Birds

Many different kinds of birds are harmed by industrial wind turbines, especially during their migration flights. Millions of birds migrate through the Southern Hills region each spring and fall on the way to and from their summer and winter homes. Otisco Lake and the Tully Valley are on the eastern edge of an important migration corridor for waterfowl (ducks, geese, and swans). These larger bodied birds fly at higher altitudes in the sky.

Atlantic Brant and Common Loons are two kinds of birds that would be seriously impacted by such tall wind turbines on the hillsides of our towns.

Raptors, or birds of prey, are another group of birds that are impacted by the construction of large wind turbines. Two New York State-Threatened raptors in our area are the **Bald Eagle** and the **Northern Harrier**.



Northern Harrier
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Northern Harriers live and hunt around open fields, pastures, and marshes, which is why some people call them Marsh Hawks. This hawk has a unique look - it has facial discs around its eyes, like an owl, that help it hear mice and voles underneath vegetation. Female Northern Harriers are brown while male Northern Harries are gray. Both males and females have a white patch at the base of the tail. This white patch is one of the best ways to identify these birds. Some Northern Harriers in our area migrate south during the winter, while others stay here year-round.



Bald Eagle

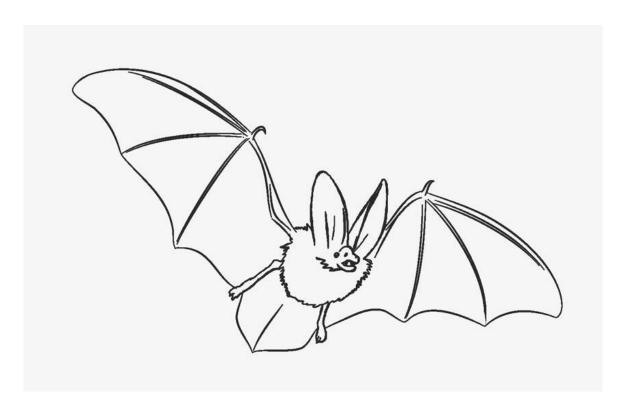
Bald Eagles are large birds that hold their wings out straight during flight. Before they reach adulthood (around age 5), they are mostly brown to mottled white and brown. Once they are fully mature, their bodies are fully brown and their heads and tails are white. Bald Eagles have a wingspan of 6 to 8 feet! They have a large yellow beak and long talons (claws) for catching their favorite food - fish.

In 1972, there was only one remaining breeding pair of Bald Eagles in New York State. After banning certain pesticides and a successful long-term reintroduction program, there are now over 400 breeding pairs in the state. Even though Bald Eagle populations are now considered stable, it is important that we continue to do what we can to protect them.

Mammals

There are many kinds of common mammals living in our area that will lose their habitat due to the construction of industrial wind turbines and the facilities that go with them. The type of mammal that will be most harmed by industrial wind turbines are bats. Like birds, bats are struck and killed by rotating wind turbine blades. They are also very sensitive to air pressure changes near the blades and can die as a result of getting too close. It is estimated that hundreds of thousands of bats are killed each year by industrial wind turbines in North America.

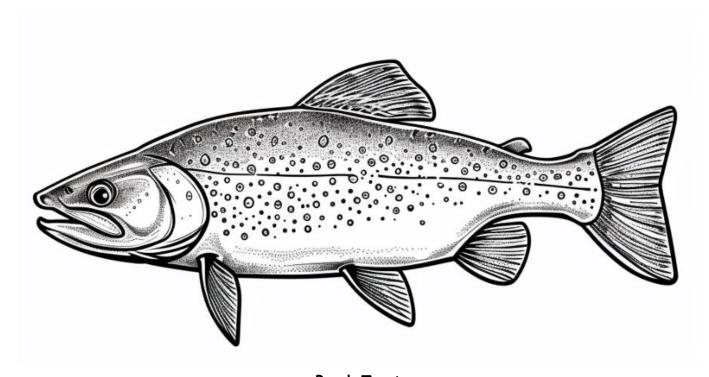
Two endangered bat species that are known to occur in our region are the **Northern Long-eared Bat** and **Indiana Bat**. Both of these kinds of bats live in forested areas where they feed on many different kinds of insects at night. During the day, they roost (rest and sleep) under the bark of trees or in caves and rock crevices. Northern Long-eared Bats and Indiana Bats spend the cold winter months in New York hibernating in caves and mines. These overwintering spots are called hibernacula. Bats are incredibly important for keeping insect populations in balance.



