# Bridge Creek Conservation Area

DIRECTIONS: Two trailhead parking areas, each with limited capacity, provide access to this unique natural area:

- West Barnstable Fire Station: Space for 3 cars is provided in the northeast corner of the lot (next to the kiosk), behind the fire station. Additional parking arrangements may be made by contacting the Fire Station.
- Jenkins Wildlife Sanctuary: From Rt. 149 just north of the Mid-Cape Highway, take Church Street east 7/10 of a mile. The trailhead parking area is on the left.

SITE DESCRIPTION: The Bridge Creek Conservation Area is notable for its remarkably diverse and accessible wetland habitats. It encompasses 246 acres overall. The area hosts an array of interesting features such as stone walls, abandoned cranberry bogs, tidal and freshwater streams, open marsh, hardwood swamp and upland. There are 2.5 miles of easy walking trails. If you follow the northern trail out toward Rte 6A you will cross over a boardwalk and two bridges that offer a view of Bridge Creek marsh, excellent for bird watching. At this time, hiking, mountain biking, and horseback riding are welcome; however, some trails may be closed to all but hiking during the wet season. Hunting is permitted subject to current rules and regulations, with the exception of the Jenkins Wildlife Sanctuary. Check the kiosks at the trailhead parking areas for additional information.

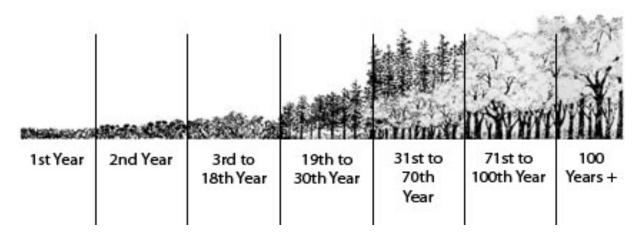
#### INTERPRETIVE TRAIL GUIDE:

## 1. Wildlife Corridors

Bridge Creek Conservation Area provides a continuous corridor between the Great Marsh and the West Barnstable Conservation Area. Wildlife corridors are important for management because they enable animals to migrate among habitats and maintain their appropriate species range. Bridge Creek area is beneficial to turkeys, fox, coyote, deer, and other wildlife because it is such a large wilderness area that connects a variety of habitats in West Barnstable.

## 2. Old Field Succession

The open field, pitch pine, and mixed oak upland habitats were previously used as pastures or croplands that are no longer farmed. The abandoned fields have become a new habitat for plant and animal species. Over the years pine, cedar and shrub species can reseed and sprout in these areas. Abandoned fields can be a stressful environment for many plant species due to excessive sun and wind exposure. Pioneer species that are able to live in harsher conditions are the first to colonize this environment. These pioneer species can change the environmental conditions enough for different species to grow. The area will go through a number of stages of succession until it reaches a mature forest. You will notice the different stages of succession based on the plant species in each area.



## 3. Open Field

Most of the plant species found in this open field habitat are a mix of herbaceous plants and shrubs, such as goldenrod, milkweed, sumac, wild rose and bayberry, which have replaced the pioneer species. There are a few trees to allow for a greater diversity of food and habitat for animal species. Some animals you might see include field sparrows, redwing blackbirds, eastern cottontail rabbits, and red fox. This field is maintained as an open habitat to allow for more species diversity in the Bridge Creek Conservation Area.

#### 4. Milkweed

There are more than 140 known species of milkweed. Each species may have different looking buds but one thing they all have in common is the sap it produces. It is a milky sap which is toxic to some animals. Monarch butterflies depend on milkweed to lay their eggs and host their larvae. The larvae will eat the toxic milkweed which protects itself from predators. The nectar from milkweed flowers benefits other species of butterflies and honey bees. With the decline in populations of monarchs and honey bees, milkweed is an important plant species in open field habitats.



#### 5. Forest

You are now entering a mature forest, the final stage of succession. Notice the layers that make up the structure of the forest. The upper canopy is made up of the tallest trees; oak, maple, and pine. The sub canopy lies beneath and is made up of young canopy trees and smaller tree species such as American holly, sassafras, and red cedars. Below that is the shrub layer consisting of mountain laurel, common greenbrier, highbush blueberry, and northern arrow-wood. The last layer is the ground cover, made up of bearberry, wintergreen, and sweet fern. The mature forest provides habitats for a greater number of animal species such as squirrels, white-tailed deer, raccoons and coyotes.

#### 6. Vernal Pool

Vernal pools are temporary ponds filled with rainfall and rising groundwater. They typically fill during the late fall and winter and remain filled through the spring, going dry in the summer. Fish are unable to live in vernal pools due to the occasional drying. Many amphibian and invertebrate species, such as frogs, toads, fairy shrimp, and salamanders, rely on vernal pools as breeding habitats that are free of fish predators. Vernal pools are a protected habitat due to the species that are dependent on them for their survival.







#### 7. WM Crocker

Deacon William Crocker was born in 1612 in Devonshire, England. He moved to West Barnstable in 1643 and is considered a 'First Comer' to the Town. This land was given to Crocker, as part of a large grant, which extended from the "Great Marshes" to the Mid-Cape Highway. At this site stood a fortification house build by Crocker in 1643. During this time, relations between newcomers and the original Native American habitants were not friendly and the threat of war was a concern throughout the colonies. Even though this was not the case in Barnstable, Plymouth authorities ordered the town to provide refuge for its people. This was one of three fortification houses built in the Town of Barnstable. The house was taken down by the early 1800's, and in 1939 a marker was placed at the site to commemorate it.

