Is seagrass and seaweed the same thing?

Plants are very diverse. Just like land plants, aquatic plants (those that live in water) can be very different.

Seagrass and seaweed are similar in some ways. They both photosynthesize just like land plants, and they both play an important role in an ecosystem, providing food and habitat. However, though their names and appearance are similar, seagrass and seaweed are not the same thing. In fact, they are very different.

Seaweed is a nickname for a group of alga. It is any of the red, green, or brown algae that grows in the sea/ocean. Most alga, including seaweed, are not even considered plants. Though similar to plants, alga lack roots, stems, leaves, and other important structures of a plant. There are many different species of seaweed and they can be found fixed to the seafloor or floating in the water.

Seagrasses are true plants and are very similar to land plants. They have long, grass-like leaves, flowers, seeds, and roots. The only difference is, they grow underwater. They are the only living plant that can live entirely underwater.

Here in Tampa Bay, we have three common species of seagrasses: shoal grass, turtle grass, and manatee grass. Seagrass is a critical habitat in the bay, providing a nursery and home for many animals. It is also an important food source and improves water quality in the bay.

MEET THE
Grass Porgy

The grass porgy is a pale, olive brown fish with dark blotches forming vertical bars along its body and a dark spot just behind the gills. It has a compressed body, humpback shape, a deep snout, and a forked tail. The grass porgy gets its name from its habitat, residing in inshore seagrass beds of coastal waters. It is very well camouflaged in its environment with its unique patterns.

Above, the Grass Porgy is well camouflaged in its environment.
Decades ago, the Tampa Bay estuary looked a lot different than it does today. Back then, there were not many laws in place for proper disposal of wastewater from homes and businesses. Most of this dirty water was dumped directly into Tampa Bay, which caused nutrients like nitrogen and phosphorus to enter the environment. These nutrients acted like a food source for algae living in the bay, causing it to grow in large mats covering the surface of the water. The seagrasses living at the bottom of the estuary were blocked from the sun, which caused most of them to die off because they could no longer use the sun for photosynthesis. With Tampa Bay’s seagrasses in distress, the entire bay ecosystem suffered: invertebrates, fish, and wading birds no longer had a place to live or find their food. Luckily, once people started to realize how dirty the bay had become, they decided to take action! New laws were passed so that wastewater had to be thoroughly cleaned before flowing into the environment. Also, organizations like Tampa Bay Estuary Program were created with the goal of restoring these seagrass habitats to sustainable levels. Today, Tampa Bay Watch has helped this organization maintain 34,000 acres of healthy seagrass across the bay!

Sources: Smithsonian Ocean, Tampa Bay Estuary Program

Fun Facts

There are nearly 52 species of seagrasses worldwide and only seven species are found in Florida waters.

Most seagrass species grow in the water between 3ft-9ft because they need enough sunlight in order to grow.

Sargassum is a type of seaweed that floats in island-like masses in the Atlantic. Sea turtles spend the first few years of their lives in the Sargasso Sea eating Sargassum.

Generally, manatees will eat one-tenth (1/10) of their body weight in plants every day. A manatee that weighs 1,000 pounds eats nearly 100 pounds of food per day.

Sources: Florida Department of Environmental Protection, Tampa Bay Estuary Program, The Turtle Island Restoration Network, University of Florida

Sustainability Tip

All drains lead to the ocean!

Remember that storm drains on streets and sidewalks flow directly into the bay. Be sure to throw your trash in a trash can and limit fertilizer/pesticide use on plants and grass so no pollution washes into the estuary.