



MUD POND KOI
pond supplies and maintenance

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Steps to a Clear Pond

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1. Determine gallons
2. Treatments
3. Importance of and Sizing of UV Lights
4. Bacteria
5. Cleaning

DETERMINE GALLONS

The most essential element to pond control is knowing your pond's volume. All of the treatments used as well as the equipment are gallon specific. So, how do you figure your volume?

The formula is width x length x depth x 7.5.

The trick is very few ponds are uniformly shaped. Here is how I do it: I measure the width in three places, and I take the average of these three. I do the same with length, measuring in three places and taking the average of these. Finally, I measure the depth the same three places then I take the average of these. In my sample pond (see attached), the formula is 10 x 14 x 19 x 7.5 or 1,995 gallons.

- **TIP:** Start a pond journal. Once you've determined your pond's volume, it becomes the first ... most important entry ... in a pond journal. Your journal may also include plant types, fish treatments, treatment days and frequency. It's also a great place to record your equipment information, e.g. UV light size, when the bulb was last changed, etc.

TREATMENTS

In terms of water clarity, the No. 1 nuisance is algae. Algae comes in two forms: microscopic algae that results in "green water," and string algae, which clings to any available surface and, in addition to being unsightly, can also plug up filters and pumps.

String algae are readily eliminated with the use of Algae Fix, a liquid product that is safe at the proper dosages for all aquatic and terrestrial life. Here's a great example of why it's critical to know your pond volume. The dosage rate is ¼ cup per 600 gallons of pond water to be treated, e.g. 1 cup for a 2,400-gallon pond. Over doing it can be fatal to your fish ... know your pond volume.

When to start with treatment? I start in early spring BEFORE algae growth starts. I generally stop in late October. Some growth over the winter is acceptable.

String algae can also be a problem in streams where the liquid algaecides aren't as effective. A granular product such as Green Clean is effective.

IMPORTANCE OF AND SIZING OF UV LIGHTS

Microscopic algae: A UV light eliminates "green water" caused by this type of algae. UV lights are sized according to number of gallons in the pond that is being treated. For example, an 18-watt light is capable of controlling up to 1,100 gallons. The lights are also flow sensitive. Know the size of your pump to divert the right amount of water. For example, an 18-watt light requires only 365 gallons of water to be effective.

BACTERIA

Sludge and debris will build up as you control the algae in your pond. Beneficial bacteria is the solution. There are two types:

- Bacteria that removes ammonia caused by fish waste
- Bacteria that "digest" sludge and pond debris

Regardless of which one you're using, their life span is short. Weekly replacement is important to build up the beneficial bacteria in your system.

CLEANING

Equipment combinations vary, but the basic building blocks are a pump, skimmer and bio-fall.

- Skimmer: first line of defense; it removes debris before it reaches the bottom of the pond and also houses the pump.
- Bio-fall: acts as mechanical and biological filter.
- Tip: A good net is a "must have" to scoop out debris. Consider vacuuming your pond to remove built-up debris.

Questions? Call Kevin at 927.8686 (cell) or 671.7226 (store). Thank you!