I've watched crappies stalk their prey, inch by inch, creeping slowly closer until they inhale their victims in a lightning-quick gulp too fast to see. I've seen a large-mouth bass strike a minnow from the side, then turn its head before swallowing it. And I know at least one of the channel catfish's favorite foods.

For several years, I've brought gamefish home from local waters and kept them in a half dozen aquariums in my basement. This hobby is fun, relaxing, and gives me a better sense of how the fish I pursue function.

**Collecting**

Check with your local fisheries agency to determine the species and number of fish you wish to collect. Start with juvenile or stunted specimens, for smaller fish won't outgrow a tank so quickly. I usually collect my fish by seining the weedline of lakes or ponds, or in deep holes of shallow creeks. Dip nets and baited minnow traps also work.

**The Basics**

Longer, narrower tanks are better than stout, high tanks of equal volume, as narrower tanks provide a greater surface area for oxygen absorption. Don't overstock your tanks. A guideline is one inch of fish per gallon of water.

Add fish gradually, to allow denitrifying bacteria to become established. These beneficial organisms purify the water by consuming ammonia wastes from fish. Add too many fish before these bacteria have a chance to build up and fish may become poisoned from their own waste.

Most gamefish prefer cooler temperatures for at least part of the year, so a cool basement is ideal. Water weighs 8.3 pounds a gallon, so a 100-gallon tank, weighing nearly half a ton, is safer on a concrete basement floor.

Use a fluorescent light on the tank to encourage algae growth. To remove excessive algae from the glass, use a razor blade or a sponge attached to a plastic handle. I use a pair of coated magnets, which attract through opposite sides of the glass.

Bigger makes a better tank. If your budget allows, start with at least 65 gallons. This volume of water modifies temperature swings, which can weaken fish and lead to disease. Bigger tanks also allow fish to spread out and establish territories, preventing scrappy gamefish from killing each other.

A small tank works if you start with fingerling fish. Prevent temperature swings with a heater. Set the control dial to allow only a two or three degree difference between the daytime high and nighttime low.

Use one-half to three-fourths of a pound of aquarium gravel per gallon of water. Rinse the gravel before adding it to the aquarium, agitating it to stir up as much dust as possible, until the water runs clear. I like natural scenes in my tanks, so purple gravel is out. Most native species change color to match their surroundings, so dark colors are best. Fish kept in light surroundings tend to appear pale.

**Filters**

Larger fish require a larger and more powerful filtration system. For a small tank with few fish, a corner box filter works well. The filter fiber traps fish droppings and other waste particles. Carbon removes chemical wastes.

Many aquarists opt for an undergravel filter. A power-head circulates water through the gravel, promoting production of denitrifying bacteria that colonize the gravel.

A power filter hangs over the rear of the tank, drawing water up through a plastic tube, through filter fiber and carbon, then back into a tank.
The most expensive option is a canister filter, free standing outside the tank and circulating water through various filter media.

Vacuum the gravel with a siphon once a week to remove waste particles. Siphoning also replaces water and removes dissolved wastes that filtration doesn’t eliminate.

Ideally, change 10-20% of the water each week, but avoid major water changes since pH and the hardness of tap water may vary, and chemical shifts can stress fish. When changing water, adjust the temperature of the water to match the temperature in the tank. If your tap water is chlorinated, add a dechlorinating solution to the new water.

**Esthetics**

Gamefish look best in natural settings, so I collect my tank decorations from local waters. Old pieces of water-logged driftwood work well, as do rocks of sandstone, granite, quartz, and slate. Avoid limestone, marble, and gypsum, as they can raise the pH too high. Also avoid rocks with shiny flecks, sometimes indicating toxic metals that can leach into the water.

Natural objects may harbor parasites and disease organisms, however. To eliminate them, soak driftwood overnight in a tub of hot water to which a half container or so of table salt has been added. Scrub rocks with a sharp-bristle brush and a sprinkling of table salt.

Plants enhance an aquarium, not only as decorations but also to remove fish wastes and to add oxygen. With the exception of *Anacharis*, most plants sold in pet shops die in colder water. Whether you buy or collect plants, disinfect them beforehand by soaking them in a solution of a half teaspoon of alum to a gallon of water. Many varieties of natural-looking plastic plants are available in pet shops.

**Observations**

**Largemouth bass** Underwater photographer Garold Sneegas says hungry largemouths sometimes behave like greedy people. With stomachs too full to swallow, bass continue to catch shiners, holding them with heads and tails sticking out. Though the shiners escape when the bass opens its mouth, the chase continues.

Both largemouths and smallmouths seem to like well-lit tanks and aren’t a bit shy once they become acclimated to aquarium life. Only bass of the same size should be kept together, however, because they eat smaller tankmates.

Keep tank lights on for only about eight hours a day. In response to longer light periods, male bass and sunfish go into spawning mode, excavating nests in the gravel and becoming territorial. Spawning male bass and sunfish eventually harass their tank mates to death.

**Northern pike** Pike are shy by nature, preferring to hide behind rock or weed cover before ambushing their prey. They attack only from a short distance—about four inches.

Pike should be kept only with fish slightly larger than themselves, as they try to eat fish of nearly equal size. They may swim around for a day or two with a tail protruding while the victim’s body is digested. In fact, pike in hatcheries sometimes “chain up” if not fed adequately; one fish tries to swallow another, and still another tries to swallow the first two, and so on, until the sixth or seventh fish sinks to the bottom, unable to move.

**Crappies** Crappies are shy fish, preferring cover. The crappies I’ve kept have been careful, patient hunters. They slowly inch toward their prey, barely moving until they’re within a striking distance of two or three inches. The crappie’s slightly elongated, paper-thin mouth allows it to inhale prey in a gulp too quick to see.

Crappies are best kept in a tank by themselves, as more aggressive species like sunfish and bass bully them and outcompete them for food. Anyone interested in keeping crappies will need a constant supply of live minnows. I’ve had no success getting them to take pellets, although they did take strips of flounder when they were hungry.

**Catfish** I’ve kept brown bullheads and channel cats and have been intrigued watching them track their food. A catfish hidden in a remote corner quickly emerges when food is offered. Being slower, cats are outcompeted by bass and sunfish for food. Don’t keep cats with smaller fish, however. Cats wait until dark to eat sleeping fish that have eluded them during the day.

Catfish don’t refuse many foods and can be kept on a diet of commercial pellets. They eagerly accept earthworms, live or frozen minnows, and mealworms. Their all-time favorite food, though, seems to be brine shrimp.

**Trout** Keeping trout is harder because they require well-oxygenated cold water. The would-be trout keeper needs a chiller to cool the water to the low to mid-50s.

I’ve always been intrigued by that mysterious world at the other end of my fishing line. My aquariums bring part of that world up close, where I can see what others only imagine.

*Excerpted from an article that originally appeared in the February 1997 issue of In-Fisherman.*