

The Great Eel Migration

If you're visiting Black Creek in spring, you may spot what's called a fyke net in the water. Its purpose is to catch glass eels. This is part of a project of the New York State Department of Environmental Conservation's Hudson River Estuary Program to involve citizen scientists—people like you—in counting and recording the number of glass eels that make their way into Hudson River tributaries each year. These are juvenile eels that have completed an amazing journey, traveling more than 1,000 miles from the Sargasso Sea. They spend up to 20 years in freshwater before returning to the Sargasso to spawn. Glass eels are practically see-through (that's how they got their name) and no more than a few inches long. Once they're counted, volunteers release the eels back into the creek. For more information on this study or to become involved, visit: www.dec.ny.gov/lands/49580.html.

Why we protected this place...

The 130 acres Scenic Hudson purchased at Black Creek Preserve protect a portion of a significant Hudson River tributary—an important spawning ground for herring—as well as a complex of vernal pools that provide critical breeding habitats for amphibians. Wetlands at Black Creek filter pollutants from the river and act as a sponge during storms, preventing inland flooding and erosion.



Clockwise from top left: elvers; volunteers counting; an elver; installing the fyke net; glass eel; volunteers.



Become part of our online community at: www.scenichudson.org

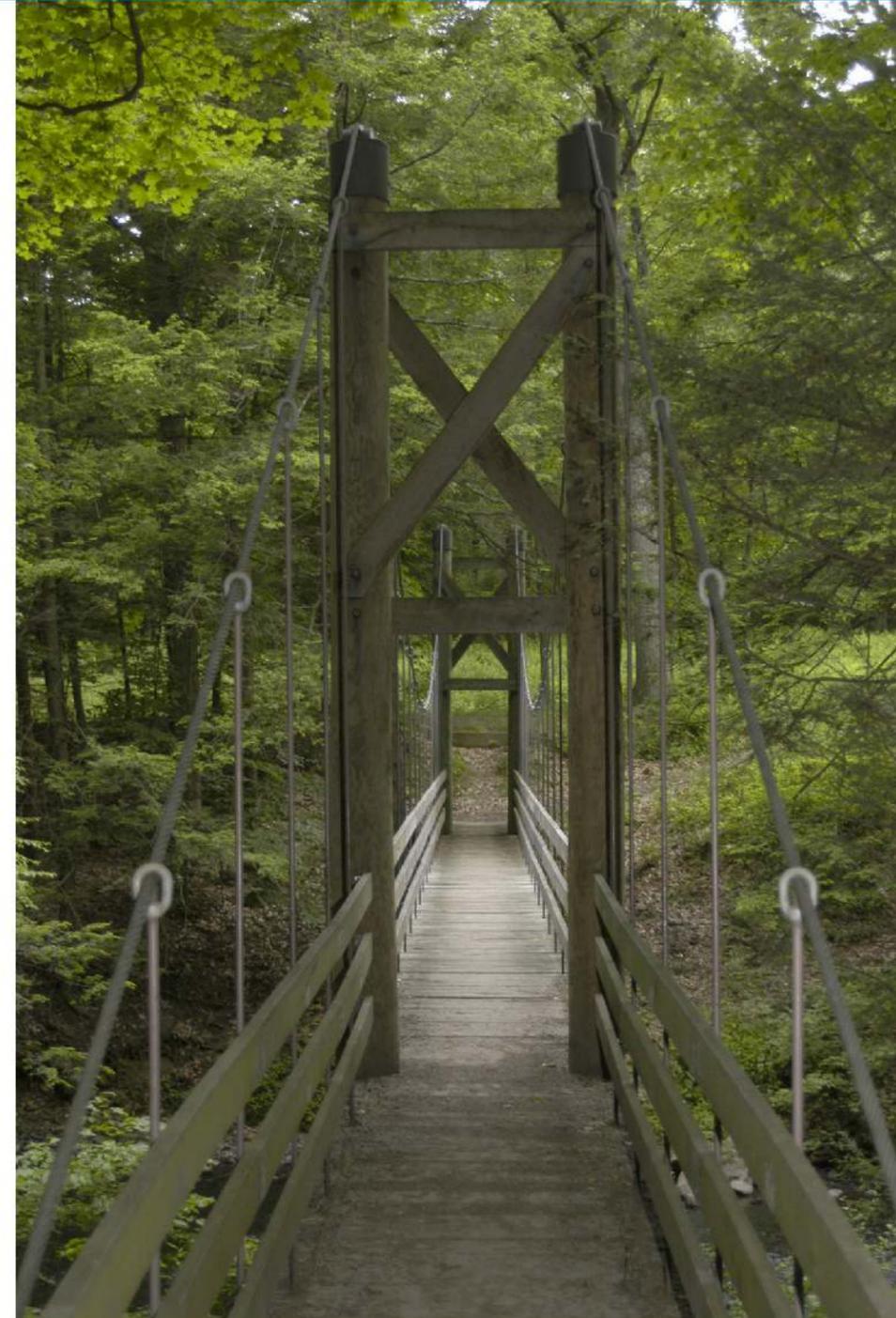
NatureNotes created by Susan Hereth and updated by Kayla Hussey. Illustrations by Seth Martel

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NatureNotes

BLACK CREEK PRESERVE

Esopus



Walk to the suspension bridge and peer into the water. Black Creek is a healthy Hudson River tributary, so what's with its name? Although clean, you'll notice that the water looks very dark, almost black—the result of it being rich in nutrients deposited by leaves. Because of this, Black Creek supports many aquatic insects, fish and other animals. Be on the lookout for more evidence of wildlife throughout your hike!

