

Some Amphibian Species found at Quakertown Swamp



Photo Credit: Marlin Corn

- American Toad

- Four Toed Salamander



Photo Credit: Robert Zappalorti

- Red Spotted Newt



Photo Credit: Art Hulse

- Spring Peeper



Photo Credit: Marlin Corn

Photo Credit: Marlin Corn

- Wood Frog



Since 1958, Heritage Conservancy has been protecting and preserving our natural and historic heritage.



Upper Tohickon Watershed Association



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of the
Quakertown
Swamp



AMPHIBIANS:



(Spotted salamander. Credit: Kathryn Leber)

THE GREAT MIGRATION

Even on a good night, it is a risky proposition for a two-inch frog to cross a 16-foot stretch of asphalt. To add to the suspense, if the spring night is cool, his movements will be slower than in warmer conditions.

Frogs and salamanders are amphibians; as such, they are *ectothermic*, meaning their body temperature is the same as their surrounding conditions. Yet, for the whole of the frog's journey, few cars slow down to allow him to cross safely to his breeding grounds. Unfortunately, this is the sad case for thousands of salamanders and frogs in the Quakertown Swamp area.

Most amphibians require both land and water, at different stages of their lives, to survive and reproduce.



(Egg mass. Credit: Marlin Corn)

The word amphibian actually means 'double life'. Most are born in water as larval forms, and eventually undergo metamorphosis, changing into an adult form. At this point, many species leave the water to live out most of their lives in a terrestrial environment; but they must return to water to breed and lay eggs.

For millions of years their life cycles have been dependent on wetlands, streams, rivers, ponds and lakes, and they spend most of their terrestrial lives within a half-mile of these aquatic environs. In the Quakertown Swamp area, at least six species of amphibians with this type of life history are known to exist; examples include American toad, four-toed salamander, spotted salamander, spring peeper, and wood frog.

Some of these species (primarily spring peepers, wood frogs, and spotted salamanders) undertake large-scale migrations to reach their natal breeding pools. These migrations take place, en masse, during the first warm, moist nights of late-winter or early-spring.

Unfortunately, decades of development in our area has eliminated many breeding pools. New roads have bisected much of the habitat these animals live in, and increasing traffic makes their journey to the remaining breeding pools all the more perilous.



(Spring peeper. Credit: Bill Moses)

In Richland and East Rockhill Townships, the impact on local amphibian populations has been drastic; during peak migration nights, hundreds of these animals are unwittingly slaughtered by automobiles.



(Fowlers toad. Credit: Marlin Corn)

During this time, drivers should be aware and use caution. This is when amphibians make their journey across roadways towards the vernal pools (breeding grounds).

Amphibian crossings usually occur during the first warm winter's rain.