Background Information

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 the 11-mile section of Coastal Highway between Dewey and Bethany Beach.

Diamondback terrapins are unique because they spend their entire life in bays, creeks, salt marshes, and coves. In these habitats, they play a key role in maintaining a balanced and healthy marsh ecosystem by consuming the salt marsh snails that feed on smooth cordgrass. Terrapins face significant threats from natural predators, sea level rise, as well as human impacts like improperly maintained crab pots, and loss of habitat from development.

Why Terrapin Gardens?
In response to increased threats, the Center has installed three 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:

- close proximity to an estuary
- location above the high tide line
- vegetation providing shade and shelter for nesting females and emerging hatchlings
- accessibility to construct and monitor the garden

Pilot Gardens
A pilot garden was constructed in June 2020 at the Delaware Seashore State Park, Northside, across from the Center. Two additional gardens were installed in September 2021 & March 2022.
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.

**Is My Space Suitable for a Garden?**

Before creating a terrapin garden, make sure your property meets the qualifications noted under "Why Terrapin Gardens?". Your terrapin garden should consist of a horseshoe-shaped area built with at least two feet of elevation. A gentle slope on all sides allows terrapins to easily enter and exit the garden. Other important factors in creating a well-designed garden include a balance of soils and planting desirable vegetation along the edge of the garden.

**How Do I Build My Own Terrapin Garden?**

Your terrapin garden soil should have a balance of sand, silt, and gravel. The general mixture should contain around 97% of sand, 2% silt or organic matter, and 1% gravel. The particle size for sand and silt should be uniform in size and texture. This allows for airflow and for water to percolate through to ensure the survival of terrapin eggs and the plants surrounding the garden. The ideal size of a terrapin garden is 10 feet by 15 feet. The average amount of soil that would be needed for the garden is around 25 tons. When the garden is completed, we encourage you to put signs out near your garden to prevent people from intruding upon the garden. Check your garden at least three times a week and record the information. Record any indicators of terrapins nesting and any signs of predators around the garden (e.g., animal tracks, dig marks, etc.). When eggs are laid, protective cages need to be added to the garden. These reduce predation, while still allowing enough space for hatchlings to fit through and make their journey to the water. Cages are wire and fastened with rebar on both sides of the cage, as shown in Figure 5.

**What Should I Do If I Find an Injured Terrapin?**

If you see any newborn terrapins or injured adult terrapins, please contact the Delaware Council of Wildlife rehabilitators and educators on how to properly proceed with care:
- Sussex County, DE at 302-228-1063
- Kent County, DE at 302-270-9256
- New Castle County, DE at 302-834-4604

Please ensure that you have all applicable permits and permissions from regulatory authorities before creating your own terrapin garden. The Center is not responsible for the creation or acquisition of permissions for any private terrapin gardens.