About Diamondback Terrapins

- Diamondback terrapins are the only truly estuarine turtle in North America. They are non-migratory and spend their entire lives in bays, creeks, salt marshes, and coves.
- Terrapins produce only about 25-40 eggs per year (and may not nest every year) and do not reach maturity until a minimum of 6 years of age. The low reproductive potential of terrapins means that females must reproduce for many years in order for the population to grow or remain stable.
- Although the terrapin is considered an aquatic organism, it depends heavily on the near shore and shoreline habitat to complete its life cycle. Female terrapins must lay their eggs in terrestrial environments in open sandy areas to successfully reproduce. These are among the few times that terrapins must exit the water.
- Although little is known about the behavior of very young terrapins, hatchlings and first year turtles have been documented foraging on readily available prey such as arthropods, clams, crabs, and small crustaceans. Juveniles and hatchlings may spend a lot time on the edge of the marsh following the shoreline searching for food and at high tide entering into grassy, salt marsh areas.
- Much of the natural shoreline around the Inland Bays is excellent terrapin habitat because of the alternating areas of sandy beaches used for nesting and salt or fringe marsh necessary for juvenile feeding and growth. Areas where these two habitats are not found together usually do not support large populations of terrapins.
- Due to the low-lying nature of many bay beaches, most terrapin nesting occurs in areas that are marginally above the high tide line. In fact, many of these nesting beaches can become inundated during periodic wind driven high tides associated with a hurricane's storm surge. In parts of the Inland Bays, terrapins cross Route 1 to nest in the sandy dunes on the eastern side of the highway.
- Shoreline stabilization with bulkheads or riprap threatens terrapin populations. It destroys the narrow strip that has suitable sandy material required for nesting as well as high beach elevations necessary for the successful development of terrapin eggs. Consequently, terrapins will nest in areas that are not sufficiently above the high tide and the developing embryos drown, or they will lay their eggs in higher grassy areas where eggs and hatchlings become entrapped or killed by grasses. Even the use of beach grasses in these areas can result in increased mortality in the upper beach areas in which grasses can entrap eggs in the nest.
- Increased competition for essential terrapin habitat is steadily increasing. Impacts include: loss of nesting habitat, poor recruitment due to limited nest and hatchling predation, beach disturbance, shoreline modifications that eliminate beach strand habitat essential for terrapin breeding, injuries and morality due to boating and vehicle impacts during both active and inactive periods in their life cycles.
- It is estimated that only two percent of terrapin eggs hatch, owing largely to predation by foxes, skunks, and raccoons, which dig into the nests and consume the eggs and baby terrapins. Survivors emerging from the nest are often eaten by gulls and crows or by herons and predatory fish after entering the water. Traditional intelligent predators increasingly target limited and fragmented nesting areas.

- Traditional nesting areas have been severely and permanently altered by waterfront development.
- Habitat loss is a significant threat to the continued existence of the Diamondback terrapin in Delaware. Beach nesting areas are universally and permanently being altered through riprapping, bulk heading, and other shoreline stabilizing practices.
- Beach habitat is critical to the continued existence of terrapins. Research indicates that more than 95 percent of breeding females return to a particular area to nest year after year.