Northern Long-eared Bat

Fish

Even when industrial wind turbines are built on tops of hills and mountains, they affect other types of habitats in areas that are further away. In our case, wind turbines that could be built on top of the hills in Otisco and LaFayette could affect plants and animals living at the bottom of the Valley in Onondaga Creek. For over 100 years, much of Onondaga Creek was negatively impacted by industrial processes and human activities, however the headwaters of this important waterbody, which are located in the towns of Otisco and Tully, are still relatively unspoiled. These cool, clean waters support a population of native wild **Brook Trout**. Brook Trout are found in small to medium sized streams with rocky bottoms and plenty of trees along the shoreline to provide shade. These fish are indicators of high water quality, healthy aquatic habitats, and intact ecosystems.



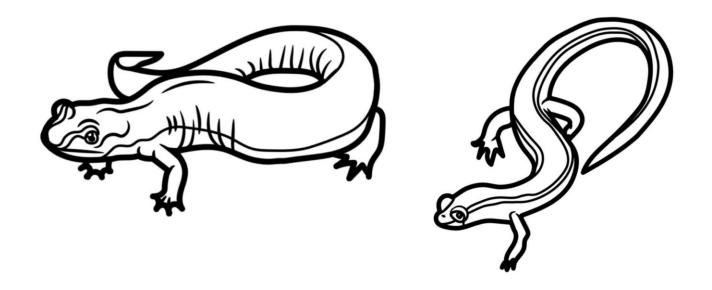
Brook Trout

The Brook Trout is the smallest trout species in New York. These fish have a dark olive green background with light wavy markings on the back and tan or red spots on the sides. Their ventral (bottom) fins are reddish in color with a white leading edge followed by a black stripe. The Brook Trout is New York's official state fish.

Amphibians

Amphibians can be found in a wide variety of habitats including ponds, lakes, streams, marshes, forests, and fields. Because most amphibians breathe through their soft, sensitive skin, these types of animals require clean, healthy habitats that are free of contaminants and pollution.

The Northern Spring Salamander and the Northern Two-lined Salamander are two types of amphibians that live in and along the edges of woodland streams. Woodland streams are highly impacted by activities that are occurring at their source. Clearing of land for the construction of industrial wind turbines near the sources of woodland streams in the Southern Hills will increase the amount and speed of water flowing through them. When too much water flows at high speeds through these small streams, animals like salamanders are swept downstream, their eggs are washed away, and the habitat becomes less suitable.

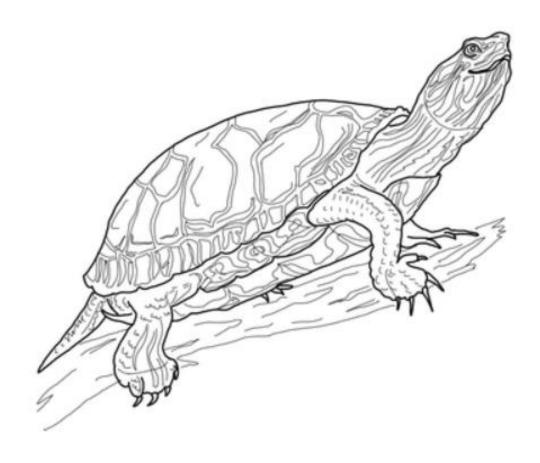


Northern Spring Salamander (L) and Northern Two-lined Salamander (R)

