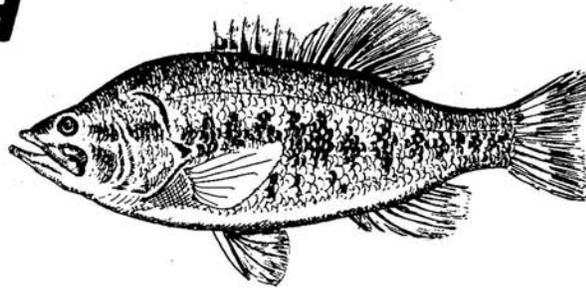


Habitat management for

**LARGEMOUTH
BASS**

In the State of Oregon

The largemouth bass (*Microterus salmoides*) is among the most popular of warm water game fishes. Largemouth bass are found in several locations throughout the state but appear to do best in the Willamette Valley and in coastal lakes and ponds where temperatures are more constant. Bass regularly reach two pounds in size in Oregon with five pound bass being fairly common. The usual size in ponds is 1/4 pound and larger. Largemouth bass spawn once in the spring (April or May) after the water temperature exceeds 60°F. Bass spawning is frequently unsuccessful in Oregon's cooler waters and this has complicated warm water fishpond management.

HABITAT NEEDS

Water. The largemouth bass does best in non-turbid, highly fertile, non-flowing waters properly stocked with forage fish. For best growth and activity, water temperatures above 80°F are needed. It has been reported that bass become very inactive in waters having temperatures below 50°F. Digestion of food is slow at water temperatures below 65°F.

Largemouth bass normally spawn when the daytime water temperature is between 60°F and 68°F. Waters having a salinity over 5,000 ppm are unsuitable, and waters with a pH between 6.0 and 9.5 are best.

Food. The largemouth bass eats a wide variety of food consisting mainly of small fish, insects, and larvae. The bass also eats crayfish, tadpoles, worms, frogs, salamanders, and lamprey ammocoetes. Largemouth bass do not accept artificial foods; therefore, production is limited to the natural environment which can be improved through use of inorganic fertilizers.

MANAGEMENT

Stocking. In ponds of average natural fertility, stock 50 bass and 500 bluegills per surface acre. Ponds that are maintained at a high rate of fertility can be stocked with 100 - 150 bass and 1,000 to 1,500

bluegills per surface acre. It is a serious mistake to stock at the higher rate if you do not fertilize the pond adequately year after year. The annual yield by fishing can be predicted safely as follows:

100 to 200 pounds per acre from the fertile pond.

15 to 35 pounds per acre from the natural waters.

15 to 20 pounds per acre if bass are stocked without the bluegills to feed them.

Bluegill fingerlings are stocked as early as possible in the fall, usually in August through October. Bass fingerlings about two inches long are stocked the following June.

This stocking rate assumes the bass and bluegills will spawn the first spring after stocking. Evidence in Oregon indicates that bass will not spawn until two to three years of age. The bluegills usually spawn one or more times a year, resulting in an overpopulation of bluegills too large for bass to eat and too small for anglers to use. In some instances, stocking 10 mature, wild-angler caught bass in the pond in the spring before the bass have spawned so that spawning will take place in the pond, has sometimes proven successful in establishing bass of the proper age group.

Another complication is that some years mature bass do not spawn successfully in Oregon. This allows the uncontrolled forage species to overpopulate the pond with unusable small fish.

Fishing. Fishing should not be started in stocked ponds until the bass have spawned. It is possible to overfish the bass population in a pond. Fishing can be used as a tool to obtain desired species and size of fish. If large bluegills are wanted, do not catch many of the bass. If a few large bass is your goal, catch most of the usable sized bass.

Additional reference: WARM WATER FISH PONDS; Farmers Bulletin
No. 2250; U.S. Department of Agriculture

Technical Note No. 20
USDA - Soil Conservation Service

November 1979
BIOLOGY B.