

rediscover Learning

BY ANN GREEN PHOTOS BY MICHAEL HALMINSKI

OCRACOKE OFFERS TEACHERS RENEWAL EXPERIENCE

In the waters of the Pamlico Sound near Ocracoke, an N.C. Division of Marine Fisheries trawler drags the bottom with nets.

As several teachers gather around a culling table, Louis Daniel sorts through the seaweed and catch from the last haul.

"Trawling is not a good way to catch fish in estuarine waters because of the bycatch of juvenile fish," says Daniel, director of the Division of Marine Fisheries (DMF). "North Carolina doesn't allow trawling for finfish in our estuaries."

However, commercial fishermen are allowed to use trawlers outfitted with bycatch reduction devices for catching shrimp.

As Daniel holds up an Atlantic croaker small enough to fit in his hand, he cuts open its head. He points to the tiny otoliths, commonly known as "earbones," that sit inside a capsule in the croaker's head.

"This fish has three sets of otoliths," he says. "You can determine the age of the fish by looking at the ear bones."

Scientists look at the ring patterns under a microscope to determine growth patterns in fish.

"This is awesome," says Mary Howell, physical education teacher at Ashe County Middle School. "I have never been on a shrimp boat. I am excited about returning to the classroom, catching a rainbow trout from the New River and being able to explain and show the age of the fish to my students."

This commercial fishing demonstration is part of the "Salty Dogs and Lore of the Sea" seminar, sponsored by the N.C. Center for the Advancement of Teaching (NCCAT), which provides opportunities for teachers to participate in experiential learning and networking.

Throughout a five-day program at Ocracoke, educators kayak through salt marshes, tour a local fish house and eat dinner with local fishermen.

"I am very interested in how people make a living fishing," says Melissa Sparks, art teacher at Falkland Elementary in Pitt County. "I always had

taken seafood for granted. I never realized how hard the fishermen work and all the regulations that they have to follow."

The teachers also participate in a discussion on the future of commercial fishing.

Daniel points out that DMF is striving to preserve resources for everybody, not just Ocracokers and commercial fishermen. "We want teachers to bring this information back to their classrooms."

NCCAT renewal seminars — often referred to as "Outward Bound for teachers" — are open to any North Carolina public school teacher employed for at least three years.

For many, the Salty Dog seminar helped connect their lives as teachers with those of commercial fishermen. For reading material, teachers read *Coastwatch*, as well as *Old Man and The Sea* by Ernest Hemingway.

"I saw many parallels between fishing and school regulations," says Krista Eason of Harrisburg Elementary in Cabarrus County. "There are lots of rules for fishermen and more and more regulations for teachers."

NEW ISLAND CENTER

The seminar was special because it was the first time that teachers had stayed in the new NCCAT center in Ocracoke.

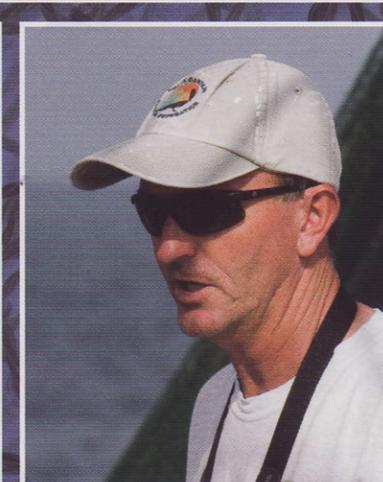
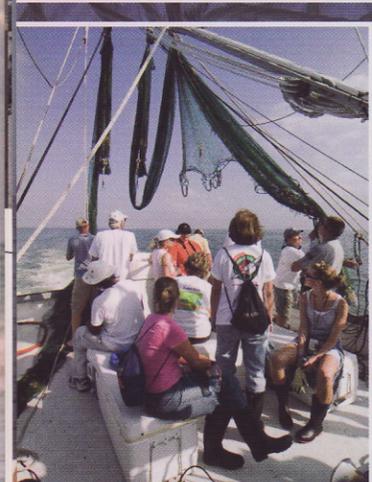
The campus, which includes five acres and two buildings, is where the U.S. Coast Guard had headquarters in Ocracoke for almost 70 years. The main building has a tower that overlooks the entire island.

"Although not all seminars at the NCCAT center will feature coastal topics, just having educators living on the island will promote appreciation for the North Carolina coast," says North Carolina Sea Grant marine education specialist Terri Kirby Hathaway. "How can one resist the feeling of awe and inspiration after viewing Silver Lake harbor from the observation tower?"

