



FREQUENTLY ASKED QUESTIONS

Why is the pump just plugged in? Can I hard-wire it?

The pump is designed to plug in for a couple of reasons. First, it is designed to plug directly into a standard GFCI outlet and doesn't need hard-wiring. Second, it makes the pump much easier to service. If you choose to hard-wire the pump, be aware that you will pay additional service call fees for us to perform service or warranty work.

Why are the rocks covered with green fuzz?

That green fuzz is filamentous (string) algae. It is perfectly normal and natural for an organic water garden to have some of that below the water's surface. If it gets out of control (3+ inches in length), refer to the trouble-shooting sheet for options.

Why did my water turn pea-green?

If your pond is new, this is a normal occurrence. Not all ponds go through this phase of Genesis, but many do. Just keep adding the AquaClearer bacteria according to the directions, and it should clear up within a few days. Once the water clears up, begin backing off of the bacteria as long as it stays clear.

When can I add fish? How many fish can I have?

You should wait at least two weeks after the aquatic plants have been installed before introducing Koi or decorative goldfish to your pond. We recommend purchasing small fish (3-5" in length); otherwise, they could wreak havoc on your newly-planted aquatics. The number of Koi fish is calculated as: 1" of fish per cubic foot of water¹. You can have a few more goldfish than Koi, should you desire to go that route. You can also mix the two, substituting two goldfish for every Koi. These are general rules of thumb to follow. Good judgment and common sense should always prevail.

How often, and how much, should I feed my fish?

Feeding your fish is rarely, if ever, necessary. They will survive just fine without the addition of commercial fish food, surviving quite well on plant material and visiting insect life. Most people, however, enjoy feeding the fish on occasion, and it does make them friendlier pets. Only feed your fish what they can eat before it hits the skimmer, and once a day is plenty. If you over-feed them, not only are you wasting the food, but you are creating an environment where string and free-floating algae can flourish. Do not feed your fish commercial protein fish food in the winter months when the water temperature drops below 60°. Their metabolism slows down considerably in the cold weather, preventing them from digesting the protein-rich commercial foods on the

¹ This formula is a rule-of-thumb used in the industry. Balance is the key. Your pond is new, so start slowly and add fish as the pond matures.



market. You could actually feed them to death! During that time, however, you can give them natural treats such as watermelon, zucchini, and lettuce.

Can I add aquatic plants?

Absolutely! Have a ball, and experiment with any number of aquatic plants on the market, usually in the spring. You'll have to check with your local nurseries as to availability and cost, as this varies greatly. You can get plants on-line, but it's a gamble as to whether or not they'll survive. Many folks shop around and add tropical water lilies, papyrus, umbrella grass, Louisiana iris varieties, etc., to their pond. The more diverse the plant mix in the pond, the less chance string algae has of taking hold. And it's a marvelous place to garden when its 110° outside! If your pond is new (less than 6 months old), you may need to add a fertilizer tab when you introduce a new lily or maginal. Otherwise, we don't recommend fertilizer for the aquatic plants because it's also a source of food for string algae.

Does the water get too hot in the summer or too cold in the winter for the fish?

Not at all. The combination of the 24/7 water circulation and the shade on the pond via aquatic and terrestrial plants keep the temperature reasonable in the summer time. You will notice that the fish hang out in the shade of the lily pads and marginal plants during the sunny time of day.

The fish's metabolism slows considerably in the winter time, allowing them to even hibernate below several inches of ice in the colder regions.

Is my pH level too high?

Arizona has alkali water. This means that you pH levels will run between 8.5 and 9.5, and all the books are telling you that pH should be a neutral 7.8. You DO NOT need to try to lower the pH. The fish and plants will acclimate, which is easier than for you to try to maintain a neutral pH, and could even be stressful for the fish – and a losing battle for you considering that every time new water is added to the pond, it is at our high pH.

Do I ever need to drain and clean the pond?

Once a year, in the spring, we recommend a clean-out of the pond, especially the biological filter (and this includes the “pondless” waterfalls). The extent of this cleaning depends on the age of the pond and fish load, as well as other factors that are fairly easy to assess visually. This is something that can be done yourself, or you can hire someone to do it for you. The instructions for doing this job are in your Owner's Manual. We also offer a training course once or twice each spring, which will teach you, hands-on, how to do this yourself.

