pine Knoll Shores resident Dr. Charles “Pete” Peterson. She also explained that the site has two outdoor large ponds (not in use at the present time) for larger experiments as well as a number of research power boats, trucks and a recreation vehicle.

The tour took place at a quiet time, but, according to Ms. Smith, a great deal of interdisciplinary research, including fine-scale physical oceanography, fishery ecology and microbial biology, is researched, published and used in teaching and outreach programs.

Ms. Smith, who is a second-year Ph.D. student in the Marine Sciences department at UNC, is using property on Oakleaf Drive in Pine Knoll Shores for research leading to her doctoral thesis. She possesses both a fellowship and grants to pay her research and living expenses and to obtain a much-needed assistant. She shares the office with another UNC graduate student.

The vast amount of IMS-researched scientific information is disseminated to the scientific community, educational institutions and the general public through publications, blogs, journals, books and seminars. Graduate students at the institute may take scientific information to school classrooms and lead classroom tours at the marine institute. They may write articles, propose innovative ideas and have opportunities to participate in IMS events such as statewide or national marine science quiz bowls for high school students or be involved in the SciREN (Scientific Research and Education Network) program.

SciREN was started by two UNC Ph.D. students to help researchers write lesson plans using North Carolina educational teaching guidelines. This enables teachers to easily use them in their classrooms. Ms. Smith contributes her expertise and experience to this program—and, I suspect, a great deal of enthusiasm as well. In addition to writing lesson plans for SciREN, doctoral graduate students often participate in seminars conducted by the IMS, one of which was held at the NC Aquarium at Pine Knoll Shores in February. The seminar at the aquarium, which was held after deadline for this issue of *The Shoreline*, was expected to bring together 50 participating researchers and over 200 North Carolina teachers.

IMS also uses smaller seminars to interact with teachers—and the Pine Knoll Shores aquarium provides a good locale for these. All of these programs are part of the networking and outreach service that IMS conducts to distribute

# PKS Opens Dog Park to the Public

By Barbara Lemons

In late 2011, a group of local dog lovers began a conversation with the Town of Pine Knoll Shores about the possibility of opening a public dog park. While commissioners at that time did not agree to support a public dog park, space located behind town hall was offered for a private dog park, provided no public funds were used to construct or maintain it.

Volunteers moved ahead to raise necessary funds and entered into an agreement with the town that they would continue to obtain private donations and volunteers for upkeep of the park. With that agreement in place, volunteers formed the Pine Knoll Shores Bark Park Club, LLC, a non-profit 501(c)(7). Membership was open to Pine Knoll Shores residents, who could join the club and register their dogs in order to use the park.

The private park, which was named Canine Veterans Memorial Park in honor of military service dogs, officially opened on June 30, 2012. Going forward, the Bark Park Club kept its commitment to maintain the park, enroll members and register their dogs. Over time, however, this administrative process became cumbersome, membership declined and the park went largely unused. In August 2015, the Bark Park Club and the town officially terminated their agreement, and the keys to the park, as well as funds that were raised in support of it, were turned over to the town.

The good news is that the town, with the oversight of volunteers, has now opened Canine Veterans Memorial Park to the public—no membership required. Walter Zaenker volunteered to oversee the park during the transition, and has already done a great job of getting additional volunteers to help. He has also created flyers publicizing the park, which are available at town hall.

The now-public dog park is located behind town hall. There are separate areas for small and large dogs, secure entry, fresh water and lots of room to play. Rules for park use are posted on the gate. There are also restrooms for humans nearby.

Many towns now have public dog parks because they have proven to be a great place for dogs to exercise and develop off-leash social skills. Dog parks are also great places for pet owners to get to know one another.

So next time you’re thinking of hiking one of the several trails around town hall grounds—or if your best friend is tapping a paw while waiting for you to go for a walk—why not bring your four-legged friend with you to Canine Veterans Memorial Park and enjoy one of the most beautiful natural areas in Pine Knoll Shores. The dog park is open sun-up to sun-down, 365 days year.

information on their cutting-edge scientific discoveries. One of their diverse research projects affecting Pine Knoll Shores is addressing the impact of military training operations at Camp Lejeune on coastal ecosystems and landforms.

The UNC IMS has garnered international recognition not only for its training of young scientists, but also for sharing its expertise with government agencies and industry. IMS faculty participate in many state and national advisory panels, some with direct impact on our locality—such as those that deal with the development of wind power for energy, shark bites along the Crystal Coast, the possibility of offshore drilling and oil spills and our yearly worry about the increased power of hurricanes in our area.

It is interesting to know that the Croatan-Albemarle-Pamlico Estuarine System (CAPES), to which Bogue Sound is connected via Back Sound and Core Sound, particularly during high wind tides, is the second largest estuarine system in the United States. According to researcher Carter Smith, this makes Bogue Sound a great environment in which to continue research at the site she has identified in Pine Knoll Shores, which she will do in March.