## Algae \& Stench Control in Water



## PREAMBLE:

There are three types of algae found in ponds:

## Planktonic Algae (the good one):

Planktonic algae are the microscopic, single celled, and free-floating algae that exist in the top few centimetres of a pond or lake where sunlight penetrates. This type of algae is what gives the water a green coloration.

The plant mass does not have to be visible.

Planktonic algae are normal and are in fact desirable, because they are essential to the pond's food chain.

Planktonic algae (phytoplankton) provide food for the microscopic animals (zooplankton) that are eaten by fish fry, baitfish, and other pond inhabitants, which ultimately support a larger fish population.

They display seasonal abundance, with explosions of growth called 'blooms ' in the spring or summer that often change the colour of the pond.

Planktonic algae are also important in oxygenation of the pond as they photosynthesize during the day creating oxygen as a by-product.

Rapid die-off due to algaecide treatments or natural degradation of algal blooms can lead to oxygen depletion causing the fish to die.

## Filamentous Algae: (the bad one)

Filamentous algae, often referred to as 'pond scum 'or 'pond moss', are the most common type of algae that people want to eliminate from their pond.

Filamentous algae interfere with recreational activities such as swimming and fishing, and are aesthetically unpleasing.

They clog pumps on farms ponds amongst other problems.

Filamentous algae are typically bright green, cover pond bottoms to the depth of light penetration, and are found in ponds throughout the year.

The yellow-green floating mats seen in summer are due to an intense growth cycle caused by warming water temperatures and increasing day length.

The mats float because oxygen and other gases become trapped within the filaments.

## Macroalgae (the weird one):

Macroalgae look similar and are often confused with normal rooted pond vegetation, but are in fact a form of multicellular algae.

If a pond owner finds a submerged aquatic plant that smells like a skunk or garlic, or feels like it is covered in sand-like grit, they have most likely discovered a macroalgae.

Although they may look like it, these are not true vascular or rooted plants.

## BIOLOGICAL SOLUTION:

All unwanted algae can only grow due to eutrophication in the dam or pond or any body of water.

That means an excess of nutrients such as Nitrates and Phosphates.

Such nutrients mostly originate from fertilizers runoffs into the water and/or excrement reaching the water.

Natural biology simply metabolizes the two above mentioned nutrients into proteins and amino acids, both are part of natural decomposition.

Once the water is devoid of nutrients, the algae die off.

## PROTOCOL:

1: Calculate the pond's volume in cubic meters (1000liters)

2: Apply 10grams of Ergofito EcoFlush per cubic meter, every 10 days for the first month (3 applications). Thereafter a maintenance dose of between 5-10 grams per cubic meter can be applied once a month.

In bodies of water where there is a continuous inflow of waste water / sewage, it is best to apply 10 grams per cubic meter every day, in order to remove the odour, decompose the sewage, and remove pathogens from the water.

3: Therefore, multiply the pond's cubic meters by 10 grams

## Example:

1. If the pond is $2000 \mathrm{~m}^{3}$ then multiply $2000 \times 0,01=20 \mathrm{Kg}$
2. Apply 20 Kg of Ergofito EcoFlush.
3. Mix the 20kg of Ergofito EcoFlush with 1000 litres of water. Use the water from the pond
4. Mix well, then let it stand for a few hours to activate.
5. Take 200 litres of the above Ergofito mix and spray all around the edges of the pond.
6. Take 300 litres and spray over the surface of the pond
7. Take the remaining 500 litres of the above Ergofito mix and pour it at the pond's inlet.

## CONCLUSION:

When a farm pond or a body of water, static or flowing grows algae in excess, the simplest, fastest and easiest way to eliminate the algae is to do it with natural biology with 100\% pure natural bacteria Ergofito

## EcoFlush.

All other methods will progress into long term major environmental problems.

It is also imperative to remain totally environmentally safe, as the water is drunk by animals or used for irrigation.

Trust nature to do what nature does best.

All smell from the Lake or river system will be eliminated rapidly (Beginning in the first 4 hours)

