

# Wild **TIMES** for kids!



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Discovering

# Herps!

**R**eptiles and amphibians are collectively known as herptiles, or herps, and people who study their lives are called herpetologists. Herptiles are very sensitive to their surroundings and give scientists clues about environmental changes.

While herptiles all look different, they are all ectothermic, or cold blooded, and rely on their environments to warm and cool their bodies. They control their body temperatures by moving to sunny or shady places. Let's learn more about herps!

# REPTILES



© NHFG STAFF PHOTO

**Turtles and snakes** are part of the group of animals called reptiles. Reptiles are cold-blooded and covered in scales, and if they have toes they will also have claws for digging. Young reptiles often look like adults, only smaller.

## SNAKES

New Hampshire has 11 different types of snakes. Many spend a lot of time under rocks, logs, or boards on the ground. This is where they get out of the hot sun, find food, and escape from predators.

Snakes are carnivorous and eat other animals. Rattlesnakes, bellied and brown snakes feast on slugs and snails. Some green snakes like to eat insects, and milk snakes prefer to eat a meal out of rodents, birds, and even other snakes. Hawks, owls, crows, blue jays, and other birds, as well as raccoons and opossums, eat snakes, making them important to the food web.



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The **eastern hognose snake** rarely bites. Instead, when threatened it will behave aggressively, spread its head into a hood like a cobra, or play dead by rolling onto its back while letting its tongue hang out.



New Hampshire's smallest snake is the northern redbelly. They grow to a length of only 5 feet.

The **northern redbelly** is our smallest snake, reaching a length of only 10 inches.



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© NHFG STAFF PHOTOS



**BLANDING'S TURTLE**

© NHFG STAFF PHOTO

## TURTLES

Seven types of turtles live in New Hampshire, and you may have seen them sunning themselves or slowly crossing a road.

The difference between turtles and other herptiles is that they have a shell that protects their body. The shell is divided into two parts: the upper shell called the carapace, and the lower shell called the plastron. These shells are made of a thin top layer of keratin, like your fingernails, and a layer of bony plates underneath, which gives the shell its shape. The turtle's ribs and backbone are part of the shell.



BOX TURTLES © EEL TONY / ISTOCKPHOTO.COM



*American box turtles have a hinge on their lower shell, which allows them to pull their head and feet inside and close the front and rear openings tightly.*

*Painted turtles have hingeless shells so some of their body is exposed when they draw inside.*

Turtles lay eggs that have leathery shells. Different turtles choose different places to nest, but they all dig with their hind legs. When the young hatch, the baby turtles are on their own.



**COMMON SNAPPING TURTLE**

© DAVE WILLMAN / DREAMSTIME.COM



© GERALD MARELLA / DREAMSTIME.COM

# Amphibi



**BLUE-SPOTTED SALAMANDER**

© JAMES DEBOER / DREAMSTIME.COM

## SALAMANDERS AND NEWTS

Twelve types of salamanders can be found in New Hampshire. Unlike frogs, salamanders are silent amphibians. They have legs and a tail, but no eardrums, so they don't make any noise because they wouldn't be able to hear each other. Salamanders are relatively easy to identify because of their smooth skin, long tail, and four legs. Some adult salamanders are found only in water, some live only on land, and others need both water and dry land to thrive.

**Salamanders, frogs, and toads** are part of a group of animals called amphibians. They have moist skin, no claws, and live in both aquatic and terrestrial environments. Unlike reptiles, their bodies change as they become adults.

One of New Hampshire's largest salamanders is the **spotted salamander**. It can grow up to 7 inches long.

Wood frogs are the first frogs to hear the first snow of winter.



© NHFG STAFF PHOTO

The **four-toed salamander** is our smallest, growing to only 3½ inches long.

FOUR-TOED SALAMANDER  
© JASON ONDREICKA / DREAMSTIME.COM

**Red-spotted newts** are New Hampshire's State amphibian. They are born in the water, grow up on land, and return to the water as adults to lay eggs.



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They are also cold-blooded and are part of amphibians. Amphibians have most of their lives in watery environments, their appearance changes from tadpoles to adults.



Frogs are the first to come out of hibernation. You will hear them calling as early as March.



**FOWLER'S TOAD**

© BRIAN E. KUSHNER / ISTOCKPHOTO.COM

## FROGS

There are 10 types of frogs that are native to New Hampshire. Some of these species, such as the American toad and green frog, are common and widespread across the state. Other species, like Fowler's toad, are rare and listed as a species of special concern.

