

Trustum Pond National Wildlife Refuge (NWR) Interpretive Trail Map

Welcome!

Please follow the map on the reverse side and stop at the numbered markers you encounter along the way.

Each number corresponds to the numbered paragraph below. This trail is 1.8 miles in length and by following it you will learn about the animals, plants, and geography of the refuge.

Enjoy yourself but please remember, within all National Wildlife Refuges: **wildlife comes first.**

- 1 - The U.S. Fish and Wildlife Service (USFWS), a unit of the Department of the Interior, maintains over 560 refuges in all fifty states and U.S. Territories. The first National Wildlife Refuge was established by President Theodore Roosevelt in 1903. There are currently over 95 million acres of wildlife habitat, the largest area in the world, preserved for the benefit of wildlife. Trustum Pond NWR is one of the five National Wildlife Refuges in Rhode Island. The others are Ninigret NWR in Charlestown, John H. Chafee NWR in Narragansett, Sachuest Point NWR in Middletown, and Block Island NWR.

- 2 - Land in a refuge is not merely set aside and then forgotten. The USFWS manages these lands to encourage a habitat that is suitable for wildlife. The USFWS is also mandated to restore habitat where necessary and appropriate. You can see an example of such habitat restoration here. A habitat once common along the Rhode Island coast is the coastal grasslands. This provides breeding and migratory stopover habitat for such birds as the Northern Harrier (*Circus cyaneus*), Bobolink (*Dolichonyx oryzivorus*), Savannah Sparrow (*Passerculus sandwichensis*), and Eastern Meadowlark (*Sturnella magna*). USFWS plants native grass species at Trustum Pond, Ninigret, and Sachuest Point NWRs to re-establish areas of habitat. The sign in front of you provides more information on the grasses planted here.

From here, take the trail to your left.

- 3 - This is the freshwater pond that provides habitat for a variety of species. Many woodland birds nest near

here during the spring and summer. Look for the Eastern Kingbird (*Tyrannus tyrannus*) and the Redwing Blackbird (*Agelaius phoeniceus*). We can also identify birds by their songs. Listen for Yellow Warbler singing "You're so sweet; you're so sweet." Numerous reptiles and amphibians, too, live in or near the Farm Pond; look for the Snapping Turtle (*Chelydra serpentina*) swimming just below the water's surface and the Green Frog (*Rana clamitans*) at the water's edge. The Green Frog is also called the Banjo Frog because its call sounds like a banjo string being plucked. *Listen for it.*

Proceed along the trail and take the right-hand fork on the Red Maple Swamp Trail.

- 4 - Now we're in another freshwater habitat but one different from the Farm Pond. This is a Red Maple Swamp. Here, there is a leafy canopy of trees shading the waterway. The trees are primarily Red Maple (*Acer rubrum*), the Rhode Island State Tree. Smaller shrubs and plants growing in the swamp include Skunk Cabbage (*Symplocarpus foetidus*), called such because of the foul smell, and Common Spicebush (*Lindera benzoin*). In or near the swamp you might find Spotted Salamanders (*Ambystoma maculatum*) and Toads (*Bufo americanus*) and you might see, or hear, the Common Yellowthroat (*Geothlypis trichis*) singing its "Witchity, witchity, witchity" song in the understory shrubs.

- 5 - As you leave the Red Maple swamp the habitat changes from wet to drier upland with shrubs and grasses. Trustum Pond NWR was farmlands for decades until the land was deeded to the USFWS in 1973. Indications of that previous use are still evident in the old windmill you see here that pumped water for farm animals, and the fence in front of you that marked a former pasture. Over the years, these manmade features are being surrounded and replaced by grasses, trees, and shrubs. Many of these were non-native shrubs that provided lower-quality habitat. The USFWS is actively restoring these areas to native shrubs to benefit birds such as the American Woodcock (*Scolopax minor*), Blue-winged Warbler (*Vermivora pinus*), White-Eyed Vireo (*Vireo griseus*), and Eastern Towhee (*Pipilo maculatus*).

- 6 - Re-entering the Red Maple Forest, note the tree directly in front of you; instead of a single trunk with branches forming a crown overhead, this tree branches close to the ground in a spreading pattern. *This is an example of a coppiced tree.* During its early growth, the tree's main stem was killed either due to natural causes or by human cutting. The tree grew branches from the remaining stump and produced this spreading pattern. There is speculation that some trees like this were left by farmers to provide shade for farm animals when this was a pasture. Now, White-tailed Deer (*Odocoileus virginianus*) are occasionally seen resting under these trees.

When you get to the junction with the Osprey Point trail, turn left.

