
COMMON QUESTIONS ABOUT WATER GARDENING

- 1. How deep should my pond be?** This depends on what type of pond you want. There are basically two types of garden ponds - water gardens and Koi ponds. A water garden, which is our focus at Aquatic & Garden Decor, is built to house water plants and goldfish and should be a minimum of 18" to two feet in depth. In the Cincinnati area, where the winters are typically mild, there is no need to build a water garden deeper than two feet. Around the perimeter, you may also want a 10"-12" deep area, or shelf, for shallow water plants. A Koi pond is built especially to house Koi fish and not a wide variety of water plants. There are also specific design factors, which should be researched if you are considering a Koi pond.
- 2. Where is the best location in my yard for my pond?** We recommend installing your pond where you will enjoy it the most. Place it close to an outdoor sitting area such as a deck or patio and, if possible, near a window, allowing you to view it any time from inside the house. When planning the location, do keep in mind that your pond will need at least five hours of direct sunlight per day.
- 3. Where is the worst location in my yard for a pond?** Do not install your pond in an area of your yard that naturally holds water. Excessive ground water under your pond will cause your liner to float, whether it is preformed or rubber liner.
- 4. When is a good time to install my pond?** There is actually no bad time of year to install a pond as long as the ground is not frozen.
- 5. What are the differences between pre-formed ponds and rubber liner ponds?** With pre-formed ponds, the shape is determined for you, and all you have to do is trace around the pond shell and start digging. Rubber liner, however, can conform to any shape, size or depth that you desire; therefore, your only limit is your imagination. Also, the rubber liner itself is typically less expensive than a pre-formed pond shell. At Aquatic & Garden Decor, we offer both types of ponds. Our pre-formed ponds are 18" deep, come in a variety of shapes and sizes, and are U.V. stabilized to protect them from ultraviolet rays. They are made of molded, durable, black ABS plastic for remarkable strength and longevity. For rubber liner ponds, we offer a very heavy 45 mil, 'fish friendly' rubber liner that comes on 10', 20', or 30' wide rolls, that we can cut to any length. This material is also great for lining a waterfall off the side of your pond (all waterfalls on the outside of ponds must be lined). This material also has been stabilized to protect it from sun damage.
- 6. How do I protect my pond from punctures?** Proper underlayment must be used. This includes fabric underlayment or sand. Sand is best for pre-formed ponds. Either type is fine for rubber liners, although fabric underlayment has some advantages. It is easier to use and will not erode or decay. Also, fabric underlayment will protect your horizontal pond bottom and shelves as well as the vertical side walls; whereas sand can only protect the horizontal portions.
- 7. How much sun does a water garden need?** A minimum of five hours of direct sunlight per day is recommended. Most water plants need at least five hours of sun per day, especially those that bloom.
- 8. Do I need a pump in my pond?** We recommend having a pump for many reasons. Stagnant water attracts egg laying mosquitoes. A pump circulating the pond water adds oxygen to the water, which is

beneficial to the water plants and fish. The sound and appearance of a water feature is a very soothing and attractive element in any pond.

9. Will a pump aerate my pond enough to clear the water? No. A pump will aerate the water somewhat, but is not sufficient for balancing the pond. The most effective, natural way to clear and balance a pond is with the correct water plants.

10. Do I need a filter? It is not necessary to use a filter in a water garden because the plants themselves will clear the water, if the pond is planted properly. A filter could help clear the water a bit faster in the spring, while your plants are establishing themselves. For a Koi pond, a filter will most likely be necessary because Koi fish typically eat or destroy the plants that balance the water.

11. When should I add plants to my pond? As soon as the pond is complete, plants and fish should be added. However, if you install your pond during the winter, we suggest you wait until the following spring to add plants. Important reminder: due to the fact that water temperatures increase and decrease much more slowly than air temperatures, tropical water plants, such as water hyacinths and water lettuce, should not be added to a pond until May.

12. What plants go in the shallow area of my pond? These plants are known as bog plants, marginal plants or ledge plants. They should sit in the shallow area, or on a shelf in the pond, which is 10"-12" deep.

13. What plants go in the deep area of my pond? Water lilies and oxygenating plants (anacharis or hornwort) should be in this area, which is 18"-24" deep.

14. What should I consider when adding water lilies to my pond? Water lilies grow best in very still water; locate them away from waterfalls and sprayheads. Water lilies are not recommended for ponds with destructive fish, such as Koi. Most lilies need five hours of direct sunlight per day in order to grow well and bloom; however, shade tolerant varieties are available. For best growth and blooming, fertilize with aquatic plant fertilizer, during the growing season, according to the directions on the fertilizer package.

15. When do I propagate (split) my pond plants? Anytime is fine for most plants. At Aquatic & Garden Decor, we split the majority of our plants in late summer and early fall. If you divide them then, just make sure you complete the process two to three weeks before you close your pond. They need time to root themselves in before they are cut back for the winter. If you have questions regarding specific plants, just ask our water garden staff; they will be happy to help!

16. Do I need to fertilize my pond plants? We recommend fertilizing water plants during the growing season, which begins in March and ends in October or November. For best growth and blooming, fertilize with aquatic plant fertilizer, according to the directions on the fertilizer package. Do not fertilize in the fall, at the end of the growing season, when the plants are preparing themselves for winter dormancy.

17. Can I run a spray or a spitter in a pond with plants? Yes you can, but only if your pond is large enough. If you have water lilies, they need to be able to grow and spread on the pond surface without being sprayed. Lilies prefer very still water, and if a spray is too close, it can kill a lily. Remember: Your lilies are

essential to pond water balance; your spray is not. The same is true of spitters. They can be used in a pond with water lilies, as long as the stream of the spray does not harm the lilies.

