

Amphibians and Reptiles

It seems appropriate to combine these two groups here. Both are relatively poorly represented in Maine, largely because we are at or beyond the northern limits of many of these cold-blooded animals, so the lists are short. The definitive reference for both is the same, *Maine Amphibians and Reptiles* (1999). This volume grew from the *Maine Amphibian and Reptile Atlas Project (MARAP)*, a five-year effort involving some 250 volunteers in mapping the distributions of these animals town-by-town, state wide. In several cases, species with distributions that should be continuous across the region were reported from none of the towns of the Damariscotta Lake watershed during MARAP. These are noted in the narrative, and should be looked for. Sightings should be reported to the DLWA office, preferably with photograph or specimen in hand.

Amphibians

Some of our amphibians are terrestrial or semi-terrestrial as adults, but all have aquatic larvae except for the redback salamander, which is entirely terrestrial.

- **Mole salamanders:**

These species are ordinarily seen only during their brief vernal sojourn to breeding pools. They spend the rest of the year under leaf litter or underground, hence the common name. Both require vernal pools or other fish-free situations for successful reproduction, and are threatened by destruction of these refuges.

Blue-spotted salamander, *Ambystoma laterale*. Not found in the watershed during MARAP. Nocturnal and secretive, often confused with other *Ambystoma*. Possibly present, but rare. Hibernates November to March.

Spotted salamander, *Ambystoma maculatum*. Common, nocturnal. May be active in early spring even under ice. Hibernates November to March.

- **Newts:**

Eastern newt, *Notophthalmus viridescens*. Common. Adults usually in water, sometimes active in winter. Juvenile red eft stage spends 2-7 years in woods, hibernates.

- **Lungless salamanders:**

Respiration in this family takes place through the skin and the lining of the mouth and throat.

Dusky salamander, *Desmognathus fuscus*. Not found in the watershed during MARAP; probably present, but uncommon. Along stream edges; nocturnal. Often active in winter.

Two-lined salamander, *Eurycea bislineata*. Very common and abundant, in or near almost any stream. Not reported from the watershed by MARAP, but surely present. Active year round.

Four-toed salamander, *Hemidactylium scutatum*. Small, secretive, rarely seen, possibly uncommon. Maine's smallest vertebrate. Listed by Maine Department of Inland Fisheries and Wildlife as a Species of Special Concern because it is so rarely reported. In wet moss or rotting wood near water. Hibernates in groups.

Northern redback salamander, *Plethodon cinereus*. Very common; the most abundant vertebrate in Maine, but not reported from the watershed during MARAP. Surely present. Leadback phase less common. Wholly terrestrial, in forest litter and under rocks and logs. Burrows in winter, may remain active.

- **Toads:**

American toad, *Bufo americanus*. Common, ubiquitous. Hibernates November to April, in burrows or forest litter.

- **Treefrogs:**

Gray treefrog, *Hyla versicolor*. Abundant in breeding pools, less so otherwise. On trees near water. Hibernates November to May, under tree roots, rocks, or logs.

- **Chorus frogs:**

Spring peeper, *Pseudacris crucifer*. Very common. Spring breeding chorus is unmistakable. In forests near marshes and swamps. Hibernates November to April, on forest floor.

- **True frogs:**

Bullfrog, *Rana catesbiana*. Relatively common, in quiet or slow-moving water. The largest North American frog. Hibernates in mud, and emerges from hibernation late, typically mid-May.

Green frog, *Rana clamitans*. Very common, in ponds, streams, and swamps. Hibernates October to March, in water or underground.

Pickerel frog, *Rana palustris*. Very common along shores of lakes, ponds, and streams. Often in moist woods and meadows. Resembles our other "grass frog", the northern leopard frog, but has oblong blotches without borders whereas the leopard frog has rounded dark spots with light borders. Hibernates November to April, in pond mud.

Northern leopard frog, *Rana pipiens*. Locally common, but patchily distributed in the state, therefore designated a Maine Species of Special Concern. In or near quiet or slow water; semi-terrestrial in woods and fields during summer. Hibernates November to April, under water.

Wood frog, *Rana sylvatica*. Very common. Like the mole salamanders, requires fishless breeding pools and is threatened by their loss. In moist woods except during brief early April breeding season. Hibernates in woods. The first frog to emerge from hibernation and begin calling in spring. If you think you hear ducks in the April woods at night, you are surely listening to wood frogs.

