

LOGGERHEADLINES

Sea Turtle News from South Carolina

January-May, 2002



Greetings!

This sea turtle season got off to a “bang” with strandings, leatherbacks, nesting loggerheads and other events, as you will see in this issue of *Loggerheadlines*.

Strandings

There was one stranded loggerhead in March, which is typical for this month. However, the 17 in April is the highest total since 1982. It appears that the spring migration was early this year (along with everything else) and the phenomenon of emaciated turtles that we saw last May was occurring this spring too, but in April. Five of the 17 turtles had heavy barnacle loads and were very thin.

Of the 27 turtles that stranded in May, only two were emaciated. Both of the leatherbacks stranded just north of the Charleston Entrance Channel and were completely chopped in half by a very large vessel.

The opening day of shrimp season was May 15th. We usually see a jump in strandings immediately after the opening day, and this also occurred this year. Some of the strandings were too decomposed to have died on opening day, however, there were eight in the two weeks prior to the opening of the season and 19 in the two weeks after the opening. This is the same pattern seen in all previous years.

This was the first time in four years that South Carolina did not open the shrimping season concurrently with Georgia. We feared this would result in a concentration of trawlers

along the South Carolina coast, which would result in high mortality of sea turtles caused by multiple captures. Although 344 trawlers were counted on the 15th, by the 17th the count had dropped to 130 trawlers. The stranding total for May is similar to the mean of 28.1 for the previous seven years. So far, only six adult sized loggerheads have stranded, three in April and three in May. This may be the result of leatherback TED's being required this spring. More on that later.

Rehabilitation

The loggerhead named “Kiawah” was treated since May 2001 at the Karen Beasley Sea Turtle Rescue and Rehabilitation Center at Topsail Beach, North Carolina until it was finally released this spring. To check on Kiawah and other sea turtles at the hospital, use the web address below.

<http://www.seaturtlehospital.org/kiawah.html>

Necropsy Summary

Post-mortems were performed on eight sea turtles from March through May. Six were loggerheads, one was a green turtle and one was a Kemp's ridley. Of the eight, seven could be classified as dying of either acute or chronic causes. Five died acutely and two had a chronic condition. Two apparently died from blunt trauma and a sub-adult male had a post-mortem boat strike.

There were three males and five females, two of which were adults. One of the males was a sub-adult even though it had a curved carapace length of 42 inches!

Nesting News

This was the earliest nesting season on record since the sea turtle program started in 1977, with three nests laid in April. We wondered whether this was a seasonal shift in the distribution of nesting or whether it was an indication that we would have a really big nesting year. So far it appears that the latter is coming to pass. Here are the nesting numbers from each of the projects as of the end of May.

Nesting Activity Update

Thru 5/31	2002	2001	Increase
Myrtle Beach S. P.	0	0	
Huntington Beach S. P.	0	0	
S.C.U.T.E.	12	3	300%
South Island	14	13	8%
Cape Island	153	75	104%
Lighthouse Island	15	6	150%
Deweese Island	5	1	400%
Sullivans/Isle of Palms	9	1	800%
Folly Beach	11	8	38%
Kiawah Island	49	17	188%
Seabrook Island	7	2	250%
Botany Bay Isl & Plan	48	20	140%
Edingsville Beach	16	3	433%
Edisto Beach S. P.	15	4	275%
Edisto Beach	19	11	73%
Harbor Island	6	8	-25%
Hunting Island	8	5	60%
Fripp Island	6	7	-14%
Pritchards Island	33	14	136%
St. Phillips Island	7	2	250%
Hilton Head Island	47	17	176%
TOTAL	480	217	121%

Regional News

North Carolina

North Carolina has a new sea turtle coordinator, **Dr. Matthew Godfrey**. Matthew received his Ph.D. at the University of Toronto under Dr. Nicholas Mrosovsky and worked at the University of Paris prior to coming to North Carolina. We have collaborated with Matthew

in the past on the relationship between sex ratios of hatchlings and incubation duration, and we look forward to future collaborations.

In February 2002, **Wendy M. Cluse** started in the position of Assistant Coordinator of the Sea Turtle Program for the North Carolina Wildlife Resources Commission. Wendy did her Master's under the supervision of Dr. Larry Crowder at Duke University. She analyzed stranding records in North Carolina over a number of years and found that on average 15% of all stranded turtles showed signs of collisions with boats. This rate is higher than previously imagined, and perhaps reflects the large inshore waterway boat use in North Carolina. She recommended that reduced speeds and propeller guards be used to reduce the number of collisions with sea turtles.

Georgia

High numbers of sea turtle strandings in Georgia (94 in two weeks, according to **Mark Dodd** with Georgia DNR) resulted in the National Marine Fisheries Service imposing an emergency rule to require leatherback TED's from St. Augustine, Florida to about Cape Fear, North Carolina. The emergency rule also bans nighttime trawling. The rule went into effect at 3:04PM on May 24th and will be in effect for 30 days.

There were 25 to 30 very large trawlers from the Gulf of Mexico working in Georgia waters. These large vessels can use more and larger trawl nets and can operate longer than the local, smaller trawlers, especially at night. NMFS applied the emergency rule to the entire region to prevent these trawlers from just moving to another area and causing the same problem there.

