

Turtles reign during nesting season

By Laurie Krosney

SUN STAFF WRITER
lkrosney@amisun.com

The seven species of marine turtles, including the five that nest in Florida, face numerous threats, which are pushing them ever closer to the edge of extinction.

The biggest single threat is the loss of habitat.

In these aerial photos, we can see that here on our Island, where it's almost exclusively loggerhead turtles that nest, there has been a dramatic loss of habitat caused by development. A similar increase in development is happening all over the planet.

Obviously, we are already here, and we're not about to abandon our homes and businesses, go inland and leave our Island to the turtles.

But there are simple things that we can do to help reduce the threat to nesting turtles.

Safe lighting

Next to development, the second largest threat to nesting turtles is bad lighting. When there is a bright light that's visible from the beach, mother turtles will go toward it.

A turtle's body is made to swim. Turtles are graceful. They move with ease in the water. It's takes tremendous effort for a female turtle to lumber ashore, dig her nest, lay her eggs, cover the eggs, and haul her heavy body back into her water environment. Remember, she only comes ashore to nest.

A bright light, or too much glow from lights illuminating a parking garage under a condominium building can draw that mother turtle away from the shoreline. She's tired; she's getting dehydrated. Her body is heavy and it can collapse her organs if she's out of the water too long, but she can't help herself. She's attracted to the lights.

Later on, in about 55 days, the hatchlings will emerge from the nest, all in a clump. Their instinct is to head immediately into the warm waters of the Gulf, but all too often, they will become confused by our lights and head toward the brightest spot they can see.

Traffic on Gulf Drive crushes too many hatchlings. Or they get lured into swimming pools. If they make it across Gulf Drive, they have been found all too often dehydrated and dead further east on our Island.

We can't educate the turtles, but we can educate ourselves and do what we can to protect the turtles.

There are many options for lighting that's safe for turtles and humans alike. Home and business owners can log onto the Florida Fish and Wildlife Conservation Commission at

www.myfwc.com and enter "safe turtle lighting" into the search box. There's a wealth of information.

Code enforcement officers in each of the three cities are well versed in what works well in terms of turtles and in terms of safety.

If you hire an electrician to help, make sure you use one who has taken the FWC safe lighting class and passed the test.

Safe lighting, which doesn't have to be expensive and doesn't have to put human safety at risk, can make a huge difference to the survival of our turtles.

The mantra should keep it low (low wattage bulbs and low fixtures,) keep it long (use long wave length lights in the red and amber colors) and keep it shielded.

Other threats

Furniture left out on the beaches can be another barrier to the survival of sea turtles. Turtles don't see well on land, so they often bump into furniture or tents left out overnight. There are cases where turtles have become entangled in beach furniture and died. Remove it from the beach from sun-down to sunrise.

We are blessed to have nesting on our beaches. The turtles we see were born on or near Anna Maria Island at least 30 years ago. Sea turtles return to their natal beaches to nest.

The male hatchlings never return to land, but when the females are roughly 30 years old, they return to where they were born to lay their eggs.

Once the hatchlings are "safely" in the water, they face the same predators that they faced before we took away their habitat.

Remember only one of about 1,000 hatchlings will live to reach reproductive age.