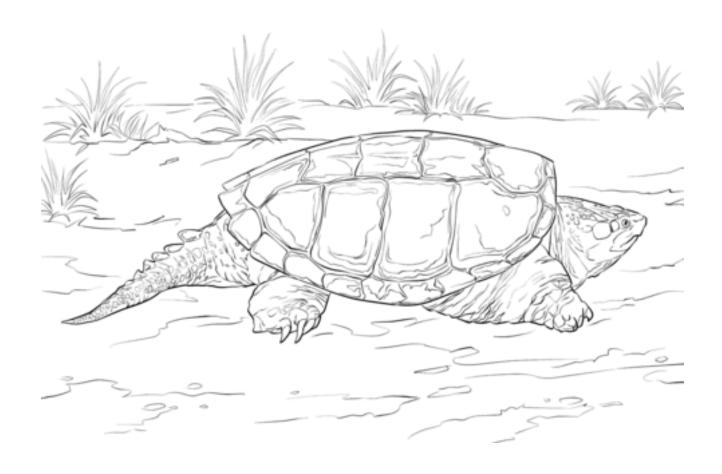
Northern Spring Salamanders and the Northern Two-lined Salamanders are lungless salamanders - they are born with gills but as they grow into adults, they lose their gills and breathe through their skin. They spend most of their time hiding under rocks in and along woodland streams. Both species eat many different kinds of invertebrates, including mosquito and blackfly larvae, which is very helpful to us humans! Northern Spring Salamanders will also eat other smaller salamanders.

Reptiles

One might not readily think of reptiles being impacted by wind turbines. While these animals might not be directly injured by rotating turbine blades, they are more likely to face injury and death from the construction of the turbines. These massive construction projects will take several years to complete and will require thousands of trips by big trucks and heavy machinery. In some places, new roads may have to be built. Roads are a death trap for turtles, especially during the late spring when female turtles must cross busy roads to find suitable areas to lay their eggs. The most common turtles in our area are the Eastern Painted Turtle and Common Snapping Turtle.



Eastern Painted Turtle



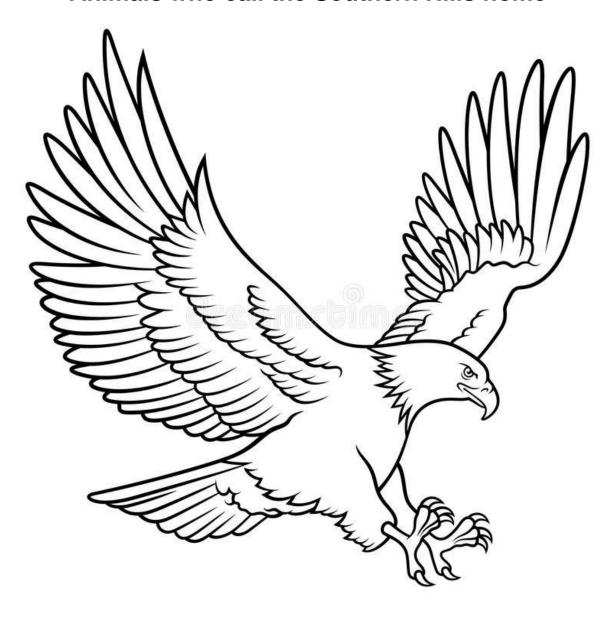
Common Snapping Turtle

Painted and Snapping Turtles are pond turtles, spending most of their time in slow moving waterbodies with muddy bottoms and lots of vegetation. However, these turtles require dry, sunny upland locations to dig their nests and lay their eggs. In our region, turtles nest around the end of May and the first part of June. This is when you will be most likely to see them crossing roads. Only about 1 in 1,000 turtles survives to adulthood, so every adult turtle is crucial to a healthy, stable population.

