

SELF-GUIDED TOUR OF PUSHAW STREAM



1



Do you see the mound of **freshwater mussel** shells? Muskrat, otter, mink, and raccoon all eat mussels and discard the shells in a trash pile called a 'middens.' Mussels live buried in the muddy banks of streams and lakes. Tiny mussel larvae attach to fish on their gills or fins, and develop into juveniles on their host. Eventually the juveniles drop off, bury down into the mud and begin their mostly sedentary life. Mussels are filter feeders, taking in large amounts of water and filtering it back out while trapping tiny organisms. This process can also improve water quality by filtering other particles. However, areas with highly polluted water have increased death rates, and endangered the species.

2

Wood Ducks are one of the few ducks that nest in tree cavities up to 60ft above the ground. They also nest in man-made boxes like the ones you see along the stream. During the late 19th century Wood Duck populations declined significantly with deforestation and hunting. Construction of duck boxes has saved their numbers. On average, Wood Ducks will lay 15 eggs at a time. Chicks are born alert and covered with downy feathers. A day later, the chicks leave the nest by jumping several dozen feet to the ground, following the call of the mother. They are so light, they bounce when they hit the ground without injury!



3



Beaver are large rodents that build and live in 'lodges,' large structures that exist above and below the water. Beavers enter through underwater tunnels and live on platforms above the water. They have different platforms for eating, sleeping, grooming, and rearing young. You can see multiple beaver lodges as you paddle upstream. If a beaver lodge is still in use you will see freshly cut sticks and an overall neat appearance. Beavers don't like mess, so an overgrown lodge is a sign that it is not currently inhabited. Beavers are nature's engineers, building dams to adjust the flow and course of waterways. They are the only non-human animal that alter their habitat significantly enough to change local ecosystems.

4

Turtles are reptiles, cold-blooded animals that require a heat source to maintain their body temperature. You will often find painted turtles basking in the sun on fallen logs or rocks. You may also see snapping turtles in the water where they are agile swimmers, or adeptly camouflage themselves under the mud as you pass by.

On land they are vulnerable and can be quite ornery. Their diverse diets can include insects, amphibians, small mammals, other turtles, or even birds!



5



For decades the Larouche family, **founders of Hirundo**, called Pushaw Stream their home. Here, through the trees, is where the family cabin was located. Hirundo started as a camp on a 3-acre plot, and today protects over 2,400 acres. In 1983, Oliver Larouche entrusted his land to the University of Maine so the public could access this beautiful area and to provide researchers and students alike with a 'living laboratory.' Long before the Larouches, this land was part of Wabanaki homeland where Penobscot people lived, hunted, and fished.

6

The **Silver Maple Floodplain Forest** is a rare natural community located on the left side of the river as you head downstream and on both sides of the river as you paddle upstream - just past the sedge meadow (the open area right after the bridge). Every spring snowmelt and rains submerge the forest in a foot of water. Unlike many trees in our area, silver maples thrive in flooded conditions. The floodwaters deposit rich sediment to the forest floor, making it prime habitat for ferns. These forests act as a sponge to take on the heavy spring runoff, and slowly disperse it into the surrounding areas during the summer.



7



Maps are measured out in longitudes and latitudes. Here you are at the **45th parallel** North (meaning you are 45 degrees north of the Equator), the halfway point between the equator and the North Pole! At this latitude, the sun is visible for 15 hours 37 minutes during the summer solstice, and 8 hours 46 minutes during the winter solstice.