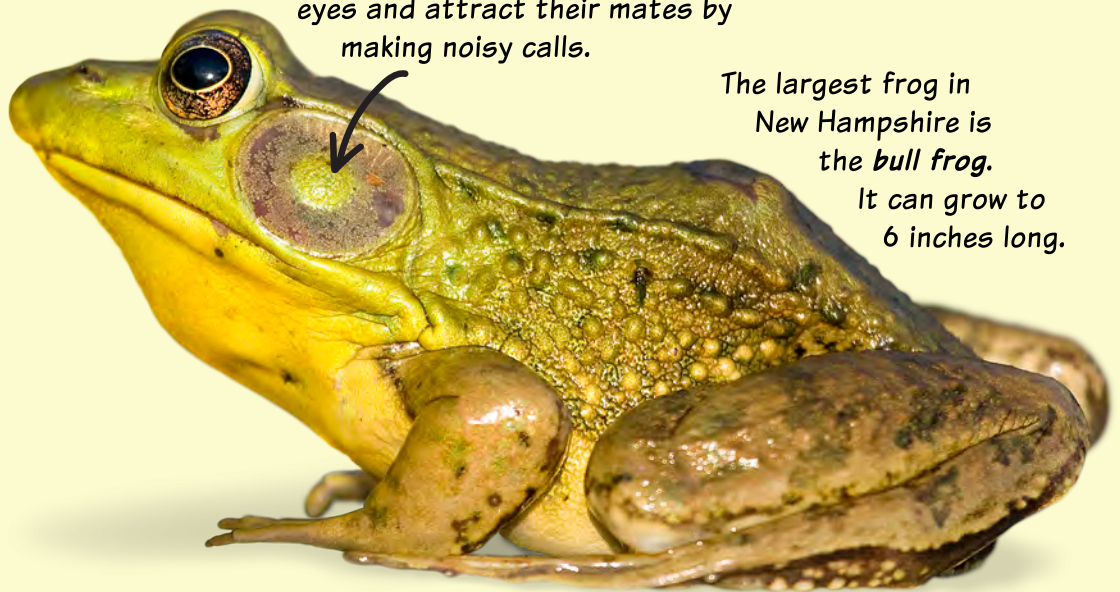
**Peep, peep, peep!**



© BRIAN LASENBY / DREAMSTIME.COM

New Hampshire's smallest frog is the *spring peeper*. It is also one of our loudest frogs!

Adult frogs have eardrums near their eyes and attract their mates by making noisy calls.



The largest frog in New Hampshire is the *bull frog*. It can grow to 6 inches long.

© YGLUZBERG / ISTOCKPHOTO.COM

# Timber RATTLESNAKE

The **timber rattlesnake** is our rarest snake. There are so few that they are the most endangered animal in New Hampshire. Timber rattlers are New Hampshire's only poisonous snake. They use venom to kill their prey. They are ambush hunters. This means they will find a spot in the forest near a fallen log or stone and wait for a mouse or chipmunk, biting it as it passes by.



Timber rattlesnakes give birth to live baby snakes called neonates. Unlike other snakes, a mother rattlesnake will care for its young for about a week before leaving them on their own.



Rattlesnakes have a rattle at the end of their tail that they shake when they feel threatened.

RATTLESNAKE IMAGES © NHFG STAFF



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## Northern REDBACK SALAMANDER

The northern redback salamander is our most common land animal, but most of us have never seen one because they live under rocks, logs, and under the forest's leafy floor. In mid-summer, the female deposits up to 14 eggs in a rotting log or in leaf litter, and she stays with them until they hatch. When they are born they look like small adults.



© WIREPEC / DREAMSTIME.COM



© MICHEL DE WIT / DREAMSTIME.COM

Redback salamanders start out tiny, but they will grow to be up to 4 inches long as an adult.

Redback salamanders have two color phases, the redback phase and the *leadback phase* (above).

# Growing Up **HERP STYLE**



juvenile



metamorph



tadpole



adult

## **AMPHIBIANS**

*Wood frogs*, like most amphibians, live a double life. When they are born they live in the water in a larval stage, like tadpoles. In their adult stage, they spend part of their time on land.



egg

## **REPTILES**

Unlike amphibians, when reptiles are born they are like tiny versions of adults. All turtles and some snakes develop inside an egg and later hatch. But there are some snakes that are born live and can be as little as a small earthworm.



*Baby eastern box turtles* hatch from eggs and are only about  $1\frac{1}{4}$  inches long when born. When fully grown they will be about 7 inches long.

*Common garter snakes* are born live. They are about 8 inches long as babies and will grow to about 26 inches long as an adult.



WOOD FROG LIFECYCLE © ISSELEE / DREAMSTIME.COM

© GERALD DEBOER / DREAMSTIME.COM



# FROG CALLS

Sounds made by frogs and toads are very important during mating and courtship, and only the males sing. The best way to locate frogs is by listening for them at night. Each of New Hampshire's species has its own unique call. Learn about each frog and try to match the picture and its call with the frog's name and the clues given by writing the frog's number in the box next to its name. To hear the call of each of New Hampshire's frog species, visit [www.wildnh.com/nongame/frogs.html](http://www.wildnh.com/nongame/frogs.html)

Like the twang of a banjo string



1

**Northern leopard frog** - My pearly green color with large dark spots helps me hide from predators.

**Wood frog** - My dark mask and brown color help to tell me apart from other frogs. I am the first frog you will hear in the spring.

A low, steady croak



5

A loud, high-pitched "peep, peep, peep"



2

**Gray tree frog** - My color is gray, brown, or mossy green with rough skin. I spend most of my time in trees and have a very loud call.

**American toad** - My skin is brown with warts all over it. I come out mostly at night to feed on insects.

A deep "jug-o-rum"



6

Guttural snore followed by several clucking notes



3

**Pickerel frog** - I am tan in color with large bronze spots. I can hop fast and far to escape predators.

**Green frog** - I am mostly green (sometimes brown) with a large eardrum and a prominent ridge down each side of my back.

Short, raspy "quack, quack, quack"



7

A long, musical trill



4

**Spring peeper** - As one of New Hampshire's loudest frogs, people are surprised to see how tiny I am.

**Bull frog** - I am the largest frog in New Hampshire with a deep call and mostly green in color.

A loud, resonating trill



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- ANSWERS**
1. Green frog
  2. Spring peeper
  3. Northern leopard frog
  4. American toad
  5. Pickerel frog
  6. Bull frog
  7. Wood frog
  8. Gray tree frog

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