



For thousands of years, female sea turtles have been visiting the shores of North Carolina to lay their eggs. Beginning each May, these nesting turtles use the cover of night and crawl up onto the moonlit beaches. After digging a hole with their rear flippers, they deposit their eggs in the sand, return to the water, and leave the fate of their nest in the hands of nature. About 60 nights later, the hatchlings emerge from the sand and navigate their way to the water's edge to begin their life in the Atlantic. Male hatchlings will never again return to land. Female hatchlings will hopefully return 30 years later to these same North Carolina beaches and lay nests of their own.

Nesting sea turtles return to these beaches in search of that perfect spot along the coast to lay their nest. But more and more frequently, they return to our beaches only to find that the cover of night is now filled with the glow of light; street lights, outside porch lights, and light emanating from ocean front windows. These lights can deter sea turtles from nesting on these beaches and possibly force them to move on to another section of beach that may be less suitable for the survival of their eggs.

Unlike nesting sea turtles, hatchlings are "attracted" to light as they use light cues in order to find their way to the water. Along coastal areas where artificial lights are brighter than the natural light reflecting off the ocean, the hatchlings become disoriented and crawl inland over the dunes and toward the artificial glow. Many of these hatchlings die due to exhaustion or predation from ghost crabs, feral cats, or raccoons. It is uncertain just how many hatchlings do not survive because of light pollution. The good thing is that we can do a few simple things to help.

Turning Lights Off is a Bright Idea!

The best and easiest way to help nesting turtles and hatchlings is by turning off ocean front lights during the nesting and hatching season (May – October). Using lights only when necessary not only helps the turtles but also saves energy and allows for the best natural experience along our beaches. North Carolina has some of the darkest coastal areas in the country to star gaze and enjoy the natural beach environment at night.



Look for these stickers on light switches in your rental home.

Fully Shielded Outdoor Fixtures

A fully shielded fixture is one that does not allow any light to shine above the light source itself. By using fully shielded outdoor fixtures, all the light is directed downward, increasing visibility where you need it and decreasing the amount that is cast out onto the beach and up into the sky. Converting most fixtures to fully shielded is inexpensive and a great way to not only save sea turtles but also save energy.



Turtle Friendly Lights

Sea turtles view the world a little bit differently than us; they react differently to longer wavelengths of visible light. Longer wavelengths of light include **amber** and **red**. Look for turtle friendly or wildlife lighting certified bulbs when replacing outdoor lights. Turtle friendly bulbs used in a fully shielded fixture ensures that sea turtles will keep returning to North Carolina beaches.



Also...

- Close blinds and drapes on ocean front windows May through October
- If you see a nesting sea turtle or hatchlings on the beach, do not use flash photography
- Use flashlights and headlamps on the beach only when necessary
- Only have beach fires when and where permitted
- Pass this information along to friends and neighbors!

Did You Know?

- Out of the seven species of sea turtles world-wide, five can be found off the coast of NC
- All seven species of sea turtles are considered internationally endangered
- Sea turtles can take up to 30 years to reach maturity
- Leatherbacks, the largest of all sea turtles, can weigh as much as one ton
- A turtle's sex is determined by the temperature in which the egg incubates; cooler egg temperatures produce male hatchlings while warmer egg temperatures produce females
- Female hatchlings that emerge from nests laid along NC shores will more often than not return to NC beaches to lay their own nests
- Once a hatchling crawls down the beach and enters the ocean, a male turtle will never return to land while a female will only return to nest
- Very few hatchlings will survive to maturity; estimates range from 1 in 1,000 to 1 in 10,000
- By satellite tagging, scientists have discovered that hatchlings from NC and other southeast states travel as far as the coasts of Europe and Africa by following the circular currents of the Atlantic Ocean.

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Sea Turtles and Artificial Lighting

**One light off
is a crawl in the right direction!**