

Pond Care

The first, and most important piece of information to know when you have an aquatic garden is how many gallons it contains. Knowing this measurement will be vital in every aspect of pond care and maintenance. To calculate how many gallons are in the pond, simply take the measurement of the largest* width, length, and depth of the pond and multiply the numbers together.

Take that figure and multiply it by 7.5 to get the number of gallons.

Example: 10 ft long x 5 ft wide x 3 ft deep x 7.5 = 1,125 gallons

*If your pond has a shelf or slight variations in width, still take the largest/deepest measurements and use them in the formula.

1. I have algae in my pond! How do I get rid of it?

- What causes algae?
 - Nutrients Nutrients come from fish waste, over-feeding, decaying plant matter, and dirty filter pads.
 - o Light Too much light entering the pond causes algae blooms.
- Solutions:
 - o Reduce feeding to lessen fish waste and uneaten food.
 - Remove all leaves and other dead material from the bottom of the pond by hand or with a net. If you are not successful, use Pond-Zyme to encourage the breakdown of materials in the pond.
 - Clean filter pads regularly to reduce nitrate buildup.
 - Use marginal plants, water lilies, and floating plants to cover approximately 50-60% of the water surface. The introduction of plants also battles the algae for nutrients and will ultimately choke out algae.
 - Use algae killer, such as Algae Fix, to combat blooms. This product is safe for both fish and plants.

2. My pond is cloudy. I can't see my fish, and my filter isn't clearing up the water. Help!

- Sometimes fine particles are either too light or too small to settle to the bottom of the pond or are easily passed through the filter. These floating particles will cause the water to appear brown and hazy, thereby reducing the ability to see the fish. Also, the filter may be too small for the size of the pond.
- Solutions:
 - o If the problem is unsettled material, use AccuClear. This product causes the fine particles to clump together. This will allow for the pieces to settle or be caught in the filter pads.
 - Make sure the filter is the right size for the pond. A pond filter should be 50% larger than the total gallons of water. Example: A 100 gallon pond should have a

minimum of a 150 gallon capacity filter. The larger the filter, the cleaner your water will be.

3. How much should I feed my fish?

• Fish should only be fed enough food so that they can consume it all in 5-8 minutes. After this amount has been determined, feed the fish the same quantity twice daily.

4. When should I start and stop feeding my fish?

• Fish sold for pond use will go into hibernation when the water temperature falls below 55 degrees. This is the point at which you should stop feeding. Start feeding when the water temperature reaches a steady 55 degrees or above and the fish are actively swimming around the pond.

5. There are a variety of fish foods on the market. What should I feed to my fish?

• What you should feed is determined by the temperature of the water.

| Degrees | Food Type |
|--------------|--|
| 55 and below | Wheat Germ - Easily digestible = reduction of waste |
| 55 to 65 | Staple - Includes spirilla algae and essential nutrients as well as 25-30% protein. The spirilla algae will help intensify the color of the fish. |
| 60 and up | Growth* - High protein 40+%, spirilla algae and essential nutrients that cause fast growth. *Not a necessity to use this food. Staple can be used all summer and into early fall. Koi can grow at a rate of up to 1 1/2" per month on this food. |

6. How many fish can I safely put in my pond?

• The rule of thumb is one inch of fish per square foot of surface area. Take the measurements of the longest width and length of the pond and multiply together. This amount will equal the inches of fish allowed.

Example: 10 ft wide x 5 ft long = 50 sq ft of surface area = 50" of fish

• What is 50" of fish?

Example: 2 Koi that are each 10'' long = 20'' of fish

*Please remember to take into account that your fish will grow. Most fish tend to acclimate their size to the size of the pond, but this is not always true. We recommend staying below the maximum allowance of fish.

7. How many plants should I have in my pond?

- The number of plants is totally up to you. However, it is recommended to have enough plants to cover 50-60% of the water surface to deter algae growth.
- Suggested plants:
 - o Water lilies (perennial)
 - o Elodia/Anacris (perennial)
 - Water hyacinths (annual)
 - o Creeping Jenny (perennial)
 - **o** Water lettuce (annual)
 - Spreading clover (perennial)

8. Should I fertilize my plants? How do I do that?

- Pond plants should be fertilized every season and, depending on the product, every month or so.
- How to fertilize plants Always use fertilizer made only for ponds! Always follow directions or you can develop algae problems!
 - Plant tabs Plant food tablets for aquatic plants. Place directly into the soil, right at the root level
 - Liquid fertilizers Place directly into the water, following the instructions for amount.

*Both fertilizers can be used at once, and it may be more beneficial than using just one.

9. How large of a pump should I have for my pond?

• The optimum size pump is one that will circulate the total number of gallons one and a half times per hour.

Example: 1,200 gallon pond needs an 1,800 gallon per hour pump

• This is also an efficient way to find the appropriate filter size, because all filters usually have a maximum pump size located on the box. Things to avoid: Too large of a pump with a small filter = cleaning the filter on a daily basis. Too large of a filter and a small pump = not enough circulation, dirty pond, ultimately dead fish.