Have to Have a Habitat

All organisms great and small need to have a habitat, a space that supports what they need for life! Habitats can be found all over the island, but some habitats can only be found in certain places. The Nantucket Conservation Foundation protects over 9000 acres of habitat which supports a diverse array of organisms. We are proud of these protections put in place for island resident, including the animals that make Nantucket unique compared to the mainland.

Today you get to learn about a few of those unique species and the requirements they have for their habitats where they live!

For each species:
- Learn about the habitat they require and why
  - be sure to read for habitat-related words like: Forest, Grassland, Wetland, Saltwater, Freshwater, Open Area, and Roads.
- Check the map of properties provided and the habitats found there
- Visit each of these properties and see the habitats for yourself
- Decide which species you could potentially find at each property
Meet The Species

Spotted Turtle

Description: A small dark turtle with a smooth round shell dotted with yellow spots. Their undersides are golden yellow and they are able to bring their tiny spotted feet and head into their shells to protect against predators. Not as bold as their snapping turtle relatives, spotted turtles are shy and scurry away when people get too close.

What it eats: Aquatic plants, algae, aquatic insects, worms, tadpoles, and small fish.

Where it has offspring: Digs a hole and lays eggs in the soft leaf litter of the forest. Baby turtles hatch in the late summer and fall, then head back to wetlands for the winter.

Where it spends time: Turtles spend most of their time in the water of freshwater ponds and bogs, but need to go on land sometimes in order to move between wetlands and to lay eggs in soft forest floors. Spotted Turtles particularly like freshwater wetlands with lots of trees around to help provide shade.
Northern Long-eared Bat

Description: A small, hairy, brown and black mammal who are nocturnal, meaning they are only active at night time when it’s too dark for humans to see without a flashlight. Northern Long-eared Bats weigh about as much as a quarter! They have thin and nimble wings which allow them to fly through tight spaces and catch their prey as they fly around. Even when you see a bat flying as it’s getting dark, it’s hard to tell what species of bat it could be. Our scientists at NCF use the sounds that bats make to tell them apart!

What it eats: Moths, mosquitos, flying insects

Where it has offspring: Adult females only have 1 baby, known as a pup, per year. They raise that baby in a secluded spot in a crack or crevice known as a maternity roost. Roosts can be found in forests with lots of Pitch Pine trees as well as in crawl spaces of houses!

Where it spends time: Northern Long-eared Bats are very well adapted to hunting in forests at night. Their high pitched sounds help them find prey in the dark, a trait called echolocation. They sometimes fly into open areas, but mostly stick to forests and forest edges.
Meadow Vole

**Description:** One of the most abundant rodents on Nantucket is the Meadow Vole. These small brown rodents have short tails and don't have large ears like their mice relatives. Voles are often food for other animals so they are quick to scurry and hide away before they get eaten. Humans usually encounter Meadow Voles as a flash of brown or a rustling noise under the grass.

**What it eats:** Grasses, seedlings, fruits, seeds, and other plants.

**Where it has offspring:** Voles build nests by collecting and weaving grass, but because they are mammals they give birth to live young. Nests can be made below ground in burrows or above the ground under the cover of boards and debris.

**Where it spends time:** Voles spend a lot of time scurrying close to the ground in open areas, using dead vegetation as cover while they forage for food. Despite their name, Meadow Voles are widespread and can be found in grasslands, wetland edges, dunes, beaches, forests, and even near places where people live.
Northern Harrier

**Description:** A predatory bird often seen gliding low over open areas with black-tipped wings and a tail that is long in relation to their body. The males and females have different colors during the year (Males are silvery grey and white, while females and young harriers are streaky brown and white), but both have a white patch just above their tail which can be seen as they turn and pivot in the air. Unlike other sit-and-wait perch hunters, Harriers are active hunting birds and prefer to spook their prey into moving or push them out of hiding.

**What it eats:** rodents, small birds, and snakes.

**Where it has offspring:** Harriers make a nest on the ground in dense patches of shrub or grasslands with lots of cover.

**Where it spends time:** Harriers are really good at hunting rodents in grasslands and open areas, especially on Nantucket. The used to be called Marsh Hawks, because they can also be seen hunting the edges of marshes, wetlands, and beaches. They aren’t well adapted to living in forests and prefer to stay out in the open.
Garter Snake

**Description:** One of the most abundant and colorful reptiles in New England, the Garter Snake comes in a wide variety of colors and patterns. Some garter snakes have lines and checkerboard patterns of brown, green, black, orange, yellow, and blue. When born, garter snakes are only a few inches long, but they can live well into their teens and grow to over 5 feet in length! Garter Snakes are exothermic, meaning they don’t produce their own body heat. Snakes (like other reptiles) rely on heat from their environment, which requires them to spend time basking in the sun and some time conserving energy and hiding under shady cover. The balance of this basking vs. shading behavior is known as thermoregulation.

**What it eats:** Rodents, frogs, insects, worms, and baby birds.

**Where it has offspring:** Snakes don’t build nests, and believe it or not, they don’t lay eggs. Mother garter snakes give birth to live young, sometimes 80 at a time!

**Where it spends time:** Garter snakes actively hunt for prey particularly around wetlands and wet areas. They are also found hunting in grasslands, forest edges, and even roads or paths. You can sometimes see a garter snake using roads, rocks, paths, and parking lots to bask during the afternoon.
Piping Plover

**Description:** Piping Plovers are a small sand-colored bird that often run around unnoticed on the beach, thanks to their camouflaged coloration in their preferred habitat. Their whistle-like call and peeping help warn their chicks that something big and dangerous is in their space. You can often hear their calls before you see the bird making them! Piping plovers were almost hunted to extinction in the late 1800s, but have made an amazing recovery thanks to protections and monitoring by groups like Nantucket Conservation Foundation, The U.S. Fish and Wildlife Service, Mass Audubon, The Trustees of Reservations, and all the other groups who protect beaches around our island!

**What it eats:** marine worms, sand fleas, insects.

**Where it has offspring:** Plovers need sandy beaches to nest, where they make nests out of small depressions in the sand lined with sea shells. Once the plover chicks hatch, the adults and chicks move around the beach, feeding at the water line.

**Where it spends time:** Piping plovers are migratory, meaning they are here during the spring and summer to raise their chicks, but head south as the fall arrives in order to stay warm. While they are here, plovers stay close to the water line on sandy saltwater beaches. Sometimes they run into the cover of grassy dunes, but they mostly feed out in the open.