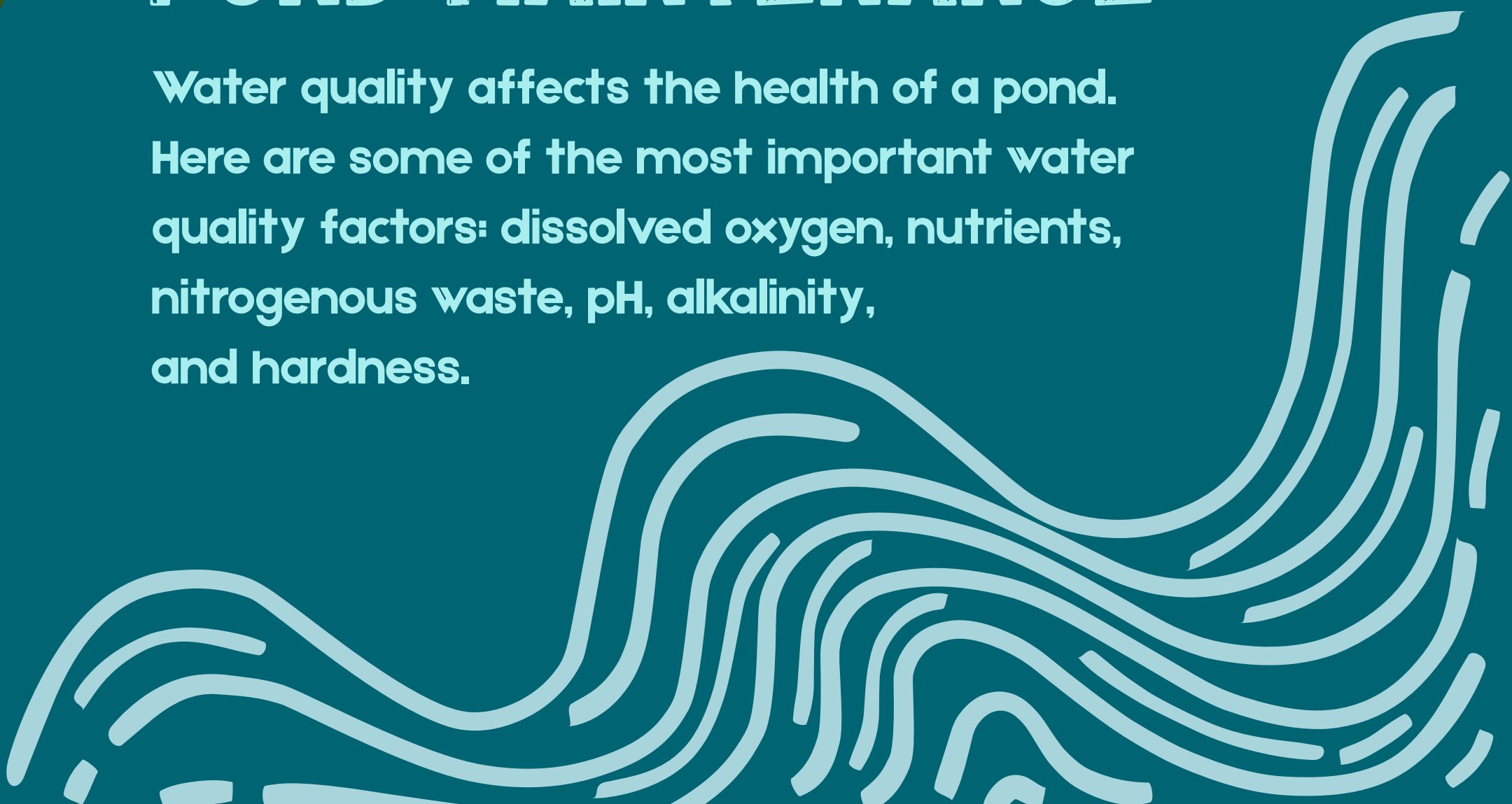




POND MAINTENANCE

Water quality affects the health of a pond. Here are some of the most important water quality factors: dissolved oxygen, nutrients, nitrogenous waste, pH, alkalinity, and hardness.



KEEPING THE BALANCE

Dissolved Oxygen (DO) - Determines a pond's ability to sustain life.

Nutrients - Phosphorus and nitrogen are important factors in algae and plant growth.

Nitrogenous Waste - Ammonia is the main form of nitrogen in fertilizers and animal waste and is converted to plant nutrients by nitrifying bacteria.

pH - Values between 6 and 9 are best for fish health and growth.

Hardness - Ponds with fish should have a water hardness above 50 ppm.

Alkalinity - 50 to 200 ppm is a good range but 100 ppm is the best.



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HOW THEY INTERACT

- Higher water temperature lowers oxygen solubility.
- Excess nutrients can lead to overgrowth of vegetation.
- Die-off of excess vegetation can lead to decomposers depleting oxygen.
- High ammonia levels may be lethal to fish.
- A low pH increases the toxicity of aluminum and copper.
- Higher alkalinity increases the stability of pH.
- Water hardness plays an important role in fish growth.



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