18. How do I get rid of an algae bloom (green water) and balance my pond? We recommend the natural way - with the correct balance of water plants. To naturally balance a pond you need to have 2/3 of the pond surface water covered with plants (such as water lilies, water hyacinths and water lettuce) along with the correct amount of oxygenating plants (anacharis or hornwort) on the bottom of your pond. One bundle of oxygenators for every ten gallons of water is recommended. This formula rarely fails and will result in clear water. Remember that any product that claims to kill algae may also kill other desirable aquatic plants because algae are also water plants.

19. How do I control string algae in my pond? String algae can be pulled out of the pond by hand or by twirling it around a stick or net. As the growing season progresses and the surface coverage from the plants increases, string algae will naturally diminish. Remember, string algae is normal in a healthy pond.

20. How do I control algae on my waterfall? Growth of algae on your waterfall can be slowed drastically by the application of a saline solution. First, turn off the waterfall. Fill a bucket with pond water, and mix in two to three ounces of non-iodized or kosher salt for each gallon of water in the bucket. Pour three fourths of the solution over the rocks and scrub the rocks with a scrub brush to remove existing algae. Pour the remaining solution over the cleaned rocks and allow the rocks to soak for at least 12 hours with the waterfall off. The salt solution should completely dry up on the rocks before the waterfall is turned back on; wait longer than 12 hours if necessary. This procedure helps to severely retard algae growth.

21. What about using chemical treatments in my pond? At Aquatic & Garden Decor, we strive to balance ponds naturally with the correct water plants. However, it is necessary to de-chlorinate tap water before introducing fish into a pond. Products available at Aquatic & Garden Decor are the same ones we use in our ponds for de-chlorinating, and they have been proven safe for water plants and fish. Always read and follow the directions on the package when adding any treatment to your pond.

22. What type of fish should I put in my water garden? We recommend any type of hardy goldfish (Shubunkins, Comets, Fantails) as they are cold water fish and can live in the pond year round. For a water garden, we do not recommend Japanese Koi, Catfish or any bottom dwelling or predator fish that may attack more gentle ornamental fish. Japanese Koi tend to destroy pond plants and stir up debris from the bottom of the pond, keeping water cloudy. In a water garden, where plants are used to balance the water, Koi and Catfish should not be introduced.

23. How many fish should I put in my pond? A pond will support only so many fish. We recommend no more than one fish inch per ten gallons of water.

24. Do I need to feed my fish? No. Fish are capable of sustaining themselves in the pond by eating insects, larvae, algae, etc. However, if you want to tame your fish, so they swim up to greet you when you approach your pond, they can be fed floating fish food. Always feed them according to the directions on the package. **Do not overfeed!** Uneaten food results in excess nutrients which will cause an algae bloom. Feed your fish no more than they can eat in five minutes.

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- 25. Can I add frogs and snails to my pond?** Both are great. Frogs will often find your pond on their own, and if not, you can add tadpoles to your pond. Frogs will eat mosquito larvae and insects. Snails can be purchased at a pet store, and many of the plants we sell at Aquatic & Garden Decor have small black snail eggs on the pots. Snails eat algae from the sides and bottom of the pond. Turtles, however, are not recommended for ponds, as they typically will eat water plants and fish.
- 26. What are the most common pond pests?** Raccoons, herons, turtles, ducks, insects, and any chemicals that may harm fish or water plants (including those that claim to kill only algae).
- 27. How do I determine the number of gallons of water in my pond?** For most ponds, which have an irregular shape, the formula is: Length x Width x Depth x 5.90 = Gallons. For ponds which are square or rectangular, and all one depth, the formula is: Length x Width x Depth x 7.50 = Gallons. Length, width and depth should be measure in feet.
- 28. When do I open my pond?** We recommend in March or early April. Refer to our 'Starting Up Your Pond In The Spring' tip sheet for assistance.
- 29. When do I clean and winterize my pond?** We recommend this be done in fall. Refer to our 'Winterizing Your Pond In The Fall' tip sheet for assistance.
- 30. What do I do with my plants for the winter?** All plants vary. Please see our 'Aquatic Plant Care' Tip Sheet.
- 31. What do I do with my pump in the winter?** Running a pump in the pond to keep a hole in the ice will only make the pond water colder and encourage a thicker layer of ice on the pond which will endanger your fish. Also, as the perimeter of the pond and/or waterfall freezes, the ice can divert the moving water in the center out of the pond, thus draining it! Pumps should remain off during the winter months. It is not good for a pump to sit in freezing and thawing water. Larger waterfall pumps, that are deeper in the pond where the water will not freeze, can remain in the pond for winter. Smaller pumps located on shelves or in shallow water should be removed and stored inside for the winter, in a container of water. Storing the pump in water prevents the seals from drying out. When you unplug your pump for the winter, plug in your pond deicer.
- 32. Is it okay to use a pond de-icer?** Yes! Use a pond de-icer to maintain an open hole in the pond's surface. This will allow toxic gases to escape. The pond de-icers available at Aquatic & Garden Decor float on the water surface and are thermostatically controlled. Please be advised, however, that a de-icer is not a substitute for properly cleaning and winterizing the pond in the fall.

Seeing really is believing...and understanding! It truly is worthwhile to see all of our water garden displays!

For additional questions or advice, please stop by Aquatic & Garden Decor and visit our water garden staff, who is always happy to help!

All products and accessories discussed in this tip sheet are available at Aquatic & Garden Decor.