Continued



N.C. Division of Marine Fisheries Director Louis Daniel (center) gives teachers a commercial fishing demonstration on a trawler in the Pamlico Sound near Ocracoke.



TOP: NCCAT recently opened a new facility at the former Coast Guard station on Ocracoke. BOTTOM LEFT: Teachers take a session aboard a trawler. BOTTOM RIGHT: Ocracoke native Alton Ballance and others led the effort to establish an NCCAT center on the island.

The buildings, vacant since the Coast Guard moved its operations in 1996, are now used as a state-of-the-art professional development center for North Carolina teachers. The transformation of the stationhouse to an NCCAT facility cost about \$8.5 million.

Ocracoke native Alton Ballance, who is an NCCAT center fellow, says the facility is special to so many people because of its beauty and power.

"When teachers get off the ferry, they are in a different place," says Ballance, a former Ocracoke teacher. "The village is only 775 acres. The Ocracoke area is not strung out like other beach areas. When teachers come here, it is not a vacation, but a great experience."

NCCAT also has a western campus in Cullowhee that has been open since 1985.

"Ocracoke is a perfect location for a second NCCAT campus," says Mary McDuffie, NCCAT executive director. "It has been extremely gratifying to see how warmly the residents of Ocracoke have embraced NCCAT and the pride

sponsored several off-site seminars once or twice a year at Ocracoke.

"I grew up here and played baseball and softball with the Coast Guard stationed on the island," Ballance says. "I was engaged with the issue when I was a Hyde County commissioner and saw the facility close. I fought not to close it."

"Then with the transition to NCCAT, we turned the lights back on and gave new life to the building," he adds.

During the renovation that began in 2006, Goldsboro contractor D.S. Simmons retained much of the building's historical integrity, including distinctive dormers, a wraparound porch that overlooks Silver Lake, a red asphalt-shingled roof and a white clapboard exterior.

The old building also was modernized to include vinyl floors and one-bedroom quarters for 24 teachers, including two handicapped accessible rooms:

"It was exciting to be the first group of teachers to christen this magnificent structure,"

they feel for these beautiful facilities."

A total of 16 full- and part-time residents from the island have been hired by the center.

"The senior team will rotate between Ocracoke and Cullowhee," McDuffie says.

OLD COAST GUARD SITE

The Ocracoke project took more than a decade from conception to completion.

With the support of then-Gov. Jim Hunt and Senate President Pro Tempore Marc Basnight, Ballance and others began working in 1996 to get the vacant building transferred to the state to use as a teaching center. In the meantime, NCCAT

Howell says. "The unspoiled beauty of Ocracoke provides an environment where humans and nature seem blended in the just the right proportion. NCCAT at the coast is a place to truly spoil yourself."

Upstairs, a former game room has been converted into 1,000 square feet of seminar space.

Besides sleeping quarters and meeting rooms, there are many nooks and crannies being used as library settings for teachers.

"Each landing will have a different theme," says Laurin Baker, director of facility services. "One will relate to the Coast Guard."

The former 2,890-square-foot garage behind the station has been converted into a dining hall. Upstairs has three bedrooms for staff.

OUTDOOR LEARNING

The new complex has many environmentally friendly features — from geothermal heating to a rain garden that filters water as it flows from the road into Silver Lake.

"We are very green," says Baker. "Water flows off the roof into a 42,000-gallon container, and 95 percent of the gutters are connected to the old cistern. We use the water to irrigate plants and wash cars."

This autumn, contractors will begin building a \$1.5 million wetlands restoration project. Now, there is a temporary riprap barrier along the beach to prevent further erosion.

"We will have a walkway and platform," she adds. "It will be a great outdoor classroom."

The idea for NCCAT overall was born in 1983 when Jean Powell spoke to the N.C. Commission of Education for Economic Growth.

As the N.C. Teacher of the Year in 1983, Powell thought that providing a time and place for teachers to become students again would give them a renewed perspective of the student's role.

Hunt and the General Assembly shared Powell's vision and established NCCAT in 1985 as part of the University of North Carolina. One year later, full-time operations began on the campus of Western Carolina University in Cullowhee.

Residential seminars are the heart of the NCCAT experience. Each year, the center sponsors about 120 seminars. This year, the themes include Cherokee artistry and wonders of the Appalachian Trail.

