

Here are answer to some of the most common concerns from new pond owners, what they mean, and what to do next.

My pond turned green 'pea soup'

- Suspended, single-cell algae floating.
- Caused by excess nutrients, light, seasonal changed, or heat disturbance.
- Check filtration, fish load, add **beneficial bacteria**, increase plant or shade, consider UV Clarifier for persistent green water.

String Algae

- Long algae attached to rock or plants.
- Caused by excess nutrients and sun.
- Physically remove what you can, reduce nutrients, increase plants or shade and use appropriate algae treatment when needed.

Cloudy / Murky Water

- Suspended debris, disturbed sediment, new pond cycling or biological imbalance.
- Check filtration, beneficial bacteria and water parameters.
- Excess leaves / organic matter can also release tannins and dye the water brown.

There's foam on the water.

- Foam can be caused by protein, organic waste, or certain plants.
- Some foam after a heavy rain or fish spawn is normal, but persistent foam should be investigated.
- Remove excess debris, check filtration and review feeding habits for fish load.

Different tools work different problems, here are some of the solutions we use and recommend:

• **Beneficial Bacteria**

- Supports the biological ecosystem and break down organic waste

• **Phosphate Binders**

- Helps remove excess phosphate and debris when contributing to algae growth

• **UV Clarifiers**

- Helps clear suspended algae by exposing water to UV as it passes.

• **Aeration**

- Increased oxygen levels to support fish and beneficial bacteria



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THE POND GUYS FIELD GUIDE | No. 02

Understanding your Pond Water

A guide to what your water is telling you.

Clear water starts with understanding what is below the surface. Your pond is a living ecosystem, and changes in its appearance can tell you a lot about what's happening.

Learn what you're seeing, what it may mean, and what to do next.



1

WHAT MAKES A HEALTHY POND?

A Pond is a living ecosystem that is a balanced environment, where everything works together.

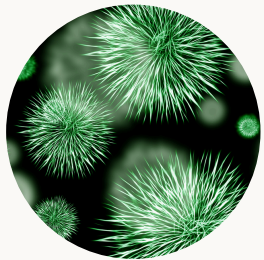
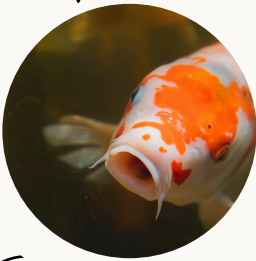


PLANTS

Use nutrients, provide shade and habitat, and help keep water clear.

FISH

Add life and beauty. Their waste becomes food for beneficial bacteria and plants. Eats excess Algae and bugs.



BENEFICIAL BACTERIA

Break down organic debris, convert waste into safer compounds.

CIRCULATION + FILTRATION

Move water, remove debris, provide surface area for beneficial bacteria, and oxygen for pond life.

*When adding large amount of tap/hose water, always add a **dechlorinator or detoxifier** to make the water safe for fish.

2

A HEALTHY POND ISN'T A STERILE POND

A little algae, changing water clarity and seasonal fluctuations are all apart of a living ecosystem. The goal isn't to eliminate every organism from your pond. **The goal is balance.**

MOST POND PROBLEMS COME BACK TO A FEW THINGS:

- Too many nutrients (fish waste/feeding)
- Too much sunlight
- Poor circulation
- Inadequate filtration
- Low Oxygen
- Seasonal Changes
- Heavy rain or runoff



YOUR FISH ARE TALKING TO:

Changes in fish behavior can sometimes be the first warning that something isn't right:

- **Gasping at the surface**
 - Can indicate low oxygen or poor water quality
- **Lethargic / Hiding / Behaviour Change**
 - Often related to water quality / stress

BEFORE REACHING FOR A TREATMENT:

Did you add fish? Feed more? Have a heavy rain? Lose circulation? Clean the filters? Experience very hot weather? Did a contractor spray something? *These questions can help decipher the issue.*

3

FISH & WATER BASICS

Healthy fish and clear water go hand in hand. Here are the essentials every pond owner should know.

IMPORTANT WATER PARAMETERS

pH	Ideal 6.8-8.5 How acidic or alkaline the water is. <i>Stability is important over number.</i>
KH (Hardness)	Ideal 110-200ppm Helps buffer pH and supports biological filtration.
Ammonia	0 ppm Produced by fish waste and decomposing organics.
Nitrite	0 ppm Produced during biological filtration.
Nitrate	0 ppm - <40 ppm Later stage in Nitrogen cycle. Can indicate excess nutrients
Phosphate	<0.1ppm A nutrient that can contribute to plant/algae growth in excess.
Temperature	Warmer water holds LESS oxygen , important in the summer. Oxygen is <u>essential</u> for fish and beneficial bacteria.