How often do I need to clean out the skimmer?

This depends greatly on how much debris is falling into the pond at any given time. You may find that this also differs depending on the time of year. We recommend that you check the skimmer basket at least weekly, even if it's just to look inside and make sure it's not full yet.

The skimmer pad should be hosed off occasionally, probably every two or three months.



How often do I need to clean out the biofilter?

This area is supposed to be a swamp! It is where the beneficial bacteria live and breed to keep your water crystal clear. It is meant to only be cleaned out once a year, in the early spring, and then it will need to be re-seeded with bacteria because every time you clean this filter, you are basically starting over with your ecosystem.

Where can I get more water treatment products?

Organic water treatment products can be purchased at most any Ewing Irrigation store. You will be looking for AquaClearer bacteria if your water is cloudy. If you have string algae, you want S.A.B. (String Algae Buster) or EcoBlast (cold water months).

What kind of water treatment products should I use?

Every pond is different. What works in one doesn't necessarily work in another. Here are some suggestions as to what products have worked for various clients:

Barley Extract: A century ago, European farmers discovered the benefits of floating a barley bale in their stock ponds. Our backyard ponds are not well served by a big ugly hunk of straw in our ponds so an entrepreneur in California began making barley tea. This tea is an extract of barley straw and is an all-natural form of algae control. Barley tea will not kill or eliminate existing stands of algae. It acts as a growth inhibitor and, under the right conditions, will stop algae production within your pond, waterfall, and stream. The recommended dosage is 2 oz. per 1,000 gallons added once per week until the algae growth is halted. However, in our hard alkali water, we are finding that 6 oz. per 1,000 gallons is a more effective treatment, and poses no threat to any aquatic life other than the algae. You may back off of the treatments and let observation be your guide from that point forward. As far as we can tell, it would be difficult to overdose your pond with barley tea.

Quick and EZ ex1 or AquaClearer: This is a cultured bacteria and enzyme product. The bacteria is an aerobic (oxygen-loving) nitrifying bacteria. These bacteria and enzymes are naturally occurring, and in a healthy, well balanced, and well oxygenated aquatic eco system are not even necessary. However, most backyard ponds have blockades to Mother Nature's grand design and anaerobic conditions are inevitable. In these cases, it is a good idea to send in reinforcements to do battle with anaerobic forces. If your pond is built using a skimmer and biological filter system, like one of our Aquascape ecosystems, then we recommend you add one tablespoon of ex1 to 1000 gallons of pond water directly to the skimmer. Your circulation system will take care of the rest of the job. Repeat application daily for the first couple weeks of spring, or until water clears up if you are dealing with a water clarity issue. Once the water clarity meets expectations, you can back off the dosage frequency and repeat applications based on your observation of the pond. Here again, this is a naturally occurring product and overdosing your pond is something that is unlikely. We only recommend organic methods for dealing with pond issues. More often than not, ponding issues are problems



of perception or aesthetics, and not actual water quality, or aquatic life health problems. Patience is often the most effective treatment for these types of problems.

How many gallons is my pond?

To figure out how many gallons are in your pond, multiply the length times the width times the average depth. Then multiply that number by 7.25.

What do I do about pest and/or weed control around the pond?

We recommend organic remedies to these problems, such as integrated pest management (IPM): good guys to eat the bad guys. Hummingbirds, flycatchers, western toads, dragonflies, and damselflies will automatically show up to most ponds to help out with pest problems. If you have a pond, we add mosquito eating minnows to take care of that annoyance. White vinegar makes a fairly effective weed control method for most weeds. If you must use an herbicide, make sure there is no wind and that your application is accurate. We DO NOT recommend you spray any chemical herbicide or pesticide within 50 feet of your pond or water feature. Inform your service, if you have one, of this requirement. Yes, it's true that the poison is harmless once dry; however, it will never dry out if it hits the pond water, and can cause catastrophic results. For more information on integrated pest management, you can contact the Master Gardeners at 602-470-8086, or visit their website at www.maricopamastergardeners.com.

