



Salt Marsh Cordgrass



Horseshoe Crab



Yellow-Crowned Night Heron



Great Egrets

Points of Interest: Marine Park Self Guided Kayak Tour

Nature preserves provide a home for native plants and wildlife, including numerous rare, threatened and endangered species. They are also a rest stop for migrating birds each spring and fall. The plants filter and add oxygen to the air we breathe, the soils capture and control stormwater run-off, and the entire ecosystem keeps the city cooler in the summer and warmer in the winter.

Salt Marsh Ecosystem (figure below left)

Salt marshes are wetlands connecting the ocean to land and are flooded daily by the tides. They serve as critical habitat for fish, mussels and shorebirds and help to clean the water and reduce flooding. Over 80% of New York City's original salt marshes were destroyed by development of the shoreline.

- **Upland Buffer**

Uplands consist of coastal forests, meadows, grasses and wildflowers, which are rare in NYC.

- **High Marsh**

Flooded only twice monthly, this is the highest part of the wetland, consisting of short grasses and wildflowers.

- **Low Marsh**

Flooded twice daily, only one plant species, salt marsh cordgrass, can live here, often found with mussels attached to its base.

- **Tidal Flat**

Only exposed at low tide, these muddy expanses are home to worms, snails, clams, crabs, oysters and other food for fish and birds.

Salt Marsh Cordgrass (*Spartina alterniflora*)

This is the only plant that can live in the low marsh, requiring twice daily flooding. Adapted to salt water by "sweating it out," you can see salt crystals in its leaves. Ribbed mussels are often found attached to the base of the plant, helping to stabilize it, and fiddler crab burrows help deliver oxygen to plant roots.

Osprey (*Pandion haliaetus*)

Absent in New York City for years due to habitat destruction and pesticides, in the 1990's osprey began returning to the city each spring. Ospreys are monogamous and, much like humans, present their partners with gifts (branches, balloons, garbage bags) that are used to decorate their nests, seen high up on platforms in the marsh.

Horseshoe Crab (*Limulus polyphemus*)

These crabs are ancient creatures that breed on New York City beaches in summer at the full and new moons. Horseshoe crabs come in with the higher-than-usual tides and lay their eggs in the sand. While horseshoe crabs are not endangered, they are globally "near threatened" as they are overfished for use in the biomedical industry.

Common Reed (*Phragmites australis*)

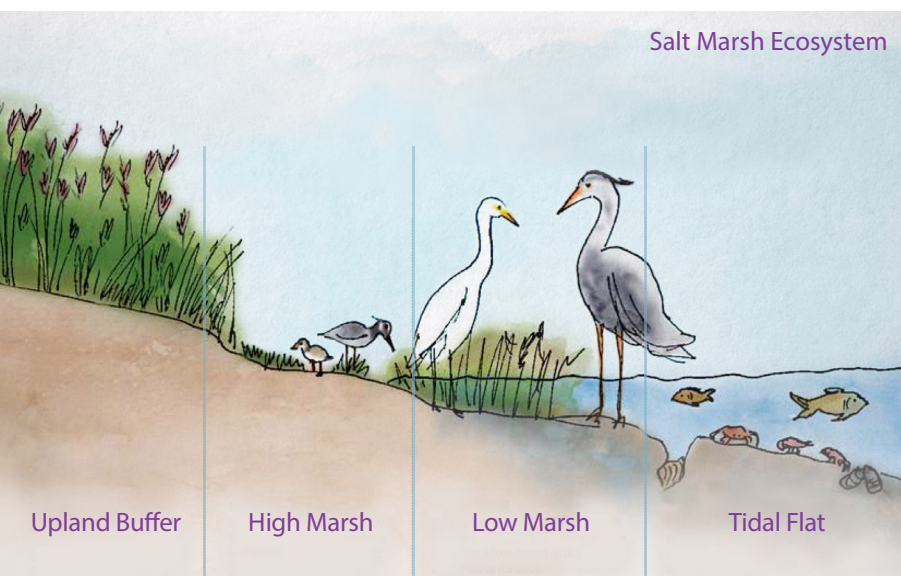
Native to Europe and Asia, common reed invades wetlands in eastern North America, displacing native grasses and ground-nesting birds. Spreading mostly by thick creeping roots, called rhizomes, and above-ground runners, common reed releases a chemical into the soil that inhibits other plants' seeds from growing, helping the species to spread easily.

Fiddler Crab (*Uca pugnax*)

These crabs burrow in the sand and mucky soil around salt marshes. They help break down dead plant leaves, returning nutrients to the soil. Their burrows also help aerate the soil by bringing oxygen to plant roots. Fiddler crabs are named for the male's single large claw, which is used to defend burrows and attract mates.

Yellow-Crowned Night-Heron (*Nyctanassa violacea*)

Often also referred to as "crab-eater," the yellow-crowned night-heron walks slowly over land and through shallow water to feed on crabs, insects and occasionally fish. Due to hunting in the early 1900's and loss of wetlands, this bird is rare in New York State but a regular visitor to Marine Park's quiet, healthy marshes.



Common Reed



Osprey



Fiddler Crab

Wheel Fun Rentals Launch Area



This area is designated as a Forever Wild Nature Preserve containing several ecosystems rare to the city. The preserve is here for your enjoyment, but it also needs your protection. No excessive noise, littering, disturbing plant life, or feeding/approaching wildlife.

Recommended Tour Routes



Starting Point

2-4 Hours

6 miles to the end of Plumb Beach Channel and back

1-2 Hours

3 miles around White Island and back

Water Safety

- Be aware of tidal forces & stay clear of bridge area when outgoing current is strong.
- White Island Preserve is off limits to all watercraft.
- Average kayak speed, 3-5 MPH*.
- Average SUP speed, 2-4 MPH*.
**Depending on currents, wind & fitness*
- Wear a life jacket **AT ALL TIMES.**
- Make sure you understand kayak and SUP rules and training.
- Don't forget comfortable clothing, sunscreen and water.
- Check the tides: some areas may not be accessible at low tide.



One Hour Kayak Rentals & All Stand Up Paddleboard Rentals are not allowed under / past bridge.