## 8. Spring peepers

Spring peepers are small tree frogs found in wooded areas near ponds and swamps. Their brown coloration and X-shaped pattern on their backs allow them to camouflage well with tree bark. They are nocturnal, emerging at night to feed on animals such as beetles, ants, flies, and spiders. Peepers hibernate during the winter and are able to withstand freezing due to natural "antifreeze" in their blood. Although peepers are rarely seen, their high pitched calls are often heard during the spring mating season.



#### 9. Cinnamon ferns

Cinnamon ferns are found in forests at the edges of wetlands. They can be seen during the spring and fall. The fiddleheads, or unfurled young fronds of the fern, first appear covered with woolly white or red hairs. When in bloom, the cinnamon fern can be identified by its' different fertile and sterile fronds. The fertile fronds are shorter and are located in the center of the sterile fronds, starting out bright green in the spring then turning to the deep cinnamon brown. The sterile fronds are longer with pale cinnamon-colored wool tufts on the underside of its leaflets. The fiddleheads of this fern provide a food source to many animals. The wool from these ferns has been used as nest material for species of birds.

### 10. Great Horned Owls

Great horned owls are one of the most common owls in North America. They are found in a wide range of habitats including forests, open areas, and swamps. They have a gray-brown body with a red-brown face and earlike tufts on the top of their head. They are nocturnal animals, hunting at night on prey such as small rodents, mice, and other birds. You may hear their call, a deep series of four to five hoots, at night.



## 11. Red Maple Swamp

Red maple swamps are the most common forest wetlands in Massachusetts. Most of the plant species found in the swamp are red maple with a mix of other species such as sour gum, swamp azalea, skunk cabbage, and ferns. Many wildlife species use the swamp habitat. Birds nest in the dense shrub layers of these swamps, small mammals use the swamps as a place for protection and as a water source and reptiles and amphibian use swamps for breeding and feeding.



#### 12. Jenkins

John Jenkins arrived in Barnstable in 1635 from England and is considered a 'first comer' to the Town. The Jenkins homestead was located along Church Street. This is also the birthplace of Chief Justice Lemuel Shaw. In 1951, the Jenkins family gave the town 6.5 acres of land to use as a town forest and wildlife reservation, now known as the Jenkins Wildlife Sanctuary.

#### 13. Stone Walls

Cape Cod was formed by a glacier thousands of years ago. This glacier dropped rocks and boulders along the spine of Cape Cod. Farming was on the rise during the 18<sup>th</sup> century in New England. The abundance of stone provided farmers materials to close off fields and pastures. Although many of the farms are gone, the stone walls still remain.

### 14. Skunk Cabbage

During the winter you may see the cone-shape of maroon leaves waiting to bloom. If there is snow on the ground, you may notice it has melted around this plant. Skunk cabbage has the ability to regulate its temperature above the outside temperature. When spring comes, the maroon leaves are molted to reveal bright yellow-green leaves that are hard to miss. This plant can also be distinguished by its smell; the name had to come from somewhere! The smell of skunk cabbage discourages animals from eating it and disturbing the muddy wetland habitat it prefers. However, the smell will attract bees and

flies that will pollinate this plant.



## 15. Cranberry Bogs

Cape Cod is a perfect place for growing cranberries. It offers the conditions cranberries require to grow like sandy soil and access to fresh water. This area of the property was once used for cranberry farming. A network of drainage ditches, earth berms, and culverts which were associated with the production of cranberries still exists on the property. These areas support freshwater marsh vegetation such as highbush blueberry, ferns, and cranberries. Deer use these areas as habitat because they provide excellent cover and food.

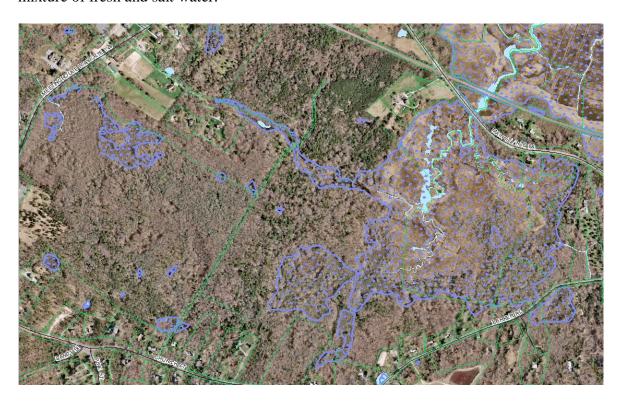
#### 16. Greenbrier

This thorny vine has broad, heart-shaped leaves with tendrils that sprout from the leaf axils. Tendrils help this vine climb up 20 feet. Small, green flowers bloom in the spring and blue-black berries appear from late summer into spring. These berries provide a food source to species of birds. Some animals also use this vine as protection from predators.



## 17. Bridge Creek

Bridge Creek flows along the eastern portion of the property and is one of the six major drainage systems feeding into the Barnstable Great Marsh to the north. Bridge Creek makes up a large portion of wetland acreage in this Conservation Area. This portion of Bridge Creek is tidally influenced. This is evident by the types of grasses in the marsh such as salt meadow cord grass and phragmites. The western branch of Bridge creek is predominantly fresh water. It flows into the salt marsh making the water brackish; a mixture of fresh and salt water.



#### 18. Great Blue Heron

Saltmarshes are a great habitat for birds like the great blue heron. Their long legs allow them to wade into the water to hunt without getting their feathers wet. They move slowly when hunting as to not scare their prey. When their prey comes near, the great blue heron stretches its long neck, strikes rapidly with its sharp bill then swallows its prey whole. Most of the great blue heron's diet is fish but they also eat frogs, insects, rodents and other birds.



This interpretive trail guide was written by Emily Baker, AmeriCorps member placed with the Town of Barnstable Conservation Division, 2017-2018.