STOCKING YOUR POND WITH FISH

Unless stocking is for corrective purposes or is part of a recommended stocking program, fish should not be added to a pond that already has fish in it without the advice of a fisheries manager.

According to Maryland State Law, it is unlawful to import live fish not indigenous to waters of the State without first obtaining a permit from the Department of Natural Resources. You may obtain a permit from the Fisheries Service, B-2, 580 Taylor Avenue, Annapolis, MD 21401, or call them at 410-260-8320. The only species you may stock in Maryland without a permit are bluegill sunfish, channel catfish, golden shiner and fathead minnows. It is undesirable to stock a pond with fish found in another pond, lake or stream. Disease and weeds such as hydrilla can be introduced with the transfer of the fish.

When stocking fish in a pond, the temperature of the water in the transportation tank and temperature of the receiving water should be compared. If the temperatures differ by more than 3° to 4°F (2°C), the fish need to be "tempered" or allowed to acclimate slowly to the pond temperature. This can be accomplished by slowly adding small amounts of pond water to the transportation tank, until the temperature in the container equals the pond temperature. Alternatively, if the transportation tank is small (e.g. a plastic bag or bags), the container can be placed unopened in the pond, and allowed to float there until the temperature inside the container equals the pond temperature. This latter method should not be used if there is a difference of 18°F (10°C) or more between the two waters, because thermal equilibrium will be reached quickly. In any case, fish should not be exposed to a temperature change which occurs faster than 9°F (5°C) per hour, or thermal shock and death may result.

State Programs

The Department of Natural Resources Fisheries Service will stock a landowners pond with a balance of fish species and numbers to provide for sportfishing. This service costs \$10.00 per species and requires that the landowner allow reasonable public access for fishing. They will visit a landowners pond or offer telephone assistance and recommend species and numbers of fish to achieve a balanced population. This service is free to all landowners.

Stocking Combinations and Harvesting Rates

The combination of largemouth bass-bluegill sunfish is the most popular choice for stocking in warmwater ponds. Other fish which may also be stocked in various combinations include fathead minnows, golden shiners and channel catfish.

It is very important to stock the appropriate size, number, and species of fish in order to create a good sport fishing pond. Indiscriminate, unplanned stockings usually produce unbalanced fish populations consisting of a few large predator fish and an overabundance of stunted forage fish.

There is a high potential for overpopulation of the pond by bluegill. Overharvesting of bass is usually the primary cause of this problem, although underharvesting of bluegill can also contribute to overpopulation. Pond owners should be advised that proper management of the bass harvest is the key to maintaining a well-balanced pond that will provide many years of good fishing.

Stocking rates

100 fingerling bass and 500 fingerling bluegills per surface acre. For best results, stock bass in the spring followed by bluegill in the fall. The same results may be achieved by stocking 100 two year

old bass (over six inches long) at the same time as stocking 500 fingerling bluegill (less than two inches long).

If stocking adult fish only, use at least six adult bass (over 10 inches long) and 10-12 adult bluegills (over five inches long) per surface acre, or per pond for ponds less than one acre in size.

Harvesting rates

Both species should be fished on a catch-and-return basis until they have reached adult size and have begun to reproduce. Harvest 20-30 % of the adult bass per year in order to maintain a stable bass-bluegill balance. If bass are not harvested, the pond will be bass-crowded.

If a 1-acre pond of average fertility is bass-crowded (most bass caught are 10 to 11 inches long, and most bluegill caught are at least six inches long), 13 to 20 of the bass can be harvested per acre per year without upsetting the bass-bluegill ratio.

If the same pond is bluegill crowded, very few bass will be caught, but those that are will be "lunkers" at 2.5 to 3.5 pounds each. Bluegill will be abundant, but small (mostly 3 to 5 inches long). A 20 to 30 percent harvest limit for bass would mean that only two to three 2.5 pound bass could be removed without further shifting the bass-bluegill ratio in favor of bluegill.

On a pond with light to moderate fishing pressure, the quota on bluegill harvest is so high that it is safe to say that all bluegill fished from the pond should be either eaten or used for fertilizer. At any rate, they should not be thrown back into the pond. If the average bluegill caught is 5 to 6 inches long and weighs 4 ounces, then 120 to 180 bluegill can be eaten in a year. So unless a pond is very heavily fished, there is little likelihood of running low on bluegill.

Fish Not Recommended for Stocking

Brown bullheads reproduce readily in most small ponds and have a tendency to overpopulate a pond. Large populations can keep a pond muddy because they tend to stir up the bottom when searching for food.

<u>Crappie</u> reproduce very rapidly and quickly overpopulate a pond. The result is a pond full of many stunted fish. Crappies spawn earlier in the spring than largemouth bass and prey on bass fry.

Yellow perch are very prolific and will reproduce in almost any body of water and quickly overpopulate a pond. They also reproduce much earlier than largemouth bass and will prey on bass fry.

<u>Carp</u> are very prolific and will reproduce in almost any body of water. They may interfere with sportfish spawning. However, in some cases they may be used for algae control.

Supplemental Feeding

There should be enough natural food in a recreational fish pond to support the growth and reproduction of fish when they are stocked at the recommended rates. Artificial feeding is not recommended because excessive amounts of uneaten feed may cause water quality problems when the feed decomposes.