Reptiles

- **Snapping turtles:**

Snapping turtle, *Chelydra serpentina*. Common. In any soft bottom aquatic habitat. Female leaves water to deposit eggs. Not reported from the watershed during MARAP, but surely present. Hibernates October to May, underwater.

- **Mud and musk turtles:**

Common musk turtle, *Sternotherus odoratus*. Uncommon, secretive. Strictly aquatic, in shallow streams and ponds. A Maine Species of Special Concern. Not found in the watershed during MARAP, but probably present. Hibernates October to April, underwater.

- **Box and water turtles:**

Eastern painted turtle, *Chrysemys picta*. Common and abundant within about 50 miles of the coast. In shallow ponds and slow streams; generally seen basking in sun. Often migrates from one pond to another during May. Hibernates October to March, underwater.

Spotted turtle, *Clemmys guttata*. Rare, listed as Threatened by the State. In small shallow streams and ponds. Not found in the watershed during MARAP, but possibly present. Hibernates November to March, underwater.

Wood turtle, *Clemmys insculpta*. Rare. In and along streams, sometimes wanders far from water. A Maine Species of Special Concern. Not reported from the watershed during MARAP, but probably present. Hibernates October to April, underwater.

- **Colubrid snakes:**

These hibernate from October or November until April, usually in groups of several to many individuals, often of mixed species. None of them are venomous.

Ringneck snake, *Diadophis punctatus*. Secretive, nocturnal. Possibly common, but rarely seen. About 12" long.

Milk snake, *Lampropeltis triangulum*. Common. In a variety of habitats, often near buildings. Handsomely marked, and up to 3' long.

Northern water snake, *Nerodia sipedon*. Not common. Semi-aquatic, in streams, bogs, and marshes. Can exceed 3' in length.

Smooth green snake, *Opheodrys vernalis*. Relatively common, in meadows, lawns, and open areas. Generally not over 20” long.

Brown snake, *Storeria dekayi*. Not common, but in a wide range of habitats. Secretive, nocturnal. Not found in the watershed during MARAP, but surely present. Listed as a Species of Special Concern. About 12” long.

Redbelly snake, *Storeria occipitomaculata*. Common, ubiquitous, secretive. About 12” long.

Eastern garter snake, *Thamnophis sirtalis*. Common, ubiquitous; the most abundant reptile in Maine. Typically about 2’ long, rarely over 3’.

- **Suggested reading:**

Blair, W.F., A.P. Blair, P. Brodkorb, F.R. Cagle, and G.A. Moore. 1957. Vertebrates of the United States. McGraw-Hill, New York. Very technical, with no ecological information, but if you are trying to identify something from outside our area this is a good thing to have. Lots of keys.

Conant, R. and J.C. Collins. 1991. A Field Guide to Reptiles and Amphibians of Eastern and Central North America. Third edition. Houghton Mifflin, Boston. 450 pp.

DeGraaf, R.M. and D.D.Rudis.1986. New England Wildlife: Habitat, Natural History, and Distribution. U.S.D.A., Forest Service. Northeastern Forest Experiment Station, Bromall, Pennsylvania. General Tech. Rept. NE-108. 491 pp. Excellent resource, with the most detailed habitat information available.

Ditmars, R.L. 1920. The Reptile Book. Doubleday, Page and Company, Garden City, N.Y. An ancient classic, fun to read. Deals strictly with North American fauna. A “must have” book for an earlier generation of naturalists.

Hunter, M.L. Jr., A.J.K. Calhoun, and M. McCullough. 1999. Maine Amphibians and Reptiles. University of Maine Press. 252 pp. Indispensable reference for these two groups in Maine. Town by town distribution maps, lots of ecological and life history information, and a compact disc with the songs of our frogs and toads.

- **Links:**

American Society of Ichthyologists and Herpetologists.
<http://199.245.200.110/>

Maine Department of Inland Fisheries and Wildlife
www.state.me.us/ifw/wildlife

North American Amphibian Monitoring Program.
http://www.mp2_pwrc.usgs.gov/naamp/

Partners in Amphibian and Reptile Conservation
<http://www.parcplace.org/>