

POND ALGAE



Algae is a broad name for aquatic plants, but generally defined as aquatic organisms composed of one or more cells that are photosynthetic but do not have true roots, leaves, stems, or gametes (female or male parts). Algae can be unsightly but not usually harmful, unless too dense whereby it can rob the water of dissolved oxygen for fish to thrive. There are 3 most common types of algae found in ponds:


- Planktonic – single celled, distributed through the pond water, forming the base of the food chain, when abundant, may cause the water to look murky green or brown
- Filamentous – often found at the surface in stringy mats (hence the reference to filaments), typically starts near the pond edge or in warm shallow water where light easily penetrates, floating to the top as it dies
- Attached erect- resembling a bristly plant, non-rooted and thicker

Most pond owners notice algae after a “bloom”, a period of rapid growth when the water may turn a pea-soup green or blobs of slimy mats float in many areas of the pond. It is more difficult to treat algae when it has reached a heavy coverage. The best strategy is to act preventatively to keep excess algae from growing. Algae blooms occur in response to warm sunny conditions where there are high levels of nutrients (mostly phosphorous & nitrogen) caused from fertilizer or manure runoff and organic matter such as decomposing leaves, grass or dead algae as well as animal waste (fish or bird droppings).

Suggestions for control include

- Create steep slopes within a pond to lessen warmer waters
- Plant a buffer strip of vegetation to filter runoff around a pond
- Physically remove with raking
- Install aeration to increase water movement and dissolved oxygen
- Shade sunlight with pond colorant
- Prompt decomposition of decaying organic matter with beneficial bacteria
- Add barley straw (or pellets)


*Many of these options are addressed on our **Dealing with Algae Issues** handout using products found at Fish Haven Farm.*




BEFORE

improve water quality


MacroZyme beneficial bacteria helps decompose organic matter, an algae nutrient



Barley pellets help deter further algae growth as they degrade
(algistatic vs algicidal)




Pond clarifier is an alum product which binds up phosphorus

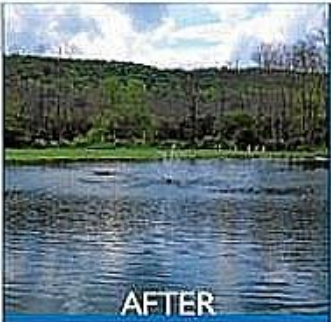


Dealing with Algae Issues?

limit sunlight

Pond Colorant shades sunlight penetration to reduce photosynthesis





AFTER

add oxygen

increase water movement

Electric, Wind, or Solar Aerators

- aids in the decomposition of decaying organic matter which is a nutrient for algae
- surface agitation reduces stagnant areas that algae prefer, decreasing sunlight absorption and destratifying water layers to lower the overall surface temperature

Eco-friendly, non-toxic and safe products.

Fish Haven Farm sells eco-friendly non-toxic products that are safe to use and will not harm pond fish, plants, animals and people. In New York State, the application of algaecides and herbicides to control vegetation in ponds requires a pesticide permit and should be administered by a licensed professional.

1. Three products are sold together (barley pellets, MacroZyme beneficial bacteria, and pond colorant) to change pond conditions and inhibit further algae growth. Check out the POND PRODUCTS page on the website or the Pond Care Package Handout in this INFO section.
2. Aeration options help to add oxygen to aid in nutrient decomposition, fish health, as well as increase water movement. Check out the AERATION page on the website to learn more.
3. Grass carp can eat certain pond vegetation including some amount of algae. New York and Pennsylvania require permits to purchase these fish. Links to permit applications and weed identification are found on the FISH page of the website.