

Diamondback terrapins (*Malaclemys terrapin*) are endemic to the Atlantic and Gulf coasts of the United States. Marshes and shorelines are critical to terrapins, and these habitats are being destroyed on a large scale by human development. In Barnegat Bay, New Jersey, where this project took place, over 45% of the shoreline has been walled or bulkheaded, and only 29% of the Barnegat Bay shoreline is in its natural state. As a result of this terrapins have been seeking alternative nesting locations, which may not be as suitable as historic sites were. This research focused on the nesting ecology of diamondback terrapins on North Sedge Island in Barnegat Bay in order to determine whether there was any correlation between female size and clutch size, mass or nest depth. This will provide better insight in the nesting ecology of terrapins at Barnegat bay, which may help to improve the population status of terrapins throughout the area. The study was completed from May to August 2011. We found that there was a correlation between female terrapin plastron length and clutch size as well as female plastron length and clutch mass. There was a very low correlation between female terrapin plastron length and nest depth as well as the depth of the first egg.