Who's Scenic Hudson?

We're a group of dedicated people who care about the Hudson River Valley. Starting in 1963, our founders fought to stop a power plant from destroying a mountain. Since then Scenic Hudson has continued protecting special places like this park. Now we're focused on Saving the Land That Matters Most—working with communities and other partners to preserve lands of the highest scenic, ecological and agricultural significance.

For more information about the 50-plus parks we've created or enhanced, visit www.scenichudson.org/parks.



Use the map to visit some of Black Creek Preserve's most important natural and manmade features, and learn about creatures that depend on them for life.

BLACK CREEK HERRING



Alewives (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*) are common in Black Creek come spring. Both species spend most of their time in the ocean, only migrating to freshwater tributaries to spawn. They tend to swim in schools. Alewives arrive at Black Creek around mid-May, depositing their eggs in shallow water with a slow current. Appearing about a month later, bluebacks spawn in deeper, more swiftly moving water. Newborn herring begin their swim to the sea at about one month old. Alewives and bluebacks are important food sources for other fish, birds and mammals. Fishermen use them as bait for striped bass.

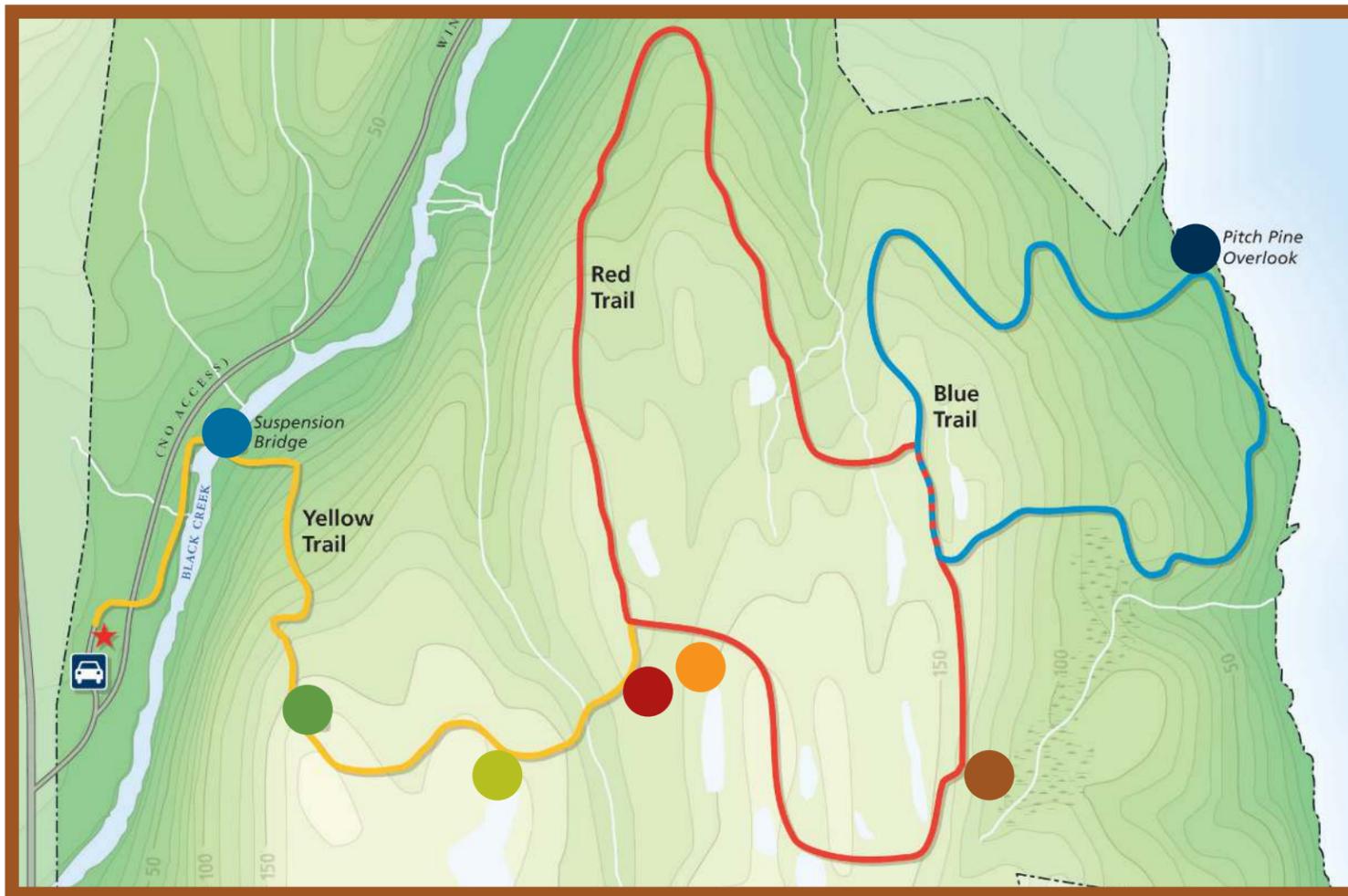
Herring populations on the East Coast have been declining. To help the NYS Department of Environmental Conservation Hudson River Estuary Program determine how these fish are faring in the Hudson River, volunteers monitor the number of herring in Black Creek and other tributaries each spring. For more information visit: www.dec.ny.gov.

