



CONSERVE WILDLIFE

FOUNDATION OF NEW JERSEY

June 1, 2021

This document was developed to help provide guidance to local governments on steps they can take to help engage their residents and taxpayers in conserving their natural resources. Specifically, we seek to raise awareness for northern diamondback terrapins, who inhabit the coastal saltmarshes of New Jersey, where many causeways connect the mainland to island communities. Roads are barriers to many species of wildlife, including terrapins, but the creation of roads on or near saltmarshes has also created suitable nesting habitat. This in turn has created nesting opportunities that they take advantage of, at the risk of becoming roadkill, to ensure the survival of the species. Turtles on roads can also impact human safety, where drivers stop and exit vehicles to help them cross roads safely. It is our goal to help ensure the safety of terrapins and humans who enter roadways.

In this document we provide key information about the life cycle of terrapins and their presence on coastal roads. Also discussed is guidance on mowing road shoulders, installation of X-ING signs, and what to do when a live, dead or injured terrapin is found in southern Ocean County.

ALL ABOUT TERRAPINS



THE ONLY TURTLE THAT INHABITS COASTAL MARSHES WITH BRACKISH WATER (MIX OF SALT AND FRESHWATER) FOR THEIR ENTIRE LIFE.

Identification

The northern diamondback terrapin is a medium-sized turtle that varies in length from only 4 to 5.5" in males to 6 to 9" in females. Females have a short, narrow tail while males have a relatively long, thick tail. Terrapin coloration varies highly between individuals, but all have a gray, brown, or black carapace (top of shell) and a lighter plastron (bottom of shell), which is a greenish-yellow. The skin is light to dark gray with black spots and other dark markings. Both sexes have a light colored upper mandible.

PRIMARILY, FEMALES EXIT THE SAFETY OF WATER TO FIND NEST SITES, BUT OCCASIONALLY HATCHLINGS AND JUVENILES ENTER THE ROADWAY IN EARLY SPRING.

Distribution and Habitat

Northern diamondback terrapins exclusively inhabit coastal salt marshes, estuaries, tidal creeks and ditches with brackish water (a mix of both salt and freshwater) which is bordered by spartina grass. They are the only turtle in the world that is specially adapted to spend its entire life in this type of water. Studies have shown that terrapins exhibit a high level of site fidelity or they return to the same territory every year. They also have a very small home range and some occupy the same small creeks year after year. Northern diamondbacks range from Cape Cod, Mass. to Cape Hatteras, N.C.

Diet

Terrapins are carnivores and primarily eat mollusks and crustaceans, including snails, fiddler crabs, and mussels. They also eat blue crabs, green crabs, marine worms, fish, and carrion. Terrapins are more active during high tide, or when the marsh is often flooded.

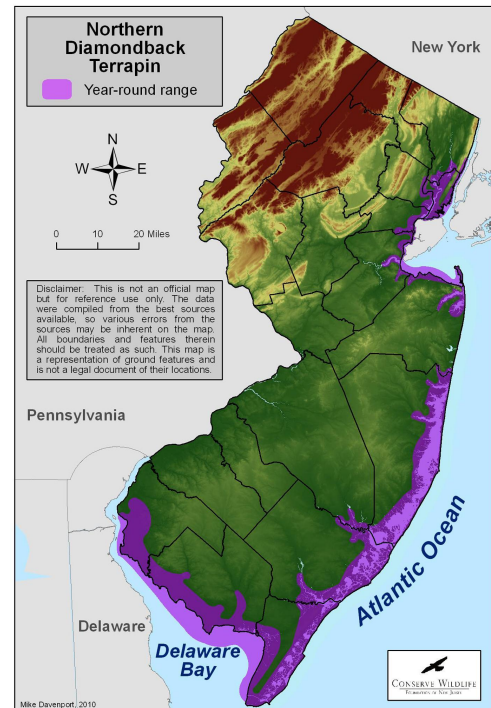
Life Cycle

Terrapins are cold-blooded. They brumate during the winter in muddy banks or the bottom of open water bays. Adult terrapins mate in early spring. Females lay clutches of 8-12 eggs from late May into mid-July on sandy beaches and other upland gravel areas that are above the high tide line. The eggs hatch in 61-104 days. The warmer the soil, the faster they develop and hatch. The sex of hatchlings is determined by the temperature of the soil, the warmer the soil, the more females that are produced.

MOST ACTIVE DURING HIGH TIDE CYCLE AND DURING FULL AND NEW MOON (SPRING TIDE) EVENTS. [TIDE CHART LINK]

Only around 1-3% of young produced reach adulthood. Hatchlings sometimes overwinter in nests (those that were laid later in the year) and emerge the next year (in April). After hatching they immediately head for vegetation, which helps provide cover and protection from predators, like gulls and crows. Occasionally hatchlings wind up in storm drains, where many die since they cannot escape.

Terrapins thrive in areas where nesting habitat is close to their aquatic habitat. In many coastal areas their nesting areas are along roads, which were built using fill to raise elevation for construction of roads. This is why many female terrapins enter roadways.



