

Where Marsh Meets Hammock

You are standing at the intersection of two unique coastal environments. To the west lies salt marsh, a dynamic and ever changing ecosystem shaped by daily tidal flows through Bogey Creek. The reedy grasses and mangroves of the marsh provide both protection and a steady food supply for many species from invertebrates to birds to mammals. To the east, a maritime hammock forest emerges, characterized by hardwood trees and a palmetto understory. This drier ground is home to many mammals and birds. These two ecosystems have unique qualities, but they also work together to protect each other and to protect our coastline.



Salt Marsh Ecosystem Services



Snowy Egret



Fiddler Crab



Marsh Rabbit

Managing nutrients and water quality

Salt marsh grasses and oyster reefs are like nature's cleanup crew! They team up to trap dirt and filter out extra stuff from the water, helping keep it clean and healthy. Oyster reefs also act like big water filters, catching excess nutrient runoff that could otherwise pollute the marsh environment.

Carbon Sequestration

Salt marshes are like big sponges for the air! They soak up lots of carbon dioxide and other gasses, which helps keep our planet cool. Marsh grasses, seagrasses, and mangroves work together to save this "Blue Carbon". In fact, salt marshes can store an estimated 10 times more carbon than tropical rainforests! But if we lose these marshes, all that saved carbon can escape back into the air. The special soils in marshes also help keep this carbon stored by breaking it down very slowly without much oxygen.

Buffering of coastal communities

Coastal areas have always been popular for towns and cities, and for a good reason! Tidal marshes with their grasses, mud, and oyster reefs are like nature's shields. They help protect us from big waves and flooding during storms and hurricanes. In fact, in 2023, they were estimated to be worth \$7,284 for every acre in keeping coastal cities safe!

Cornerstone of life cycle for aquatic inhabitants

In tidal marshes, the low oxygen helps make a cozy home for smaller sea creatures that can handle it. These marshes are also great for birds! They provide a safe spot for birds to lay eggs, build nests, and find food. Migratory birds love these marshes too because they can rest and recharge before continuing their long trips.

White Tail Deer



Working Together

Much of the vegetation living and growing in the maritime hammock helps stabilize its soil, preventing possible erosion and runoff of harmful waste into the salt marshes. In return, the salt marshes act as a nutrient filtration system for those same plants through root systems connected to their upland border. This filtration system is crucial to neutralizing many pollutants before they can reach marine and estuarine communities.

Each environment is home to many species of small mammals, birds and insects. Amphibians can find their home in both environments as they can live in both water and on land. Birds feasting on invertebrates such as crabs and snails living in salt marshes, find shelter in the maritime forest.

The symbiotic relationship between salt marshes and maritime forests helps feed, provide homes for and protect many living organisms. They are both crucial coastal environments in Northeastern Florida.

Great Blue Heron



Maritime Hammock Ecosystem Services

Resting and foraging areas for wildlife

Maritime hammocks are like cozy rest stops for songbirds during their long trips between the tropics and their summer homes. These spots give birds a safe place to hide from predators and bad weather, and they find plenty of yummy insects and plants to snack on along Bugtussle Trail. It's like a birdie pit stop with all the food and shelter they need to keep going!

Buffering

Just like salt marshes, maritime forests are great at helping protect us from big storms and hurricanes! These forests grow in a way that helps them deflect the wind, so it doesn't hit them straight on. Instead, salt pruned trees and plants help the wind go around, making the storm winds less damaging. It's another piece of the armor that provides the first line of defense in the stormy season.

Oysters



Biodiversity hotspots

Maritime hammocks are like a super cool nature playground for all kinds of animals! Migrating birds use these places to rest and find food on their long trips, while local birds, mammals, and reptiles make it their home all year round. Because so many different animals live and play here, we call it a "biodiversity hotspot." Bogey Creek is a fantastic spot for wildlife lovers who want to see all these amazing creatures in one place!

Rain and stormwater management

Maritime hammocks are great at handling lots of water because they live right by the sea! When it rains a lot or when big waves come in, these special forests can handle the extra water with trees, bushes, and grasses that help soak up and slow down the water, so it doesn't wash everything away. So, when there's a lot of water from surplus rain storms or flooding, maritime hammocks are ready to tackle it and stay strong!

Raccoon



Red Winged Blackbird



This document was created by students in the UF/IFAS Florida Master Naturalist Program for use by North Florida Land Trust.

