

Diamondback Terrapin. Image: Robert Bachand

Project Summary

Why Do Diamondback Terrapins Need Help?

Around the same time the Delaware beaches start to crowd with summer traffic, female Diamondback terrapins are on the move looking for the best places to lay their eggs. Sadly, that means many terrapins are hit by cars during their search for the perfect nesting spot, typically from May to July. Data collected in 2019 alone found that nearly 100 terrapins were killed by vehicles on an 11-mile section of Coastal Highway between Dewey Beach and Bethany Beach.

Diamondback terrapins are unique because they spend their entire lives in bays, creeks, salt marshes, and coves, where they play a key role in maintaining balanced and healthy marsh ecosystems by eating salt marsh snails that feed on smooth cordgrass. They also face significant threats from natural predators like fox and raccoon, drowning in crab pots, and loss of nesting habitat.

Why Terrapin Gardens?

In response to those increasing threats, the Center is planning to install a series of Terrapin Gardens to provide suitable locations for female terrapins to safely lay their eggs. These sandy patches are built in carefully selected locations considering multiple factors, including: 1) close proximity to the estuary; 2) location above the high tide line; 3) vegetation providing shade and shelter for nesting females and emerging hatchlings; and 4) accessibility to construct and monitor the garden.

Through interpretative on-site signage, the gardens can help to increase public understanding of and appreciation for terrapins, ultimately inspiring people to support and protect this iconic Inland Bay species.

Installation of future garden sites will depend on community participation.

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Terrapin Gardens

Ongoing Project

Project Contact: Nivette Pérez-Pérez, Project Manager nperezperez@inlandbays.org

Funding:

- Pettus Crowe Foundation
- Pegasus Foundation
- Diamondback Terrapin Working Group
- U.S. Environmental Protection Agency

Project Timeline:

A pilot garden was constructed in June 2020. Two additional gardens will be installed in 2021. Efforts to expand to additional sites through partnerships with interested communities, businesses, and organizations will continue.



Completed Terrapin Garden at Delaware Seashore State Park.

How Do the Gardens Grow?

In 2020, the Center installed a pilot terrapin garden with an interpretive sign located near the Indian River Inlet at the Delaware Seashore State Park. A mixture of sands and soils was used in the garden's construction to closely imitate the natural conditions of terrapin nesting habitat.

Twenty-two tons of sand mixture was evenly spread around a horseshoe-shaped area built with about two feet of elevation. A gentle slope on all sides allows terrapins to easily enter and exit the garden.

In the event that eggs were laid, protective cages were prepared to reduce predation while allowing enough space for emerged hatchlings to fit through the cage's holes and make their journey to the water.

Between June and August 2020, the Center monitored the pilot garden three times per week to document any activity. Visual observations (e.g., animal tracks, dig marks, etc.) were recorded prior to raking the sand into a uniform pattern to help identify changes between each monitoring event. While no nests were found during the first year (it often takes a few years before terrapins find and use the gardens), the Center plans to continue monitoring the garden each nesting season to study terrapin nesting success over time.

What you can do to help?

Two more gardens will be constructed in spring 2021 (locations to be determined). With support from the community, the Center's long-term goal is to expand the number of gardens to aid terrapin nesting activity in the Inland Bays while simultaneously providing outdoor interpretive sites that engage the public.

If you have seen terrapins on the roads, parking lots, sidewalks, or other areas of your community or local business, please contact us!

We would be glad to explore whether a terrapin garden installation might work well at your location. For more information contact Nivette Pérez-Pérez, Project Manager at <u>nperezperez@inlandbays.org</u>



Intern monitoring the pilot terrapin garden.



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39375 Inlet Rd Rehoboth Beach, DE 19971 The Delaware Center for the Inland Bays is a non-profit organization established in 1994 to promote the wise use and enhancement of the Inland Bays and its watershed. With its many partners, the Center conducts public outreach and education, develops and implements restoration projects, encourages scientific inquiry and sponsors research. To learn how you can get on board with the bays go to inlandbays.org.

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