HOW TO CONTRIBUTE TO CONSERVATION

Best Practices for Roadside Vegetation Management

- Adopt a delayed mowing regime. Do not mow roadside edges in areas that terrapins inhabit from May 1 to October 1.

How to help a terrapin cross the road

- Stay safe. Never put yourself at risk. Make sure that you do not endanger yourself, or others, by walking into traffic.
- Keep a good distance between you and the vehicle in front of you.
- When safe to do so, pull your car over onto the shoulder. Turn on your hazard signals.
- When safe to enter the roadway, approach the turtle and carefully pick it up by grabbing its shell with both hands between its front and hind legs. HOLD ON. Terrapins have strong legs!
- It is important that you move the turtle in the direction that it is heading. They are not always headed directly towards water. They will turn around if you put them in the wrong direction, so work with their instincts.
- Place the terrapin off the road onto the soft shoulder (dirt or grass).
- If you have a GPS or a smartphone, take a photo and/or record your location so you can contribute your sighting to our project.
- **This is very important!** Please DO NOT move a terrapin long distances to “somewhere safe!” They have very small home ranges and moving them will only hurt them.

What to do if you find a live, injured or dead terrapin

For residents or visitors who wish to contribute their sighting to our Great Bay Terrapin Project, they will need a smartphone and install the free “iNaturalist” app [[Google Play](#)][[App Store](#)]. To record your observation, follow these steps:

- Download the iNaturalist app onto your smartphone (you must allow your location to be recorded).
- Join the [Great Bay Terrapin Project](#) by clicking on the “More” button in the lower right corner. Select “Nearby” Projects and look for [Great Bay Terrapin Project](#).
- Use the camera on your smartphone to take a good photo of the terrapin.
- Record your observation by selecting the species observed: “Northern diamondback terrapin” or “diamondback terrapin.”
- Double check the location to be sure it is accurate and make sure your location is open.
- Add your sighting to our project by selecting the condition of the animal: Live, Injured, Dead.
- Add a note about your sighting. For a help video, [click here](#).

For those who find an injured terrapin, record the location where you found it (a geotagged smartphone photo has location info). Carefully pick up the injured animal and place it in a small container or box. Keep it out of the sun and in a dry setting (do not put water in the container). Contact one of the veterinarians below to determine if they are open and will accept the patient. Note, if you pick up the terrapin and want to help it, then you are responsible for transporting it to a veterinarian or wildlife rehabilitator! The following veterinarians are gracious to offer triage care for terrapins in southern Ocean County.

- **Rancocas Veterinary Associates -- Tuckerton Office**
46 Great Bay Boulevard, Tuckerton, NJ 08087
(609) 812-5273
Hours: M-F: 9-6
- **Stafford Veterinary Hospital**
211 N Main St, Manahawkin, NJ 08050
(609) 597-7571
Hours: M-F: 8-8, Sat: 8-3, Sun: 9-11
- **Barnegat Animal Clinic**
530 N Main St.
Barnegat, NJ 08005
(609) 698-2141
Hours: M-Th: 8-8, Fri: 8-6, Sat: 8-3

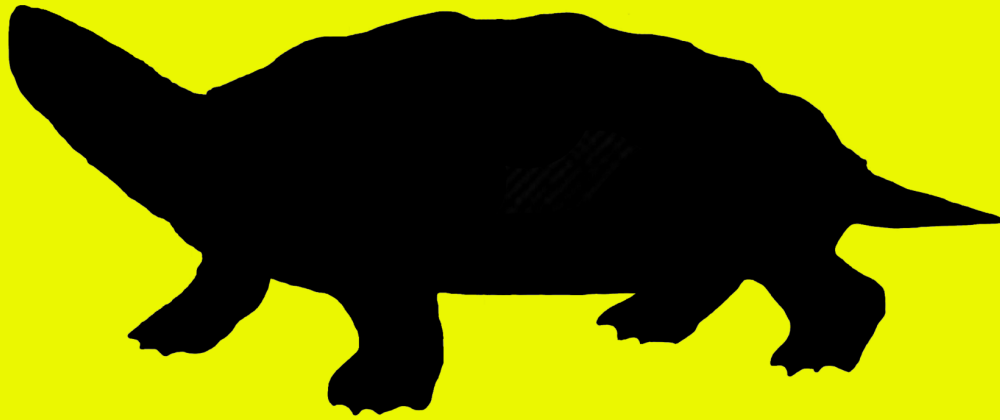
Rehabilitator who is permitted to care for terrapins:

- **Mercer County Wildlife Center**
1748 River Rd. (Rt. 29), Titusville, NJ 08560
(609) 303-0552

Links and resources:

[Terrapin life history - Conserve Wildlife Foundation of NJ Field Guide](#)
[Great Bay Terrapin Project - Conserve Wildlife Foundation of NJ](#)
[Project Terrapin](#)

TURTLE X-ING



Absolutely Fish 



POSTED BY SOMEONE WHO CARES ABOUT NESTING TURTLES. WWW.CONSERVEWILDLIFENJ.ORG

[18x24" Yard sign available for purchase online w/ local pickup in Bass River: \\$15](#)