- 7 - As the trail gets closer to Trustum Pond the trees you see are different. First are numerous Black Gum or Tupelo (*Nyssa sylvatica*) and then Shadbush (*Amelanchier canadensis*) and Sassafras (*Sassafras albidum*) as you get closer to the water. The Sassafras is unique in that it is a tree with four, unique leaf patterns: an oval, a mitten with a left thumb, a mitten with a right thumb, or a mitten with two thumbs! Both the Sassafras and the Shadbush are more tolerant of the poor-quality, sandy soils found here and also are better able to tolerate the saltier air found near the ocean. Both trees benefit from the lack of competition from other forest trees. Communities shaped by these maritime influences are unique and rare regionally.

- 8 - The water before you is Trustum Pond, the only undeveloped coastal pond in southern Rhode Island. The water in the pond is brackish, and slightly more salty than fresh as compared to the water in the Farm Pond, though still less than 1 ppm (part per million of salt). The exception to this is after storms when the barrier beach is overtopped by the waves. Rain and continual groundwater discharge keep Trustum Pond almost fresh unlike many of Rhode Island's other coastal ponds which have had breachways installed and are now tidal. Salt ponds provide breeding areas for a wide variety of fish species. During the winters, coastal ponds are also vital over-wintering habitats for waterfowl such as Ruddy Ducks (*Oxyura jamaicensis*), Buffleheads (*Bucephala albeola*), and Scaup (*Aythya* sp.). During the summer, Great-Blue →

Heron (*Ardea herodias*) and Snowy Egret (*Egretta thula*) are often seen wading the shallows, while Osprey (*Pandion haliaetus*) fly overhead, searching for fish.

- 9 - Across Trustum Pond you see sandy dunes which mark the back of the barrier beach, separating Trustum Pond from Block Island Sound. Barrier beaches protect coastal ponds from the sea and are active geological features, growing wider or narrower as storms and tides add or remove sand. Over many years, barrier beaches can move closer or further away from the mainland. The barrier beaches are important breeding habitats for the federally threatened Piping Plover (*Charadrius melodus*) and the state threatened Least Tern (*Sterna antillarum*). To provide a protected nesting area for these birds, the barrier beach is closed above mean high tide to all human activities from mid-April to mid-September.

Return to the trail, but when you get to the junction with the Red Maple Trail, proceed straight ahead.

- 10 - Moving away from the coast, you now re-enter the oak-maple forest characteristic of Southern Rhode Island woodlands. This habitat is home to both resident species such as the Barred Owl (*Strix varia*) and the Black-capped Chickadee (*Parus atricapillus*) as well as summer migrants such as the Yellow-billed Cuckoo (*Coccyzus americanus*) and Gray Catbird (*Dumetella carolinensis*). Resident mammals such as Raccoon (*Procyon lotor*) and Striped Skunk (*Mephitis mephitis*) are also found here.

- 11 - Looking ahead at the stone wall running through the trees, one might wonder, "Why did the farmers build these walls amongst the trees?" The surprising answer is, they didn't! The walls at one time bordered fields and pastures. Once the farm animals were removed and the fields were no longer tilled or mowed, the native trees returned. This process is known as succession and is an example of the persistence of nature. Where once sheep and cattle grazed, now gray squirrels (*Sciurus carolinensis*), Fishers (*Martes pennant*), and Gray Fox (*Urocyon cinereoargenteus*) are found.

- 12 - The 'Area Beyond This Sign Closed' notice on the gate in front of you indicates an area of Trustum Pond NWR not open to the public. While many compatible activities such as nature walks and birdwatching are permitted on refuges, the principal purpose of a wildlife refuge is to provide habitat. Also, closed areas are often used for ongoing scientific research on the ecosystem and its resident plants and animals.

- 13 - You are now walking along the coastal grassland you passed through when you began this walk. Bluebirds (*Sialia sialis*) and Tree Swallows (*Ichthyophaga bicolor*) are two species of birds you might see here during nesting season. Unlike the grasses found in our lawns and farm fields which are imported from Europe, the grasses here are native warm-season grasses. They have long roots which allow them to reach subsurface water and so remain vigorous during the heat of summer. Also, several species of state and federally listed plants have been documented in the 160 acres of grassland at Trustum Pond NWR.

- 14 - An increasingly important management problem is the control of exotic species. Exotic species, also known as *invasives*, are plants or animals native to distant locations that are either transported directly or escape into the habitat. These species arrive without natural predators or diseases and are often able to dominate their new habitat to the detriment of the native species. Two examples of *invasive* species are found here. The shrub about 6 feet tall is Morrow Honeysuckle, a native of Asia, and the vine climbing nearby trees is Asiatic Bittersweet, native to East Asia. The USFWS is actively working to eradicate *invasive* plants such as these and replace them with native species.

This concludes the Trustum Pond National Wildlife Refuge interpretive trail. Follow the trail to your left to return to the Contact Station. We hope you enjoyed your walk and invite you to return often to experience the variety of plants and animals found here throughout the seasons.

