

American bullfrog (*L. catesbeianus*) *Photo Credit: Will Starkey* The bullfrog is the largest of the amphbians at RSPP. These frogs have voracious appetites and will consume insects, fish, other frogs, and even small mammals (such as mice).



**Green frog (L. clamitans)** Photo Credit: Josh DiPaola The green frog might be mistaken for a smaller bullfrog. Bullfrogs, however, lack the dorsolateral ridges (spiney ridge running parallel down the frog's back) which are found on green frogs. The mating call of the green frog sounds similar to the loose strum of a banjo string.



Wood frog (L. sylvaticus) Photo Credit: Jonah Kahem The wood frog is the most widely distributed amphibian in North America. It has evolved to survive through the harsh winters of northern climates, producing it's own biological 'anti-freeze' which protects it from sub-freezing temperatures.



Photo Credit: Josh DiPaola Perhaps the most common snake seen in New York, it is often accidentally referred to as a 'garden snake'. These snakes primarily feed on insects, amphibians, and small rodents. These snakes actually do have venom, but it is harmless.



Eastern milksnake (L. triangulum) Photo Credit: Michael Baris Despite its vibrant coloration, the milksnake is not venomous. While common species in the Northeast United States, it is rarely seen because it spends most of its life hiding under substrate (e.g. rocks, soil, etc.)



Northern watersnake (N. sipedon) Photo Credit: Josh DiPaola This species of snake is most often seen basking along lakes and other freshwater bodies. It forages primarily on aquatic wildlife, such as fish, frogs, and insects, but will also take small mammals and birds.



Eastern box turtle (T. carolina) Photo Credit: Josh DiPaola The Eastern box turtle is listed by the IUCN as a vulnerable species. Unlike many other turtles, this species is primarily terrestiral, venturing into shallow waters to occassionally cool down.



Musk turtle (S.odoratus) Photo Credit: Josh DiPaola While the Musk turtle is a common species in the Northeast United States, it is rarely seen due to its elusive behaviors. It spends much of its life submerged underwater and within dense aquatic vegetation. Specialized glands secrete a foul, musky odor, when this turtle is disturbed.



**Eastern painted turtle (***C. picta***)**  *Photo Credit: Josh DiPaola* This species of turtle can most easily be desitinguished by the yellow marks which it has on the side of its face, just behind its eyes. Though the eggs of this species hatch in the summer, its hatchlings have evolved the ability to over-winter in their nests, before entering water for the first time in the following season.



While this turtle is beautiful in color, it is actually considered invasive to the Northeast United States. This species can most easily be desitinguished from other turtles due to the red marks which it has on the side of its face, just behind its eyes.



**Common snapping turtle (***C. serpentina***)**  *Photo Credit: Beth Weissman* The largest of the turtle species at RSPP. Most evidence suggests that this species evolved approximately 50 million years ago and has remain relatively unchanged since. In ideal conditions, it is possible for this species to live to be over 90 years old.

#### SPECIAL ACKNOWLEDGEMENTS:

The documentation of these animals could not have been possible without the help of our extended stewardship team. Kim Castaldo discovered the Eastern box turtle shown in this pamphlet. Michael Baris identified and took excellent photos of the milksnake seen. Our seasonal steward interns, Will Starkey and Jonah Kahem, were instrumental to collecting data on these animals and helping to preserve their habitat. Beth Weissman, a RSPP volunteer, was instrumental to helping protect turtle nests which were laid in summer 2020. Other reptiles & amphibians that may live at the Rockefeller State Park Preserve:

#### Amphibians

#### Frogs:

Spring peeperPickerel frogLeopard frog

#### Salamanders:

- □ Red-backed salamander
- □ Dusky salamander
- $\square$  Spotted salamander
- □ Four-toed salamander

### Reptiles

#### Snakes:

- $\square$  Rat snake
- $\Box$ Eastern ribbon snake
- $\square$  Northerm racer

#### Turtles:

- $\square$  Wood turtle
- □ Spotted turtle
- □ Midland painted turtle

## ABOUT TURTLES...

Turtles evolved approximately 250 million years ago. Their shells are essentially an extension of their vertebrate and ribcage, primarily composed of fused bones. A funfact about turtles is that they are the only known animals whose legs originate from within their ribcage.

## ABOUT SNAKES...

Snakes most likely evolved from lizards around 125 million years ago. While they typically are characterized as vicious and aggressive, most snakes are relatively harmless if left unprovoked. Snakes play an important role as predators in their ecosystems, controlling many small animal and insect populations. While New York is home to many species of snake, only 3 are venomous and these species are relatively uncommon.

### ABOUT FROGS...

Frogs most likely evolved somewhere around 300 million years ago. Alongside other amphibians, frogs were among one of the first animals with a backbone to venture onto land. Frogs have a series of unique adaptations, including the ability to absorb moisture through their skin. Because of this adaptation, however, frogs are very sensitive to any contaminants which enter the water in which they live.

# Amphibians and Reptiles...

...have some of the oldest taxonomic lineages of extant animals. Throughout their evolution, they evolved unique adaptations which have set them apart from many other animals. Among these adaptations includes being ectothermic, or more commonly known as 'cold-blooded'. To one end, this adaptation means that reptiles and amphibians rely on external, ambient temperatures to regulate their internal biochemistry. Because of such, these animals are sensitive to irregular fluctuations in temperature and thus, are threatened by climate change. Fortunately, one benefit of being coldblooded is that these animals have relatively slow metabolisms and can survive without food for prolonged periods of time. Many reptiles and amphibians which live in temperate regions (regions of seasonal change), enter a state of 'brumation', which is similar to torpor and the hibernating behaviors of mammals. Species such as the Eastern painted turtle brumate beneath the surface of frozen ponds and lakes through the winter, absorbing the oxygen the need through their cloaca. Other species, such as the wood frog, endure the cold temperatures of winter by producing their own 'anti-freeze' within their blood as they brumate under substrate.

## Amphibians & Reptiles of Rockefeller State Park Preserve



Amphibians and reptiles have a long evolutionary history pre-dating most mammals. Throughout their evolution, they have acquired specialized adaptations which allow them to efficiently function within their ecosystems. Unfortunately, these animals are very sensitive to climate change, pollution, and habitat loss, with many species in decline throughout the Northeast United States.

Rockefeller State Park Preserve prioritizes protecting amphibian and reptile habitat. We encourage all patrons to learn about the importance of these animals.

All of the animals depicted here can be found around Swan Lake at Rockefeller State Park Preserve. This pamphlet can be used as a self-guided learning tool to help identify these species in their natural habitats. **Please appreciate these animals by observing them** <u>from a distance- never attempt to touch these</u> <u>animals as they are both sensitive to handling and</u> <u>could be dangerous.</u>