Florida

On the night of June 4th, 2002, researchers from the University of Central Florida were successful in locating **Eunice** while she was nesting in the Archie Carr National Wildlife Refuge. Biologist **Blair Witherington** (Florida

Marine Research Institute) outfitted Eunice with a new satellite transmitter to see if she repeats the same post-nesting season movements. Eunice was first outfitted with a satellite transmitter in 2000 at the Archie Carr NWR. After the nesting season, she moved to a resident foraging area off the southwest coast of Florida. This is the first time a satellite transmitter has lasted long enough to document a return migration. Congratulations to **Barbara Schroeder** (National Marine Fisheries Service), Blair and Eunice! To view her map, go to

<http://www.cccturtle.org/sateunice.htm>

Research

Marine Resources Division

The SC DNR's Marine Resources Division has begun its third year of the in-water study of sea turtles. The project's primary objective is to develop a methodology to establish a scientifically valid index of abundance for the northern subpopulation of the loggerhead turtle along the southeastern coast. We will let you know as soon as updates are available.

Pelagic Aerial Surveys for Leatherback Turtles

Leatherback turtles were also among the early arrivals this year. Based on sightings in Georgia, we began our surveys a week early. The number of leatherbacks recorded were the highest ever and resulted in concentrations exceeding the trigger of >10 per 50 nautical miles of track line on the very first flight.

Because of engine trouble on our large plane, we had to use a single engine plane for two of the surveys and could not fly the track line that was 3.0 nautical miles offshore. Instead, we flew the inner line at 1.5 nautical miles twice. It was on one of these flights that we counted 96 leatherbacks in one direction and 94 in the other direction.

There were 51 sighted on the opening day of shrimp season along with 344 trawlers. Amazingly none stranded. This certainly shows that the 83-inch leatherback TED works.

Collaborations for EPA Funded Study

The Kiawah Island volunteers and Cape Romain NWR staff will be working with **Drs. Larry Crowder** of Duke University and **Jeanette Wyneken** of Florida Atlantic University to provide data on nest temperatures and sex ratio of hatchlings. In previous studies, data were collected in different years. In order to avoid this bias, all data from North Carolina to south Florida will be obtained in 2002. Another advantage to this study is that hatchlings will be raised for several months until they are large enough for laparoscopic examination to determine their sex and will not have to be sacrificed.

Announcements & Events

Spring Training Workshop

The Spring Training Workshop for sea turtle volunteers was held on April 25th at Ft. Johnson with over 80 in attendance. **DuBose Griffin**, University of Charleston, **Phil Maier**, Marine Resources Division, **Mark Dodd**, Georgia DNR and **Joan Seithel**, Wildlife Diversity Section made presentations.

Books, Books and More Books

On May 7th there was a book signing and reception at the South Carolina Aquarium for *The Beach House* by **Mary Alice Monroe**. Mary Alice volunteers with the nest protection project on the Isle of Palms/Sullivan's Island. Her publisher, Mira Books, donated \$2,000 to the South Carolina Aquarium for sea turtle rehabilitation. Additional money went to produce refrigerator magnets with a "lights out" message that were distributed to each beachfront home (rental and private) on the Isle of Palms and Sullivan's Island.

Book signings are also underway for *Turtle Tracks* by **Sally Harman Plowden**. **Tee Plowden** beautifully illustrates this children's book with watercolors of Lowcountry scenes in the Georgetown area. It was published by the Palmetto Conservation Foundation Press and sponsored by Progress Energy.

And our neighbors in North Carolina sent us a copy of *A Sea Turtle Story* by **Mary Māden** and illustrated by **Vicki Wallace**. This children's book is based on the true experiences of a dedicated young lady named Lolly and her work as a volunteer at a sea turtle hospital as she cares for a loggerhead that has been injured by a boat.

22nd Annual Symposium on Sea Turtle Biology and Conservation in Miami

South Carolina was well represented at the Symposium. Poster presentations included:

“Volunteer Loggerhead Patrol on Fripp Island, SC” by **Karen Natoli, Tony Natoli** and **Charles Tambiah**;

“The Effects of Beach Nourishment Projects on Nesting Preferences in Loggerhead Sea Turtles (*Caretta caretta*) on South Carolina's Beaches” by **Mary Scianna**;

“Evaluation of Specific Biotic and Abiotic Factors Affecting Loggerhead (*Caretta caretta*) Nests on Pritchards Island, SC, U.S.A.” by **Amber VonHarten, Gary Sundin** and **Charles Tambiah** ;

“Characterization of Internesting Habitat, Migratory Corridors and Resident Foraging Areas for Loggerhead Turtles (*Caretta caretta*) from a South Carolina Nesting Beach Using GIS and Remote Sensing Applications” by **DuBose Griffin** and **Sally Murphy**.

There was also an oral presentation:

“Comparison of Resident Foraging Areas Utilized by Loggerhead Turtles (*Caretta caretta*) from a South Carolina Nesting Beach Using GIS and Remote Sensing Applications” by **DuBose Griffin** and **Sally Murphy**.

Nest protection projects also sent representatives from: Cape Romain NWR, Dewees Island, Isle of Palms/Sullivans Island, Folly Beach, Kiawah, Edisto, St. Phillips and Hilton Head Island.

New TED legislation in South Carolina

Governor Jim Hodges signed a bill on May 20th that enlarges the required opening size for a regular TED from 35”(width) X 12” (height) to 35” (width) X 20” (height) in state waters. **Senators Arthur Ravenel, Bradley Hutto, Glenn McConnell** and **Warren Giese** sponsored the Senate bill. **Representative Chip Limehouse** introduced a similar bill in the House. The S.C. Shrimpers Association and the sea turtle volunteers supported this bill and helped ensure that it got through the legislative process in a timely manner. We appreciate all the letters and phone calls that made this happen.

Sally Murphy, *State Coordinator*
Charlotte Hope, *Biologist*
DuBose Griffin, *Intern, Sea Turtle Desk*
Joan Seithel, *Technical Assistant*

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COVER PHOTO: Isle of Palms sunrise nester by Bev Ballow.