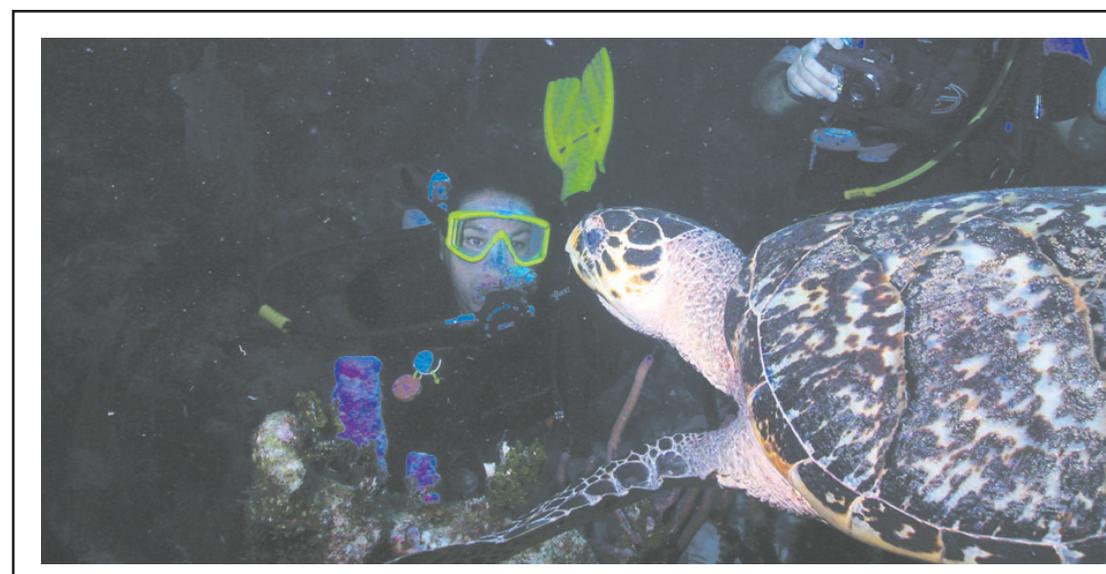
With the overall numbers of marine turtles dwindling like this, the survival of each individual can make a huge difference in the survival of the species.



PHOTO PROVIDED/AMI HISTORICAL SOCIETY

Above, The north end of the Island in the 1940s shows very little development. Below, the north end of the Island as it is today shows how development has reduced the turtle's habitat to the beach area.

PHOTO/TROY MORGAN



Turtle encounter

Long-time AMITW volunteer Irene Pearman, of Anna Maria, comes face-to-face with a sea turtle while diving off the coast of Belize. Pearman said she often encounters turtles on her dives, but this was the first time anyone was able to snap a good photo.

PHOTO PROVIDED BY IRENE PEARMAN

Florida hosts five sea turtle species

By Cindy Lane

SUN STAFF WRITER

clane@amisun.com

Florida is the second most populated nesting ground in the world for both loggerhead and green sea turtles. Three other turtle species also swim the state's waters looking for nesting beaches - the leatherback, in mildly significant numbers, and the Kemp's ridley and hawksbill, both in small numbers.

Loggerhead (*Caretta caretta*)

The loggerhead is the most common sea turtle in Florida, but not the largest, weighing an average 275 pounds at adulthood with a 3-foot-long shell, brown on top and yellow underneath.

With nearly a third of the world's loggerhead nests, Florida is second only to Oman, where about two thirds of the world's loggerhead turtles nest.

Loggerheads eat clams, crabs and other shelled animals.

Green (*Chelonia mydas*)

Endangered green turtles are named for their green body fat, and weigh an average 350 pounds as adults. Their oval shells are typically slightly longer than 3 feet and are olive brown with dark streaks on top and yellow underneath.

Florida is the second most popular place for green turtles to nest after Costa Rica. They are unique among sea turtles because they are mostly vegetarians, eating primarily sea-grass and algae.

Leatherback (*Dermochelys coriacea*)

Endangered leatherback



turtles are the largest sea turtles in the state, averaging 6 feet long as adults and weighing from 500 to 1,500 pounds - the largest on record was nearly 10 feet long and weighed more than a ton.

Distinctively different from other sea turtles, they have leathery skin where other turtles have shells. With seven ridges running lengthwise down their backs, they are usually black with white, pink and blue splotches.

Florida's leatherback population is mildly significant, with most leatherbacks nesting in Central and South America. They eat soft-bodied animals such as jellyfish, and their throats and jaws are lined with stiff spines that help them swallow soft and slippery prey.

Kemp's ridley (*Lepidochelys kempii*)

Kemp's ridley turtles, unusual because they nest in the daytime, weigh 85 to 100 pounds as

adults and grow up to 2 1/2 feet long.

The most endangered sea turtles in the world, their main nesting beach is on the Gulf coast of Mexico. Kemp's ridley turtles eat mostly crabs and other crustaceans.

Hawksbill (*Eretmochelys imbricata*)

Endangered hawksbill turtles weigh from 100 to 200 pounds as adults and are about 30 inches long. Their shells have black and brown markings and are used to make jewelry, hair decorations and other ornaments, despite an international ban on hawksbill products.

