

With Habitat, More Is Always Better

By Keith Thomas, Fisheries Biologist



When it comes to adding structure to your pond or lake, more is always better. The amount of material, time and money spent is up to you.

But what should the end product look like? If improving fishing opportunities in your rural pond is the goal, you probably aren't too concerned with the ponds' overall appearance. In this case, the woolier the better! But a clean, well-manicured pond - one without trees, shrubs, weeds or moss sticking out of the water - may be the goal in more urban areas. These differing goals create a dilemma between anglers and non-anglers living in a subdivided neighborhood. Regardless of your location, a healthy fish pond is one that provides adequate habitat.

Habitat is defined as an animal's living requirements and includes water, food, space and shelter. To start, let's describe each component as it pertains to your pond.

Water, I mean good water, is



Shelter, or structure, is an important habitat component for fishing ponds or lakes.

essential to growing a healthy pond. Muddy or stained water really hurts your pond's fish production. Because these murky ponds don't allow sunlight to penetrate the water column and substrate, they won't be able to support a lot of food items. This affects all of your primary producers. Suitable pond depths and a clean water source will support your pond's food web. Clean water from run-off, a spring, or creek will help your pond flourish. Street runoff just won't do!

Food is the next important habitat consideration. A healthy, productive pond will supply multiple prey items ranging from primary producers, like phytoplankton, to aquatic insects, to juvenile fish and finally baitfish like minnows.

By making sure your pond has enough natural and artificial cover, the food issue should take care of itself. Adding more minnows or crayfish to your pond is fine, but realize you may just be feeding your big fish a snack!

Space simply refers to how much room the fish have to roam around and live. The more surface acreage your pond or lake has, the more feeding zones, spawning grounds and loafing areas the fish should have. The more space your fish have the larger they can grow, assuming the other habitat components are present. Overstocking a pond creates competition for space, which can stress the fish and make them more susceptible to disease or parasites. The basic

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formula for growing healthy fish in a pond or lake is 20 pounds of bass per acre and 100 pounds of sunfish (perch) per acre. Catfish won't factor in to this formula unless they are your main predator species. If they are, substitute the number of bass in the formula with catfish.

Shelter means cover. I always tell landowners wanting to add shelter to their pond that "anything is better than nothing." Artificial structures like tire reefs, wooden pallets, broken concrete, sections of large diameter pipe and PVC trees are all good substitutes. You can construct vour own artificial brush piles at low cost. Many home improvement centers or utility companies will sell you scrap or outdated materials at lower prices. There are also several "crappie trees" available on the market if you don't feel like fabricating your own. Artificial habitat is relatively cheap and the materials usually last forever. One important thing to remember - it's a whole lot easier to add structure to a pond when it is low or empty rather than full.

Natural items like cut trees, aquatic plants, gravel piles and dirt mounds all work well for boosting your pond's shelter. They are a little more laborinvolved but create plenty of nooks and crannies for aquatic



Artificial structures like PVC trees provide great fish habitat.

organisms. Cedar trees are usually plentiful in Oklahoma and work well to create hiding spots for juvenile fish as well as edges for large predators. Aquatic plants are another consideration, if you can find the right species and have a source. Longleaf pondweed, sago pondweed, hornwort and water star-grass are some of the better veggies. In general, allow 20 percent coverage of aquatic plants for

your pond. A word of caution, I would not add any plants to a pond 1 acre in size or smaller. It could easily turn into a jungle.

Now the fun begins! Good luck and remember to bend at the knees. Try to recruit all the helpers that you can – the work will go faster and their payment might just be a chance to wet a line.