

Ponds for Wildlife

Frequently Asked Questions (FAQS)

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What type of vegetation can I plant in and around my pond to benefit wildlife ?

Plants are an important part of a wildlife pond. They provide food and cover, shade the water, and remove excess nutrients. There are four basic groups of plants that you can add to your pond and the surrounding edges: deep water, floating, submerged, and marginal plants. Although ideally you want to include a variety of each type, some plants have certain depth, sunlight, and temperature requirements and may not be appropriate for your pond.

Duck-weed is a free-floating plant that provides food for waterfowl. Marginal plants grow in shallow water and along the pond edge. Beneficial marginal plants include cattails, grasses, rushes, and sedges. These plants provide cover for animals like turtles and frogs, as well as nesting sites for birds. Other beneficial marginal plants are spotted joe-pye weed, sweet flag, soft rush, and pickerel weed. These plants are especially attractive to either butterflies or dragonflies. Some beneficial native flower species that you can plant around your pond include cardinal flower, turtlehead, bee-balm, and black-eyed Susan. Native shrubs that provide food and cover include black chokeberry, buttonbush, winterberry, and spicebush.

How can I provide habitat for turtles in my pond?

Turtles require food and protective cover for all stages of their life cycle. Young turtles need protective cover in shallow water. Floating plants like lotus, lilies, and water shield provide the best cover because they protect the young turtles from being spotted by predators, but don't block their movement like a thick stand of cattails or grasses might.

Rocks and logs that protrude above the water surface provide basking sites that allow turtles to regulate their body temperature. These structures also provide underwater habitat.

In the winter, turtles burrow into overhanging banks or into muddy pond bottoms where they find protection from freezing temperatures. Where groundwater seeps into ponds, turtles often find warmer temperatures and therefore ideal sites for overwintering. Pond liners are not very turtle-friendly, as they eliminate access to muddy bottoms for the winter.

Although turtles spend most of their lives in water, they do go to land to dig holes to bury their eggs. For egg-laying, they need open, sunny areas close to the pond, with soils that are easy to dig. These sunny, open areas are best if located adjacent to the pond, but even sites within 100 yards may be used.

How can I keep muskrats from damaging my pond?

Muskrats live in or near water most of their lives. They make their homes in bank dens or lodges similar to those of the beaver but smaller. Bank dens have dry chambers and underwater tunnels, with ventilation holes hidden at the surface by shrubs, branches, and thick vegetation. Muskrats construct lodges with aquatic plants, brush and mud, often building them on a foundation of brush or a stump.

Muskrats are desirable animals to have as part of your pond wildlife community. By feeding on vegetation, they maintain open water that will be attractive to some types of wildlife, such as waterfowl. However, when muskrat populations are high they can eliminate too much vegetation, making the habitat less suitable for some species. Muskrats may also damage weaken dikes when they burrow and dig while constructing their dens. The following measures can reduce muskrat damage to existing dikes or can be applied during construction of a dike as preventive measures.

- Form gentle slopes (a 3:1 ratio or less) on shorelines. Gentle slopes are less attractive to muskrats than steep slopes.
- Construct a 10-foot wide shelf of earth projecting from the face of the dam into the impoundment at water level to create an effective muskrat barrier, strengthen the dam, and reduce erosion caused by wave action.
- Rip-rap areas susceptible to damage. Stone should be at least 6 inches thick and should be placed 3 feet below the water level and extend to 1 foot above water level.
- Place 1-2 inches of galvanized mesh wire on the inside of the dam will prevent muskrat damage. Wire should extend from 3 feet below the water level to 1 foot above.
- When damage is severe, removing muskrats through trapping is an option. Muskrats can be trapped during the regulated season, following NYS DEC trapping regulations.

Generally speaking, what characteristics make a pond attractive to wildlife?

Although some wildlife will use deep, open water ponds, ponds with a variety of depths and plenty of shallow, vegetated fringe will provide the cover needed to attract a diversity of species. Wildlife species attracted to shallow water ponds (depending on size) include waterfowl, songbirds, shorebirds, wading birds, amphibians, and reptiles, as well as some upland birds and mammals. Although a portion of the pond can be six feet or deeper--to reduce emergent plant growth and to maintain an opening useful to waterfowl and other wetland birds--depths ranging from six inches to four feet are most productive for a variety of wildlife. Ponds deep enough to house fish can have a negative impact on the production of wildlife such as frogs, toads, salamanders, and even ducklings. Wildlife ponds often host some of the same plants as marshes, including cattails and bulrushes in the shallow areas and pondweed and other submerged plants in the deeper spots.

For shallow ponds, increasing the amount of edge makes the pond more productive for wildlife. Irregular-shaped projects or long, rectangular ones with scalloped edges will have more edge, increasing its wildlife value. Slope design should be flatter, ranging from 3:1 to 10:1 (horizontal:vertical), and ponds that are at least 60 feet wide reduce the impact of predators on ducklings and other young birds.

Other elements that can be added to ponds to attract wildlife include:

- a floating log anchored to the shore to provide cover and basking sites for amphibians and reptiles
- a multi-forked tree top or branch that protrudes above the water's surface for songbirds and dragonflies to use as a perch
- a large rock that protrudes above the water's surface to provide a basking area for turtles, frogs, and butterflies
- a small brush shelter submerged in shallow water to provide a place for turtles, salamanders, frogs, toads, and aquatic insects to attach their eggs and to serve as a hiding place for fish or tadpoles
- nest boxes installed nearby for cavity-nesting birds, such swallows and wood ducks, or a bat box to provide habitat for bats that feed on the insects nearby