Hawksbill turtles get their name from their raptor-like jaws, which they use to crush and eat sponges.

Source: Florida Fish and Wildlife Conservation Commission



Above left: Loggerhead
Above: Green
Below: Kemp's ridley



Above: Hawksbill
Left: Leatherback

PHOTOS PROVIDED/NOAA

Turtle trackers in training

By Cindy Lane

SUN STAFF WRITER
clane@amisun.com

Everything that volunteer turtle trackers learned this month from state and local turtle officials was put to the test as of May 1.

They wake before dawn to walk a stretch of beach that they will know like the back of their hand by the time sea turtle nesting season is over on Oct. 31.

They search the sand before tides and beachgoers and the county's beach cleaning machine erase the tracks of sea turtles, which typically nest at night.

They look for the distinctive trench and marks that a mother turtle's shell and flippers make in the sand as she crawls up the beach to dig her nest. Their training has shown them how to distinguish the tracks of all five sea turtle species that lay nests in Florida, looking for signs such as whether a tail has been dragged in a straight line or a wavy line, identifying the turtle based on its gait.

They also have learned how to determine whether a turtle turned around and returned to the sea before nesting - a false crawl - or successfully laid her eggs. Looking for sand that has been flung by turtle flippers as camouflage, they locate the nest, mark it with four stakes and plastic tape, and note the nesting date and expected hatching date on the stakes.

Sometimes, under the supervision of Anna Maria Island Turtle Watch, they dig up the nest and move it to a drier location, out of



SUN FILE PHOTOS

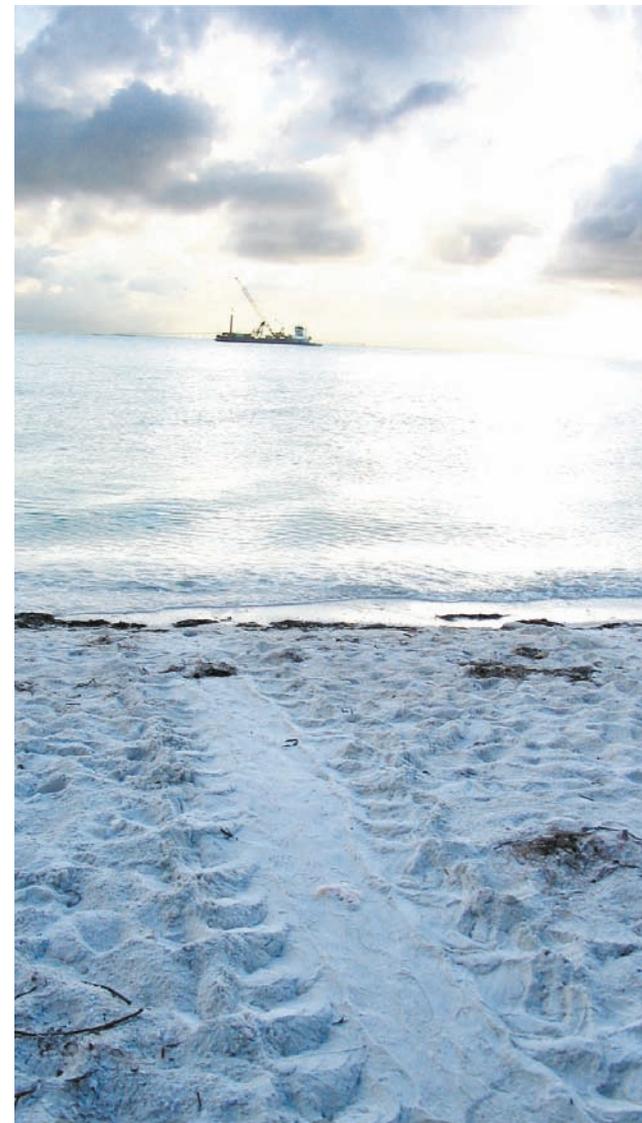
Above: A crowd gathers to watch AMITW volunteers checking a nest after a hatching. Several live baby turtles were found — much to the delight of the observers. Right: Turtles make distinct trails when they come ashore to nest. Here, a loggerhead crawl is clearly visible.

the way of flooding, careful to replace the eggs in the same order they removed them to preserve the gender of the hatchlings, which is dependent upon temperature.

