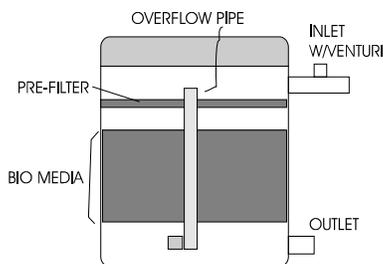


## *Pond Basics*

Ponds can be a beautiful addition to your home's landscaping or a centerpiece for any room, patio or yard. The trick is to properly install a pond so that it will always be crystal clear, allowing full enjoyment of the colors and patterns on your fish.

The size of the pond you choose depends upon the available space and budget. Keep in mind that a larger pond is easier to keep clean and clear, assuming it is set up with proper filtration. A major problem in Florida with pre-fab ponds is that they are not deep enough. Ideally an outdoor pond should have a minimum depth of thirty inches to prevent the water temperature from getting too hot. A deep area in the pond also allows fish to escape from marauding birds, raccoons and other predators. Pond liners are often a better choice than pre-fab shells. Liners are easy to install and will conform to any size or shape you choose. Quality pond liners offer twenty year guarantees and are usually less expensive than pre-fab ponds pre gallon.

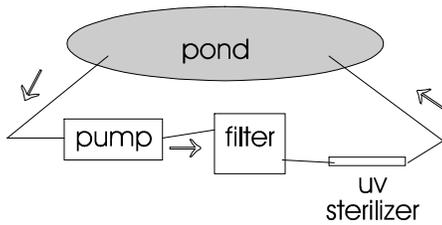


*Typical wet/dry type pond filter*

Filtration is the first step to clarity in a pond. Mechanical filtration (trapping the dirt) can be done with a basic filter that should be sized in accordance with the total gallons of water the pond will hold. These filters may be internal (submersed in the pond) or external (sit outside the pond). The filter is attached to the intake of a submersible pump or the pump is integrated into the filter box. Water is pulled through the filter containing a filter sponge or pad to trap the dirt. The unit can be hidden with plants or rocks to make them unobtrusive. Internal filters such as the *Pond Master* line come as complete kits and are easy to setup and use. The disadvantage of these filters are the limited types and amount of filtration media that can be used in them. As a rule I would recommend internal filters for small, inexpensive ponds, where the budget restricts the use of an external setup.

External filtration can be setup in numerous configurations. A typical setup consists of an external pump (not submersible) with a canister or wet/dry type filter and an ultraviolet sterilizer. Filters are available in many different brands, shapes and sizes. One of the newest and most reasonably priced filters is manufactured by Aquatop. They come in 3 sizes of canister style filters with built-in UV sterilizers to keep algae in check. There are pumps available for each filter that are matched for proper flow rate.

The necessary pump size is based on how many gallons of water the pond holds. On small ponds of 100 - 150 gallons it is desirable to turn the total volume of the pond from two to five times per hour. The higher flow rates will clear a pond faster during times of algae blooms and other occasions where the pond becomes dirty, but the minimum flow rates will eventually do the job. On larger ponds from 1500 to 10,000 gallons you may have to drop as low as a complete turn of water once in three hours. The vast amount of water in a large pond dilutes problems and makes it easier to maintain balanced water. The average larger ponds run 1500 to 3500 gallons. A 3500 gallon pond is approximately 19' x 10' with an average depth of 30'.



*Water flow thru filter system*

In my opinion, one of the major expenses, but very important component of pond filtration is the ultraviolet sterilizer (UV). The UV is your first line weapon for algae control in a pond. On an outdoor pond, unless it is very shaded, I would consider the UV a necessity. The cost of a UV will be about \$129 to \$250, but pays for itself with the time you save in cleaning and the enjoyment of year round clarity in your pond.

There are a few more things to consider for added beauty and to minimize the maintenance of your pond. I will cover these briefly, but you may want to do more in-depth research on the topics of plants, lilies, algaecides and the different varieties of fish that can be kept in a pond.

Plants and lilies can help considerably with algae control in a pond. They will be very pleasing aesthetically and at the same time help control algae by consuming the nutrients that promote its growth. You will need to research this area as to the maintenance, feeding and compatibility with the types of fish you are keeping before choosing your plants and lilies.

Algaecides are very helpful in destroying all algae in a pond. They complement your UV in keeping the pond (including the sides and waterfalls) algae free. The big drawback to algaecides is they should not be used with live plants.

Fish selection for the pond is based on personal preference. In S. Florida you can put any type of tropical fish from angels to zebra danios (in other words, from A to Z) and they will do well. The most popular fish for ponds are koi, but I have seen beautiful ponds with African cichlids, ponds with guppies and ponds with angelfish. The important thing is to make sure the fish you choose are compatible.

If you have any questions, the staff at Beverly's would be happy to guide you along the way. We can help with planning and installation, fish and plant selections and water quality. The biggest problem you will have is when you don't have a yard left because you are putting in your third, fourth or fifth pond!

***Good Luck!***

The author, Gregg Rosenberg is on staff at Beverly's Pet Center. His expertise from over twenty years in fishkeeping is always available to guide you in the selection and purchase of the fish and supplies to meet your