



**Information Sheet**  
**“Fighting Algae”**

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## Do's and Don'ts for Algae Control

### Algae Identification:

There are over 17,400 different species of algae. Most water gardens or ponds are plagued by either -

1. Plankton Algae - aka suspended algae, green water, pea soup or single cell algae.
2. Filamentous Algae - aka string algae, blanket weed, hair algae or pond scum.

Not all algae is harmful or unwanted. The short velvet type that clings to rocks and the sides of the pond is beneficial. This type of algae provides oxygen during the day, fish nibble on it, and it uses nutrients from the water. It also provides a natural look to the pond.

### Some Causes of Excess Algae:

There are about 4 basic causes of excess algae or an algae bloom.

1. For survival, algae needs nutrition (nitrogen & phosphorus) and sunlight. This can be in the form of fish waste (too many fish), over feeding fish, decaying organic matter (leaves & plants), lawn fertilizers and decomposed fish. A build up of sludge on the bottom of the pond will feed the algae also.
2. New ponds are very likely to have an algae bloom. This is not necessarily a bad thing. The algae are actually consuming the excess nutrients in the water. Give the pond time to balance it's self before adding fish as they will only add to the nutrient overload.
3. Weather and temperature changes. In the spring, beneficial bacteria have only started to multiply. Plant coverage is not at maximum coverage. There may also be decaying leaves and twigs from last autumn at the bottom of the pond.
4. Because there is a constant supply of nutrients, string algae flourishes in waterfalls and shallow streams. The sunlight is usually unobstructed and the water is warmer. There may also be a higher concentration of algae around the shallow edges of the pond where the water is warmer and there may not be enough water circulation there.

### Natural Algae Treatment:

There are several things you can do to lessen or eliminate a mild or moderate algae bloom with out the use of chemicals.

1. Manual rake or pull out all you can reach. Use a soft brush if necessary. Your pump should be able to pump at least 1/2 of the total volume of your pond every hour.

2. Plant coverage should be 50% - 70% of the surface. Add a variety to compete with algae for the nutrients. Water lilies will shade the surface of the pond. Submerged plants (Anacharis) and floating plants (Water Lettuce, Water Hyacinth) absorb nutrients directly from the water with their roots.
3. Add 1 Barley Straw Bundle per 1000 gallons of water. Keep submerged but do not let them sink to the bottom of the pond. They need light and oxygen to break down.
4. Have the proper size biological filter for your size pond. Keep filter clean.
5. Vacuum or siphon the bottom of the pond regularly.
6. Add nitrifying bacteria which will help to starve out the algae. Both feed on the same nutrients. Have a place for the bacteria to grow, such as a bio-filter, rocks, plants, and filter media.
7. Both the barley straw and the bacteria will benefit from an aerator or provide some type of water movement. Increase circulation to the edges of the pond.
8. Have pond at least 24" deep to reduce sunlight reaching the bottom.
9. Use a fish safe algaecide (GreenClean) on a regular as needed basis. If you have a water fall, turn off your pump, dust the areas with the algaecide that are bad, wait 15-20 minutes, and then turn your system back on. The algaecide will start working instantaneous, and your dead (brown) algae will surface. At that time, use a skimmer net to dispose of the dead, surfaced algae.

#### **What NOT To Do:**

1. Do not clean or do partial water changes with tap water. This will kill the beneficial bacteria.
2. Do not change all the water at one time. Only do partial water changes with well water. Changing all the water will cause a major algae bloom.
3. Do not use chemical algaecide as this will harm plants and fish and the algae will return with a vengeance. The dead algae will collect on the bottom of the pond creating organic sludge. This provides nutrients and will cause more algae to bloom.
4. An ultraviolet clarifier will destroy floating algae (plankton) but not recommended unless you have zero ammonia. It will also kill your beneficial bacteria. A UV will not help with string algae.

#### **Pond Maintenance:**

1. Do not over feed or keep more fish than your pond will support. One 6" fish per every 100 gallons. Or no more fish than can fit nose to tail across widest diameter of your pond.
2. Use Barley Straw Bundles as a preventative from recurring string algae. It will take 2-4 weeks for the straw to become active. The warmer the water, the faster the straw will start to decompose. Place early in the spring for best results.
3. Remove dead leaves with a skimmer or manually.
4. Adding an organic pond water colorant will help to keep out the sunlight, but will also turn your water blue?