Stocking & Fertilizing Sportfishing Ponds

A common myth associates fish pond capacity with total volume of water. Many pond owners have the idea that a deep pond is acceptable for having a lot of fish. The depth means very little concerning stocking rate because natural food is only produced within the top few feet of water. For this reason, fish capacity of a pond depends on surface area and is expressed as pounds of fish per surface acre. A healthy pond with a good algae bloom can sustain approximately 100-200 pounds of fish/acre in total live weight.

Another myth concerns water quality. pH of the water is not as important as water hardness for maintaining a good fish environment. If the water hardness is between 50 – 300 mg/l, this is sufficient to buffer variances in pH. I can perform a water hardness check on your pond water at the Extension office.

To produce the best fishing possible, use an appropriate ratio of largemouth bass, bream and channel catfish. The recommended stocking rate: 400 bluegill; 100 redear sunfish (shellcrackers); 50 largemouth bass and an optional 50 channel catfish per surface acre. Other species are difficult to manage and often become overcrowded and stunted and can cause your pond to become overstocked resulting in oxygen shortage during cloudy weather or after storm events.

Ponds less than one acre are difficult to manage for bass-bream fishing. In small ponds, stock channel catfish only, at a rate equivalent to 500 fish per acre.

Stock catfish and bream in the fall, bass in the spring. The reason for this is the bream and catfish fingerlings will be eaten by the bass if not allowed to get a “head start”.

Fertilization increases a pond’s carrying capacity by 100-150 pounds. Fertilization is done to create an algae “bloom”. This is what gives the water a green color which is desirable for three reasons: 1) darkens the water so sunlight can’t penetrate to the bottom and promote weed growth; 2) it provides food for the fish; 3) it puts oxygen in the water.

Begin fertilization when water temperature reaches 60 degrees, usually in mid-March. Apply 40 pounds of 20-20-5 granular fertilizer per acre OR 2.5 gallons/A of “pop-up” liquid fertilizer, 10-34-0. The liquid fertilizer can be diluted w/ water and poured out in the prop wash of a small boat or simply thrown into the water in several places along the bank. The granular fertilizer bag should be placed on the bottom of the pond on the SW side so it is covered by only 6-8” of water. Cut and fold back the paper on top so the wave ‘action’ will dissolve it and spread it in the pond. After 2 weeks, check the color of the water by placing a shiny object (tin can lid on the end of a stick) under the water to a depth of 18”. If it doesn’t disappear, fertilize again. Repeat this process until the shiny object disappears at 18”.

*****An interesting point should be heeded. If you fertilize your pond, you have created an improved, but natural, environment for your fish. The pounds of fish will increase. If you feed your fish, you are creating an artificially enhanced environment and the pounds of fish will increase.

CAUTION: Once you have fertilized and/or have fed your fish for a while, you have to continue these practices for the increased population because if you stop, you risk a fish kill as the population lowers back to the natural pond carrying capacity.

While our UGA publication, “Management of Georgia Sportfishing Ponds” is being revised, click on this site for very useful information from the Alabama Extension.

http://www.aces.edu/pubs/docs/A/ANR-0577/

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