



PONDSCAPES Atlanta



ROCK BOTTOM PONDS

Water features are like people – no two are alike. But there are many similarities to every pond, and some major differences to each as well. A recent addition to the water gardening industry is the advent of the rock bottom pond. For years all ponds were constructed with a liner or concrete, and the bottom of the pond was left bare. Recently people have started to add stones or rocks to the bottom of the pond. There are many advantages to this approach, and a few disadvantages too. We will discuss these, and you can decide if a rock bottom pond is right for you.

The standard issue pond since water gardening began was a liner or concrete, a filter and some water movement. As science has progressed so has the water gardening industry. We found out that tiny bacteria were responsible for removing waste products and ‘cleaning’ the pond. We also figured out that these bacteria live on surfaces within the pond and especially in the filter. The more surfaces, the more bacteria were present. This was called ‘bacterial filtration’ or ‘bio-filtration’. As things progressed filter manufacturers started to increase the surface area of their filters without increasing the bulk. Bio-filtration became a hot topic and an important one too.

Along the way someone figured out that the bacteria live in the pond too, not just in the filter! So they started to add rocks to their ponds. They started to experience great results, without all the filtration and gadgets that bare bottom pond keepers needed to keep their pond clean.

So what does this mean? All the added rocks (usually smooth river stone from 3” to 6” diameter) provided lots of surface area for the bacteria to live on and do their cleaning thing. We are left with a pretty pond with clear water and attractive stones on the bottom. The pond stayed cleaner longer, needed less cleaning, and less frequent water changes. Rock bottom ponds were much more desirable for garden enthusiasts who wanted a water feature, not just a pond. This approach has been pioneered by Aquascape Designs. This wholesale company has designed a system that incorporates a rock bottom pond with good filtration and water flow. The whole system is very attractive, and requires maintenance only a few times a year. This ‘water gardening’ approach has won over many followers and has made Aquascape Designs one of the fastest growing companies in America.

However, every silver lining has a cloud! The rock bottom approach to water gardening does have a few major issues that you need to be aware of. While this system works very well for many situations, it is exactly wrong for a few other situations.

All the additional surface area from the rocks helps to breakdown the debris and waste products from the fish very efficiently. Consequently you don't see too much debris in the pond for the first year or two. But after a few years, if left alone, the rock bottom pond will accumulate several inches of debris. This can lead to toxic gas build up and a complete breakdown of the natural balance of the pond. To prevent this from happening Aquascape Designs specifically recommends that the entire pond be drained every year and the rock bottom be hosed down and the debris pumped out of the pond. You don't need to remove the rocks, just the accumulated debris. This is a time consuming and unpleasant process. For the average person the rock bottom pond is not too bad as you usually only clean the filters four or five times a year (an hour each time) and spend one day draining and cleaning the pond (eight hours) for a total of twelve hours a year spent on pond and filter maintenance. The bare bottom pond would require filter cleaning about once every two weeks (about thirty minutes each time), and a major water change and cleaning once a year (about four hours) for a total of seventeen hours a year spent on pond and filter maintenance. The numbers vary with each pond, but generally the bare bottom pond will require more time over the course of a year than the rock bottom pond.

For people who are primarily interested in keeping fish the rock bottom pond is not the best way to go. These people are interested in the health of the fish first and foremost. Often the fish are worth a considerable sum of money, and everything needs to be oriented towards keeping the fish healthy. Rock bottom ponds provide too many hiding places for parasites and debris. The rocks themselves can scrape and irritate the fish, and the background color of the rock does not show off the fish as well. Furthermore, draining and filling the pond every year would put the fish under a lot of stress, and possibly lead to fish health problems. While these may seem trivial things, remember in these situations the plants and aesthetics of a water garden are not as important, the fish are the main focus.

PondScapes Atlanta installs both bare bottom ponds, and rock bottom ponds. As we have said each pond is different, and you need to figure out what you want from your water feature before you decide which way to go. Generally a person who enjoys their water feature and has interest in aquatic gardening would be well suited to a rock bottom pond. If you want show quality fish, or just don't want to fool with a major day of pond cleaning, a conventional filter and bare bottom pond may be your ideal situation.

But always remember this, PondScapes Atlanta can do the maintenance for you!

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678 – 908 - 4151