Sometime in July, when the nests begin hatching, they will begin overnight watches, staking out the nests on their expected hatching dates. Using their training, they will protect hatchlings by organizing a human "V" with all available beachgoers, pointing the baby turtles to the Gulf of Mexico.

Some mornings, instead of a mother's tracks, they'll find hundreds of tiny flipper tracks, made by hatchlings that snuck out of their nests before they were expected to.

And while it's magical to watch sea turtles hatch, the trackers are just as charmed to see the sandy evidence of a job well done heading into the surf.



Anna Maria Turtle Watch part of global effort

By Laurie Krosney

SUN STAFF WRITER
lkrosney@amisun.com

Every morning at dawn on our Island, at least nine volunteers work together to walk every inch of the beach monitoring for signs that a sea turtle nested during the overnight hours.

They are part of Anna Maria Island Turtle Watch, a local organization more than 150 members strong.

All work and are trained under AMITW Director Suzi Fox, who holds the sea turtle permit from the Florida Fish and Wildlife Conservation Commission (FWC).

Fox is part of a loose affiliation of other permit holders in our part of the state. They're connected by e-mail and by phone. Several times a season, they all meet somewhere in the middle and strategize about the best ways to handle nesting in our particular part of paradise.

"We all help each other," Fox said. "If I have a problem, usually someone else has handled the same problem and has figured out how to handle it."

Local government

There are turtle protection ordinances in effect in all three Island cities. The code

enforcement officers on the Island work hard to make sure that everyone does what they can to help protect the turtles.

"We work to make sure everyone knows what they're supposed to do," said Anna Maria Code Officer Gerry Rathvon. "For the most part Anna Maria's beaches look pretty dark, and we'll confiscate beach furniture if it's left out too long."

Holmes Beach Code Officer Nancy Hall oversees the middle of the Island.

"My property owners are mostly in compliance with lighting ordinances," she said. "We still have a few we're working with. Most people want to help protect the turtles. You just have to explain it to them."

In Bradenton Beach last year, the code enforcement officers levied the first-ever fine against a property for violation of the city's lighting ordinance.

The property owner had been notified several times about lighting problems and was finally brought before the city's special master after a nest disoriented with several hatchlings killed.

Code officers in all three cities agreed that the most difficult part of their jobs is making sure that short-term vacationers who come and go every week know about the rules.

State turtle protection

The state organization most involved with protecting sea turtles is FWC. It keeps track of the trends and numbers. It issues the permits to the local turtle protection individuals. It designs, educates and informs people about turtle friendly lighting.

FWC has a training session for permit holders twice a year.

"I go to both of those training sessions," Fox said. "My volunteers have to go to at least one every two years in order to be listed on my permit."

This is the way local permit holders stay current with the latest research and the latest rules and regulations.

The Florida Department of Environmental Protection is involved in sea turtle protection, too. Lighting plans for each new or substantially remodeled structure on the beach have to be approved by FDEP.

Coastal building plans and the enforcement of the coastal construction control line have a huge impact on protecting nesting habitat from further human encroachment. Those regulations also mitigate the impact any storms would have on our Island.

Florida provides nesting for five of the seven sea turtle species, all of which are threatened or endangered.

Since Florida is the second-most important nesting site in the world for loggerheads — next to Oman — a tight, effective state network is of the utmost importance.

U.S. Fish and Wildlife

There are national laws against harming turtles that are enforced through the U.S. Fish and Wildlife Service.

USFW is authorized to levy fines of up to \$10,000 for harming sea turtles. That's per turtle. So if you had a nest with 100 hatchlings that were disoriented by illegal lights, the fine could be levied for each baby that was harmed.

International

Scientists, politicians and turtle lovers from all over the world gather once a year to for the International Sea Turtle Symposium.

It's a weeklong event devoted to disseminating the latest information about sea turtle research. Scientists present their findings to their colleagues. There are interpreters with headphones to listen to the translations just like a mini-U.N.

The body of knowledge is growing, so there is increasing hope that we can save these magnificent creatures.