Peconic Estuary Partnership

Label a Living Shoreline!

Learn about the role each animal, plant, or material plays in this living shoreline by reading the descriptions below and labeling each in the diagram. Do you know why living shorelines are better for our environment than hardened shorelines? Answer the questions to test your knowledge!

Ribbed Mussel
These bivalves attach to sediments, plants, and other structures using little fibers called bistle threads that help to stabilize a shoreline and prevent erosion. They build upon each other to help increase the height and size of the marsh, allowing it to grown inland as sea level rises with climate change. Addtiionally, they also help improve water quality by filter feeding on particles and excess nutrients.

Diamondback Terrapin
These animals live in the Peconic Estuary and only come on shore to lay eggs above the high tide line each summer. They require healthy, brackish water and access to marsh habitat without bulkheads and other hard structures.

Sediment/ Sand
Sediment/ sand makes up Long Island's shorelines. Sand is made of different minerals that over time were broken down from rocks. It provides beach for people to enjoy and for animals to find habitat.

Horseshoe Crab
These animals play an important role in the Peconic Estuary's ecosystem. Their eggs provide essential nutrition to migrating shorebirds like piping plovers and red knots. Because they come onshore to mate and lay eggs above the high tide line in the summer months, they need to have access to the shoreline without bulkheads and other hard structures.

American Beach Grass
This native beach plant grows above the high tide line and can be found on dunes. It helps to hold dunes and sediment in place with its roots, preventing erosion.

Spartina alterniflora
This beach grass, otherwise known as smooth cordgrass, is a salt-tolerant plant that can survive being below the high-tide line. It provides important habitat for shellfish and other marine animals, and it is also important for stabilizing shorelines by holding sediment in place with its roots.

Rocks
This natural material is used to help keep sediment in place. The rocks have a hard surface that can withstand waves and flooding without easily being changed.

Questions:

1.What are some benefits of a living shoreline?

2. What animals would be negatively impacted by a hardened shoreline ? Why?