"It is important to have a special place and time for teachers who have demanding jobs working with children in today's society," says Ballance. "Since the world has become more complicated, you need better informed teachers."

In addition to seminars, the NCCAT Teacher Scholar Program provides opportunities for professional research and independent study, including preparation for the National Board for Professional Teaching Standards.

"We have 1,200 applications for every 400 slots for the National Boards," says McDuffie. "We will be adding National Board seminars at Ocracoke."

Each year, Teachers of the Year from around the state gather at the annual "Leadership, Creativity, and Change" seminar where they share leadership styles and best practices, as well as positive responses to institutional changes.

For new teachers, NCCAT offers "Connect to Your Future," a program that provides instruction in classroom management and improving student achievement.

Since its inception, NCCAT seminars have hosted 75,000 participants. During the 2006 school year, more than 5,700 teachers from 100 counties and 115 school systems spent up to five days at various NCCAT programs.

"We try to get a geographic balance when selecting teachers for seminars," McDuffie says. "We have a waiting list for all seminars."

The seminars are so popular that teachers have to wait three years to come back.

For Brenda Waters, the Salty Dog seminar was her second NCCAT experience.

"It is the most rejuvenating experience I have ever had," says Waters, who teaches at Alexander Central High School in Alexander County. "I couldn't wait to get back to my students to share all that I learned."

IMPROVING TEACHER RETENTION

Across the country, teacher retention is a major problem for public schools.

During the 2005-06 school year, North Carolina's 115 school systems reported a turnover rate of more than 12.5 percent. This represents a slight decrease in the turnover rate of 12.9 percent for the 2004-05 school year.

The state's system-level turnover ranged

from a high of more than 25 percent in Bertie County to a low of around 2.2 percent in Mitchell County.

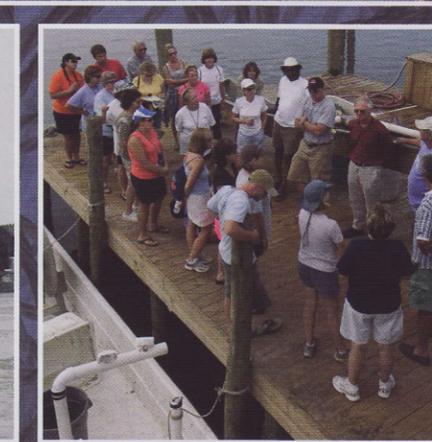
"NCCAT seminars serve a valuable purpose by renewing teachers' spirits and helping them maintain a desire and enthusiasm for their own learning," Hathaway says.

Throughout the years, the center has become a national model. In 1995, U.S. leaders of education, business and government gathered in Cullowhee for a meeting of the National Commission on Teaching and America's future. More recently, delegations of educators, community leaders and politicians from across the United States have traveled to the center to study its model.

Georgia has a center north of Atlanta that is modeled after NCCAT. There, teachers train to become advocates for reform in their schools. There also are similar programs in San Francisco, Minnesota and Florida.

At the 30-acre western NCCAT center in Cullowhee, teachers can take walks down a wildflower trail or stop at a pond stocked with catfish and bluegill. They also can explore the contemporary art collection of more than 274 works.

"Helping North Carolina retain highly motivated, caring and skilled teachers in our public schools is at the heart of everything we are doing at both NCCAT campuses, Cullowhee and Ocracoke," says McDuffie. "High-quality professional development that rekindles a teacher's passion for learning and the teaching profession is a wise investment for our state to make. We are extremely grateful for the



TOP: Teachers help pull up a net from the Pamlico Sound. BOTTOM LEFT: The life and lore of commercial fishing was highlighted during the workshop. BOTTOM RIGHT: A group of teachers gather on a dock at the Ocracoke Seafood Company.

widespread support that the NCCAT expansion has received."

The new eastern campus in Ocracoke will focus on environmental studies, history, culture and teacher leadership. During 2008, there will be a variety of seminars on the island — from the ecology of barrier islands to the art and science of boat building.

Eventually, there will be 40 seminars a year at the Ocracoke facility, improving students' connections to the coast.

"I wanted to come to an NCCAT seminar here and was lucky to be in the first group," says Martha Edmonds, an Ashe County science teacher. "During the experience, I learned about a different part of the state and found ways to enhance my students' understanding of the interconnections between the coast and the mountains where they live." ■

To find out more about NCCAT programs, go online to: www.nccat.org or call 800/922-0482.