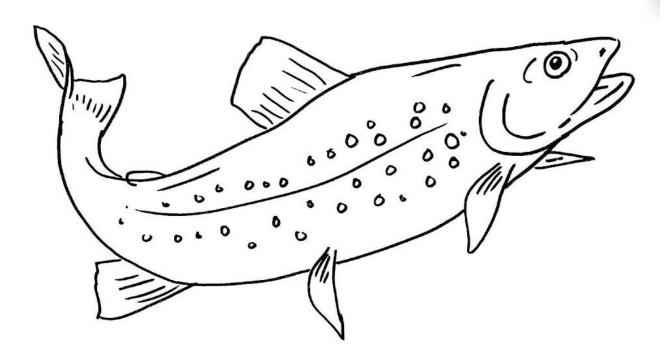
COLOR ME IN



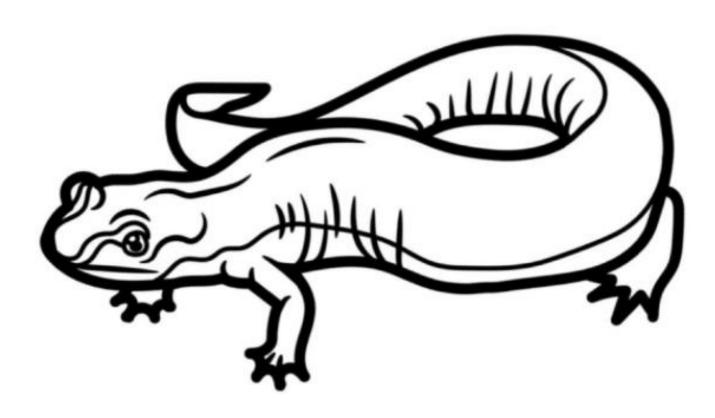
What bird am I?



What bird am I?



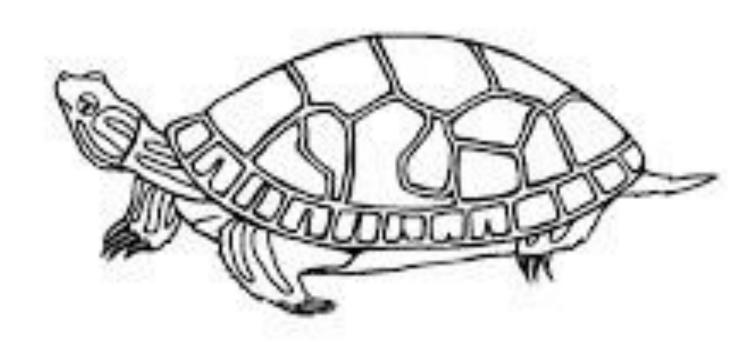
What fish am I?



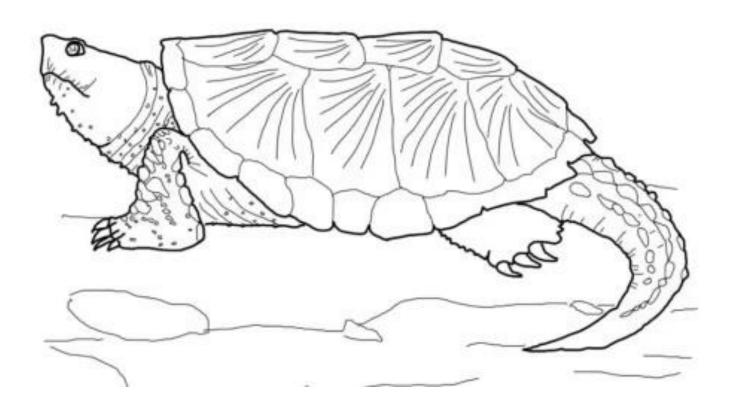
What amphibian am I?



What amphibian am I?



What reptile am I?



What reptile am I?