



a closer look at POND pH

Water pH can be thought of as a measure of its relative alkalinity or acidity. A pH reading of 7.0 is considered neutral, with readings higher than 7.0 (up to 14) being alkaline, and readings lower than 7.0, acidic.

How do I know if my pH is correct?

Test your water. [Test kits](#) produce accurate readings of pH, hardness, and other parameters in a single test strip. The [pHep 4 Tester](#) displays results on an LED readout within seconds.

What is the ideal pH for koi?

7.5 is ideal, though most koi can thrive at a stable pH level between 6.8-8.2 - as long as the pH stays consistent!

How does pH affect fish health?

Likened pH to the way the water "feels" against their skin. Low pH is highly acidic, burning their skin; high pH is highly alkaline, chapping their skin. When pH varies more than .5 in a 24-hour period, the water experiences what is called a pH swing. Swings are very dangerous, as they interfere with basic body functions, leaving fish vulnerable to stress and disease.

Since the pH scale is logarithmic, a small change in pH means a drastic change in alkalinity or acidity. For example, a pH of 8 is 10 times more alkaline than a pH of 7, and a pH of 9 is 100 times more alkaline than a pH of 7.

What causes pH swings?

The most common cause of pH swings is the normal CO₂ exchange cycle of plants between day and night. Typically, pH will rise through the day as plants give off oxygen, then decrease at night when plants produce CO₂. Acid rain, runoff, fish excrement, dead vegetation, and limestone can also cause pH swings.

How can I adjust pH and keep it stable?

Test your water hardness before trying to make pH adjustments. If a pH decreaser is added to hard water, it will decrease pH initially, but the pH may swing back dangerously in 24 hours because of the buffering capacity of hard water.

- **For hard water**, you can either find a source of softer water and do a water change, or use Pond Acid Buffer, which reduces both pH and removes some of the buffering capacity to reduce water hardness.
- **If your water is soft (and your pH low)**, [Pond pH Buffer](#) raises pH while adding buffers to increase water hardness, allowing pH to remain stable once adjusted.
- **In medium-to-soft water**, a pH-adjusting product will work just fine. pH Increaser is recommended if acid rain or runoff is a problem, and pH Decreaser lowers pH if limestone-based rocks are adding minerals to your pond.



By educating yourself in the basics of water chemistry and managing your pH, you can help prevent disease and improve the health of your pond fish.