

## **Backyard Habitat Ponds<sup>1</sup>**

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### **Introduction**

All wildlife need water, and if you provide a source of water, they will drink it. In addition, there are numerous aquatic and amphibious species that cannot stay around your house unless you provide them with a permanent water source. A backyard pond is a good source of water, in fact, a pond is an essential portion of a well planned backyard wildlife habitat. Fortunately, ponds are fairly easy to construct; among the many styles and construction techniques, there is certainly one suited to your particular situation.

However, before beginning any pond construction, make sure to check with your homeowners' association, the local government, the Florida Department of Environmental Protection, and your local Water Management District. Some deed restrictions prohibit ponds, local ordinances may require a construction permit, and if the land is "low", you want to make sure you are not disturbing a wetland area.

### **Water Table Ponds**

If you live in an area where the water table is close to the ground surface, you may have a naturally occurring pond. One thing to note – if the water table fluctuates during the year, your pond may dry up during periods of drought. A seasonal pond will support certain wildlife species, but it will not attract as many species as a permanent pond, and of course, it will not provide water during periods of drought. Be sure to check with the authorities mentioned above before attempting any "enhancement" to a naturally occurring pond.

### **Preformed Ponds**

Ponds are available in preformed shapes, usually constructed using fiberglass or PVC. These ponds can be placed above ground or sunk into the ground. Their main advantage is that they are very rugged. The disadvantage is that they limit your creativity in designing a pond. This is somewhat overcome by the fact that more and more shapes and sizes are becoming available as interest in backyard ponds increases.

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## Cement Ponds

A cement pond is fairly simple to construct. After digging the pond, line the inside with cement to seal it. The cement should be at least 4 inches thick and reinforced with chicken wire or hardware cloth. The advantages of cement are that design options are almost unlimited, and it is very durable. Disadvantages are that cement ponds are permanent or at least hard to remove, and they can be expensive.

## Lined Ponds

There are several companies in the United States which manufacture pond liners from materials such as PVC and rubber. These are flexible and like cement, allow for almost unlimited design creativity. After the pond is dug, the liner is stretched across the top, and filled with water. The fact that the liner conforms to the hole you dig makes the possibilities for shape and design almost limitless. The main disadvantage is that the liner can be punctured. In the author's pond, a barred owl repeatedly punctured the liner with its talons as it attempted to catch fish.

## A Note on Size

A backyard habitat pond does not have to be large if supplying a water source is the goal; even in limited spaces, a 3-foot diameter, 6-inch deep "pond" will attract a lot of animals. However, if you wish to provide a place for aquatic wildlife to live, make the pond as large as you can. In addition to size, a pond with varying depths will be utilized by a wider variety of critters.

## What Can You Expect to See In and Around the Pond?

Any animals that you attract to your backyard habitat will drink from the pond. If you provide a shallow area, birds will use it as a bath. In addition, depending on your proximity to natural bodies of water, you may get a number of aquatic species which will set up home in the pond. Frogs are easily attracted as are water snakes. Most water snakes belong to the genus *Natrix* and are quite harmless. The water moccasin, or cottonmouth, is rarely seen in backyard ponds. If you are concerned, get a book on snake identification. Toads and salamanders may use

the pond for reproduction purposes. If you are close to a river or other body of water, you may see a turtle set up home. In addition to all of these large inhabitants, you will get a myriad of aquatic insects and invertebrates in the pond, which make interesting study for the backyard naturalist.

## A Word on Fish

In keeping with the backyard habitat theme, native fish should be used whenever possible. However, they are naturally camouflaged and difficult to see from the surface. Goldfish or koi carp can be used if you want to see brightly colored fish in the pond. Two things to remember here:

- Brightly colored fish will be extremely vulnerable to predators, especially in a small, shallow pond, so don't be shocked if your fish start disappearing.
- If there is any chance of the fish escaping into a natural water body, don't use exotics of any kind.

## Where to Put the Pond

If you are going to dig a water-table pond, you will need to get clearances from all the appropriate authorities, and it is best to put the pond in a low area of your property where the water table should be closest to the ground surface (this will save a lot of digging). If you are going to seal the pond with cement, a preformed liner, or a flexible liner, you may want to look for a higher spot, as there will be less chance of the pond overflowing during a heavy rain.

Many pond books indicate that a pond must be placed to receive a good amount of direct sunlight, as many plants will only bloom this way. However, there are endless options for planting a pond and its surrounding area. A pond in the shade, surrounded by delicate ferns can be very attractive. Ponds can be incorporated into almost any landscape, so be creative. They can make a wonderful centerpiece, but also can be used as a secluded oasis underneath some shrubs.

## Pumps and Filters

Moving water creates a very pleasing effect in the backyard habitat, but is not necessary for the pond to function. Fountains and waterfalls will not only attract people, but many birds and other wildlife enjoy playing in the flowing water as well.

Filters can be attached to the intake end of the pump, and will assist in maintaining the water quality of the pond. However, simplicity and freedom of design are often lost when pumps are used, since now the pond must be located near an electrical source. In addition, the cost of the pump and the electricity to power it must be added to the total cost of the pond. A well planted pond, with just a few fish, will become a balanced system on its own, and water quality will only be a problem if the fish are overfed.

## Additional Reading

It is impossible to cover everything needed in such this limited space. There are a number of books on ponds, and it is highly recommended that you do additional reading before you start digging. The following is just a sample of the available books:

Garden Pools and Fountains

Ortho Books

Box 5047, San Ramon, CA 94583

The Pond Doctor: Planning and Maintaining a Healthy Water Garden

Sterling Publishing Company

Two Park Avenue

New York, NY 10016

Complete guide to Water Gardens

Creative Homeowner Press

24 Park Way

Upper Saddle River, NJ 07458

In addition to books, many companies which sell pond plants and supplies provide good information on design and construction.

## Pond Liners

Yunker Industries

200 Sheridan Springs Road

Lake Geneva, WI 53147

(262) 249-5220

Reef Industries

P.O. Box 750250

Houston, TX 77275

(713) 507-4200

(800) 231-2417

## Water Garden Supply Houses (Plants, Pumps, Liners, etc.)

Slocum Water Gardens

1101 Cypress Gardens Blvd

Winter Haven, FL 33884

(863) 293-7151

Van Ness Water Gardens

2460 North Euclid Ave

Upland, CA 91784

(909) 982-2425

(800) 205-2425