HEMLOCK STAND HEMLOCK WOOLLY ADELGID

You probably won't see these insect pests, but you might spot their eggs and you'll certainly notice the damage they've caused to hemlock trees at Black Creek Preserve. Native to Asia, the hemlock woolly adelgid (*Adelges tsugae*) was first discovered in New York forests in 1985. Females lay up to 300 eggs, resembling the tips of cotton swabs, on the undersides of hemlock branches.



Once hatched the young use long mouth parts to suck sap out of the trees. Prolonged infestation winds up killing the hemlocks—an important forest shade tree. Thousands of acres of eastern U.S. hemlocks already have been destroyed by these tiny creatures.



VERNAL POOL WOOD FROG

A sure sign of spring in the forest is the "barking" of wood frogs (*Rana sylvatica*). Once awakened from their winter sleep, these tiny amphibians hop to nearby vernal pools—temporary bodies of water formed in small depressions from melting snow or winter run-off. There the males begin their chorus, luring females. After mating, the females lay several hundred eggs in the water (a gelatin-like covering keeps them warm). By April the pool is teeming with tadpoles, which eat dead leaves and other decaying matter. Around June they've developed legs and set off into the forest, where they'll feast on insects and other small invertebrates.

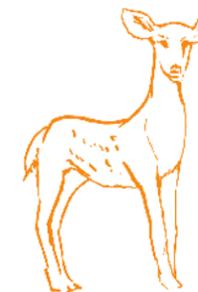


Many types of wildlife depend on vernal pools—either for breeding or as a source of food—which is why protecting them from development is crucial. Black Creek Preserve contains about a dozen pools. *Please be very careful not to disturb these ecologically sensitive places.*



TREES WITH HOLES WOODPECKERS

Notice the holes on the dead trees? They're caused by woodpeckers. Woodpeckers are built for drilling—they have chisel-like beaks perfect for pecking into wood, as well as a sturdy tongue that lets them reach in and grab insects. Their feet contain two backward-facing toes that enable them to hold onto tree trunks or branches. In addition to hunting for live insects, woodpeckers bore holes to create nesting places. In the spring they also "drum" on trees to attract mates. In the Hudson Valley, the most easy-to-spot woodpecker is the small but colorful red-headed woodpecker (*Melanerpes erythrocephalus*).



DEER EXCLOSURE WHITE TAILED DEER

White-tailed deer (*Odocoileus virginianus*) are everywhere. In the snow it's easy to spot their tracks. In warmer seasons look for chewed-on twigs. Deer love to nibble on any plants in their path, especially new growth. Unfortunately, this makes it harder for young plants to grow and difficult for the many animals and insects that rely on these leafy trees and shrubs for food and shelter. This tall fence is here to make sure that the 3.1 enclosed acres can regenerate to healthy forest.

STONE WALL EASTERN CHIPMUNK

Stone walls and rock outcroppings are good places to spot eastern chipmunks (*Tamias striatus*). But don't be surprised if you hear their high-pitched squeak before you see them. These timid, squirrel-like rodents spend their days searching for food, from nuts and mushrooms to worms and bird eggs. Pouches in their cheeks come in handy for transporting meals to their underground homes, where they hide out from hawks, foxes, raccoons and snakes. To make it harder for predators to nab them, chipmunks camouflage their burrows with leaves and sticks and carry dirt they've excavated to distant locations—again with their cheeks.



The stone wall is a remnant from a farm whose fields and meadows once blanketed Black Creek Preserve's rolling landscape. Farmers created the walls as a way of using large rocks uncovered while plowing. It's only in the last century that nature has once again taken over the land they worked so hard to cultivate.



HUDSON RIVER BALD EAGLE

While you're enjoying views of the majestic Hudson River, don't be surprised if you see one of the world's most majestic birds: the bald eagle (*Haliaeetus leucocephalus*). Boasting a seven-foot wingspan, these awe-

inspiring creatures have made a remarkable comeback in the region. Before 2000 none had hatched here for at least a century, the result of waterfront development destroying their habitats. Since then as many as 60 bald eagles have emerged from Hudson Valley nests. If you're really lucky, you'll see one of these birds of prey swoop down and pluck a fish out of the river with its talons.

Places like Scenic Hudson's Black Creek Preserve guarantee that bald eagles always will have places along the river to build their nests—and humans an opportunity to connect with these magnificent creatures.