

Desirable water quality parameters for catfish ponds

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Dissolved Oxygen = greater than 3 mg/L, preferably 5 mg/L, or more.

Total Ammonia Nitrogen – In addition to water temperature and pH, is needed to determine un-ionized ammonia (NH₃) concentration.

Un-ionized Ammonia (NH₃) = Chronic or long term problems 0.06 mg/L
Acute or short term mortality 0.6 mg/L

pH = 6.5-9.0 Affects NH₃ concentrations
Each one unit of change in pH is a factor of 10X!

Chloride = 30 mg/L or more, obtained from rock salt

Nitrite (NO₂) = Concentration should be less than 10 times that of chlorides in water.
Example: Nitrite is 0.5 mg/L, chlorides should be at least 5 mg/L.

Total alkalinity = 50 -150 mg/L the ability of the water to buffer changes in pH

Total hardness = 50-150 mg/L the amount of calcium and magnesium mineral content in the water

Carbon Dioxide (CO₂) = less than 10 mg/L, run aerators to drive off excessive CO₂

Water temperature:

Ideal water temperature for catfish = 85 F° (30 C°)

Water temperature critically influences dissolved oxygen and un-ionized ammonia concentrations!