SALAMANDERS

WOOD FROG (LITHOBATES SYLVATICUS)

FROGS (CONT.)

Wood Frogs are brown with a black mask over the eyes and a prominent white upper lip. Their breeding call sounds like a duck quack. Wood Frogs are mostly terrestrial, but during the breeding season (March-



May), they prefer temporary water sources such as vernal pools. Wood Frogs are common and secure in the state of Maine.

GREEN FROG (RANA CLAMITANS)

Green Frogs are greenishbrown and are distinguishable by ridges along their sides and dark bands on their legs. Males can be identified by a yellow throat patch. Their mating call is quite distinct- it sounds like a banjo string being plucked.

This species is common throughout Maine and is typically found near bodies of water year-round. Green Frogs are secure in the state of Maine.

GRAY TREEFROG (DRYOPHYTES VERSICOLOR)

This species is usually gray, but can vary in color from light green to brown. Treefrogs have rough, warty skin and a white rectangle beneath the eye. One of only two tree dwelling frog

species in Maine, Gray Treefrogs have adhesive discs on their toes to aid in climbing. They are found in wetlands during breeding months (April-August) and forested uplands during the rest of the year. They are common and secure in the state of Maine.



EASTERN RED-BACKED SALAMANDER (PLETHODON CINEREUS)

This species is identifiable by a reddish-brown



SPOTTED SALAMANDER (AMBYSTOMA MACULATUM)

Spotted Salamanders are blue, black, or gray, with bright yellow spots along their backs and tails. They prefer to live under rocks, logs, and debris and spend most of the non-breeding season in burrows

underground. They are typically found near vernal pools since they rely on them for breeding. This species is common and secure in Maine.

EASTERN NEWT (NOTOPHTHALMUS VIRIDESCENS)



Eastern Newts pass through three distinct stages of life, but only the juvenile stage, known as the eft stage, is terrestrial. Juvenile Eastern Newts are red, brown, or orange with distinct red spots and smaller black spots along

their bodies. Due to their reliance on water, juveniles are typically found in forested areas near aquatic habitat, where they burrow beneath logs, rocks, and fallen wood. Eastern Newts are currently listed as common and secure in Maine.

KENNEBEC LAND TRUST

Founded in 1988, The Kennebec Land Trust (KLT) works cooperatively with landowners and communities to conserve the forests, lakes, streams, wetlands, fields, and wildlife that define central Maine. KLT protects and stewards land permanently, offers access to conserved properties, provides opportunities for people to learn about and enjoy the natural world, and works with partners to support sustainable forestry and farming.

Our properties feature more than 57 miles of trails for everyone to enjoy! Your donation to KLT supports land conservation, trail development and maintenance, and conservation and sustainability programs.

Please join us!



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A Guide to the Frogs, Toads, and Salamanders of Fayette, Maine





Preserve Sign: David Kahl; installation: Ian MacKinnon (in photo) ở Patrick McGuire

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AMPHIBIANS OF YOUR BACK YARD

Amphibians have existed worldwide for millions of years. Until recently they were assumed to be abundant, with stable and secure populations, so they have not been widely studied and have not enjoyed many protections. Despite their numbers falling steeply since the 1980s, strong efforts to preserve amphibians were not undertaken at first, and even now little has been done to reverse population decline or remediate habitats that have been lost to climate change, development, and pesticide use. However, some biologists and ecologists are currently working to make the stabilization of amphibian populations a key priority.

Globally, there are over 6,000 species of amphibians, about 300 of which can be found in the United States. Maine has eighteen species, including nine species of frog or toad, eight native salamanders, and one exotic species: the Mudpuppy (Necturus masculosus). Despite declining rates worldwide, populations in Maine remain relatively stable, with only three amphibian species listed as "Special Concern": Blue-spotted Salamander, Spring Salamander, and Northern Leopard Frog.

There is concern, however, that populations may not be as stable as they seem. Maine, like most other states, lacks population trend data for many amphibian species. In some towns there is abundant information, in others very little, and in some none at all. With such gaps in the

data it is difficult to determine how abundant and secure the numbers of a given population are and whether these numbers are similar to historical trends.

Current alarming trends have inspired programs like MARAP, The Maine Amphibian and Reptile Atlas Project, a citizen science initiative run by the Maine Department of Inland Fisheries and Wildlife. This program allows residents in areas of low data collection to observe and submit their own findings to help build a better understanding of amphibian populations statewide.

WHY ARE WE WORRIED ABOUT DOCUMENTING **AMPHIBIANS?**

Although small, frogs and salamanders play a major role in the energy dynamics of the forest ecosystem. Since many of these species are both aquatic and terrestrial, they act as key transporters of nutrients into and out of the ecosystem. However, numbers are currently decreasing at an alarmingly

rapid rate. At present, one third of all amphibian species in the world are at risk of extinction in the next fifty years. In fact, some research suggests that the rate of species loss has increased at an unprecedented

rate in the last two decades: 168

species have gone extinct and nearly 2,500 species have populations in decline. Between 1500 and 1980, only 34 amphibian species went extinct. This decline is thought to be the result of habitat loss, drought, and widespread use of pesticides that can enter an amphibian's body through their highly porous skin.

The onset of climate change is also believed to be impacting the viability of amphibian populations. Species with limited habitat ranges may not have the resources to adapt, and species with strict tolerances for moisture and temperature levels are also at increased risk. Most amphibians in Maine rely on small bodies of water like vernal pools for breeding. These aquatic habitats are at risk of disappearing as temperatures rise and ecosystems dry up, threatening the ability of future generations to reproduce.

WHAT CAN YOU DO TO HELP PROTECT **DIVERSE AMPHIBIAN POPULATIONS?**

There are many simple and effective ways to protect amphibians that rely on your land. To help, try out some of these tactics:

- 1) Whenever possible, leave natural leaf litter and fallen wood as is to provide moisture and cover for frogs and salamanders.
- 2) If you live near bodies of water, your property can be an especially critical habitat for amphibians. To protect them, avoid using chemical pesticides or implement a foliage barrier between your yard and the water to catch any pesticide runoff.
- 3) Let native aquatic vegetation grow. It provides vital food, refuge, and breeding habitat.
- 4) Train pets to leave these species alone, since pets can disrupt breeding patterns and destroy microhabitats.
- If you need to treat your yard or garden, opt for 5) natural pesticides instead of chemicals.



Sources

Maine Amphibian and Reptile Atlas Project (https://www.mefishwildlife.com/atlas)

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FROGS

SPRING PEEPER (PSEUDACRIS CRUCIFER)

The smallest frog in Maine, the Spring Peeper is orange or brown with a distinct "X" on its back. As tree dwelling frogs,



Spring Peepers rely mostly on terrestrial habitat and are found in forested areas with nearby water sources. Their breeding call is a high-pitched "peep," but they tend to call only from March through June. Spring Peepers are common and secure in the state of Maine.

AMERICAN TOAD (ANAXYRUS AMERICANUS)

American Toads are plump, with rough, spotted, and warty skin that's most commonly reddish



brown, brown, or gray. This toad's breeding call is a highpitched trill that lasts twenty seconds or longer. This species is common and secure in the state of Maine.

PICKEREL FROG (LITHOBATES

PALUSTRIS)

Pickerel Frogs are brown, with two parallel rows of dark, square spots between two prominent ridges. They're often found in wet fields and meadows, as well as on the shores of most



bodies of water. This species is common and secure in Maine, but absent in northern parts of the state.