

ECOSYSTEMS

The Beach Habitat

beach
habitat

A barrier beach, such as Breezy Point, Brooklyn is an ever-changing ridge of sand that parallels the coastline. Coastal lagoons or salt ponds form landward (behind) the barrier beach. The Inlets or man-made breachways cut through the barrier beach to connect the water in the lagoon to the ocean.

A barrier beach is constantly changing. The beach and dunes are made up of sand that is either being moved onto the beach (*deposition*) during calm weather or removed from the beach by storms (*erosion*). This can happen any time of the year but because more storms happen in the winter, most beach erosion occurs then. When sand is deposited, the barrier beach grows in size and when sand is eroded from the beach, the beach gets smaller. During storms and very high tides the berm is formed. The berm is the part of a beach that slopes up from the water to form a nearly flat area. Wind moves grains of sand from the beach to the dunes. The barrier beach and dunes protect the mainland from storms and hurricanes. They can be considered land's first and second lines of defense against the sea (www.uri.edu).

Many plants and animals can live in this harsh environment. For example American Beach Grass has adapted to its sandy and windy environment by possessing rhizomes or a deep and wide root system that grips the sand dunes. This adaptation allows for this species of plant to survive within the beach habitat.

What role does weather play in this habitat?

Standard LE.5.1.d.e
Our goal is to understand the importance of adaptation in nature

Define adaptation

give 2 examples of adaptations

Why is a barrier beach constantly changing?

How do plants and animals survive in the beach habitat?

Beach Habitat Vocabulary

Define:

Berm

Deposition

Erosion