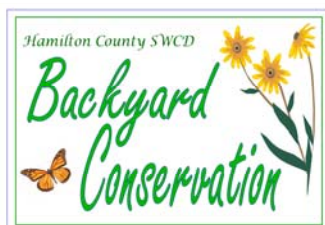




# BACKYARD PONDS



## Considerations:

**Location:** Before beginning any project, check homeowner association covenants, as well as local and county ordinances. Do not work in a drainage, utility, or other easement without the proper permits. Also call the Indiana Underground Plant Protection Service (1-800-382-5544) to identify any buried utilities. This will limit the areas in your yard suitable for digging a pond. Next, consider locating your backyard pond where you can see it from a deck or patio. Have it blend in with its natural surroundings. Plan to landscape around the pond to provide habitat for frogs, birds, and other animals that use the area. Make sure that any drainage from the pond is away from your house. If you plan to use a pump (to re-circulate water), use a filter, or light the area, be sure electrical service is available. To reduce maintenance, avoid positioning your pond under trees. Most aquatic plants will also grow better in full sun.

**Wildlife Considerations:** A pond with steep sides, a rock ledge, and potted plants does little for wildlife. Birds and amphibians must be able to reach the water, so a shallow edge and gently sloping sides (a 3:1 slope is ideal) are necessary. In addition, add 2 inches of soil over the plastic liner and install plants directly into the soil rather than using pots.

**Tub Ponds or Water Bowls:** If you do not have space in your yard for a built-in earthen pond, consider a "tub" pond or large water bowls. These can be placed on the patio or in smaller garden areas. Although they are not as beneficial to wildlife as a backyard pond, they do provide a constant source of water. There are numerous tub kits available that can be as simple as adding water, a pump, and some plants. They can also be moved inside in the winter as long as good lighting is provided for plants.

## What is a Backyard Pond?

Backyard ponds and water gardens offer benefits to you and your family, as well as birds, butterflies, frogs, fish, and other wildlife. These ponds are typically small, sometimes not larger than 3 to 4 feet in diameter, but can be significantly larger. They may also be built in barrels or other patio containers. By establishing a pond or aquascape in your yard, you can enjoy a natural, relaxing, and scenic feature while offering valuable habitat for wildlife.

## Add Fish and Scavengers

Consider stocking your backyard pond with native fish, such as fathead minnows. They are fun to watch and help keep the pond free of unwanted insects. A dozen individuals are plenty to start with due to their quick reproduction. Goldfish and koi are not recommended - they are bottom feeders and tend to produce cloudy water by stirring up sediment. Larger fish such as bluegill or bass are also not appropriate due to their large size. They may feed on frog eggs or your tadpoles! Resist the urge to feed your fish. Adding food to the water increases nutrient levels in the pond and promotes algae growth, which will make your pond unsightly and unhealthy.



## Establishing Plants

Consider a variety of native plant species to provide beauty and function to your backyard pond. There are many plants native to Indiana that you can choose from, depending on the depth at which you are planting. The table below offers several options. However, this is not a complete list of species.

0"-4" Below Water	4"-18" Below Water	18"-36" Below Water
Sweet Flag	Common Water Plantain	Buttonbush
Swamp Milkweed		Swamp Loosestrife
Bottlebrush Sedge	Buttonbush	Canadian Waterweed
Blue Flag Iris	Lake Sedge	Lotus
Rice Cut Grass	Swamp Loosestrife	Yellow Pond Lily
Water Willow	Spotted Joe-Pye Weed	White Water Lily
Cardinal Flower	Swamp Rose Mallow	Arrow Arum
Arrow Arum	Pickrel Weed	Common Pondweed
Great Bulrush	Sago Pondweed	American Bur Reed
Wild Senna	Broad-Leaf Arrowhead	Wild Rice
	River Bulrush	



## Safety

Locate the backyard pond where it is unlikely to attract unattended children. Check local safety ordinances to determine if a fence is required for the specific depth and size of your pond. Check local building ordinances for depth and safety restrictions and permits. Equip outdoor outlets with a ground-fault circuit interrupter. Unplug the pump before cleaning the filter.

## Maintenance

Algae is a common problem in many newly established ponds. The water often becomes an unsightly green after a few days. While your first instinct is to drain the pond and start over, this only prolongs the problem. Once a pond is "balanced," algae usually are kept at an acceptable level. A balanced pond is one in which the nutrients are at the appropriate level for the plants present.

If algae is already a problem, scoop it out with a dip net. Avoid using chemicals, since they may damage other plants and aquatic life. In addition, the dead algae will sink to the bottom of the pond, decay, and feed the next infestation.

Since algae need excess nutrients and light to grow, reducing the amount of nutrients and light entering the water will

help reduce algae. Floating plants or those with broad leaves such as water lilies will compete for available nutrients and help reduce the amount of light available for algae. Scavengers such as snails will help clean up wastes from the bottom of the pond.

Pond filters can also help reduce algae but require maintenance. Filters need to be cleaned frequently if algae is a problem.

Another maintenance concern may be excessive plant growth, especially of free-floating plants. Periodically skim off excess growth of duckweed, water lettuce, and other floating plants. Once a month, prune dying plant material. Clean out some of the decaying plant material that has accumulated in the bottom of the pond in the spring.

## Pondless Water Feature

An alternative to a full-fledged pond is a pondless water feature. It is simply a waterfall and a stream without the pond. This provides a calming sight and sound, is more cost-effective than a pond, and eliminates liability. It is also easier to install than a pond, and requires less maintenance. In addition to these benefits, it also provides habitat for wildlife and in most cases, it can be located in a much smaller area.

