

MISSOURI DEPARTMENT OF CONSERVATION

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May 23, 2000

Mr. Jeff Strand
Lake St. Louis, MO.

President, Lake St. Louis Angler's

Dear Mr. Strand:

On May 15, we completed an electrofishing survey of 550-acre Lake St. Louis in St. Charles County. The purpose of the survey was to assess the status of the fish populations and overall lake conditions. Information obtained from the survey was used to develop specific recommendations concerning the lake. I have enclosed the results of the recent survey as well as management recommendations to meet the goals for the lake's fishery. Thank you for your interest in fisheries management.

Sincerely,
Todd Gemeinhardt
Fisheries Management Biologist

LAKE SURVEY RESULTS AND RECOMMENDATIONS

Missouri Department of Conservation

Lake Conditions and Fish Population Characteristics: Lake St. Louis

- 1) Moderate numbers of largemouth bass (73/hour) were taken during the survey. Bass ranged in size from 4.8 to 20.4 inches, with good numbers of fish larger than 15 inches. All bass were in excellent condition.
- 2) High numbers of bluegill (397/hour) were taken during the survey, ranging in size from 2.5 to 7.3 inches.
- 3) Moderate numbers of white crappie (53/hour) were collected, ranging in size from 5.5 to 9.3 inches. Most of the crappie were below 7.5 inches, suggesting that the population possesses high numbers of stunted individuals.
- 4) Six channel catfish were taken in the survey, ranging in size from 11.6 to 23.3 inches. Our electrofishing gear is generally not effective in sampling these fish as well as flathead catfish and hybrid striped bass. We did take three flatheads (9.8, 12.7 and 14.5 inches) and one hybrid striped bass (10.6 inches), however.
- 5) High numbers of gizzard shad, green sunfish and carp were also taken during our sampling.
- 6) Several redhorse and longear sunfish were also taken during the survey.
- (7) The water had a visibility of 1 foot (likely reduced by recent rains), and a surface temperature of 70 degrees F.

Management Recommendations

Goal: Enhance the bass fishery of Lake St. Louis, while providing additional angling opportunities for other sportfish such as hybrid striped bass and flathead catfish.

Largemouth Bass

Bass population looks good. You could establish a 15-inch minimum length limit. If you would prefer a more restrictive limit, you could establish an 18-inch minimum length limit. Establishing a restrictive size limit will allow fish to grow to trophy size and allow harvest to occur at a level which will not harm the population.

Bluegill

Continue with current management. Harvest bluegill as you like, up to 20 fish/day per person.

Crappie

I recommend all crappie caught to be kept, up to 30 a day, regardless of size. Crappie often become "stunted" in small impoundments providing minimal angling opportunities.

Catfish

Harvest channel catfish as you like up to 4 fish in the aggregate (channel, blue, and flathead catfish combined) per day. Restock channel catfish periodically on a put-andtake basis to replace those harvested plus 10% for natural mortality. Stock 8 inch or larger fish to avoid predation by largemouth bass. Establish a 24-inch minimum length limit on flathead catfish. This will allow the flatheads to reach a trophy size, while still providing a limited harvest.

Hybrid Striped Bass

Establish a 20-inch minimum length limit and a daily limit of 2. By protecting the hybrid striped bass until they are at least 20 inches they will grow to a desirable size and provide a unique angling opportunity. This size restriction, coupled with a daily limit of two should protect the fishery, while still providing an opportunity for harvest. Based upon the one individual that I collected, it appears that the hybrids are rather slow growing. I would recommend that you delay stocking any more hybrid striped bass, until growth improves.

Other species

Remove all green sunfish, carp and bullhead as caught up to the statewide daily limit.

Fish Cover

The lake is in need of increased fish habitat. Aquatic plants are important in providing habitat for fish-food organisms such as insects and cover for small bluegill and largemouth bass. We recommend 15-20% of a lake's area contain aquatic plants for optimum fish production. I recommend that you continue to try and establish aquatic vegetation as Mike Reed prescribed. I would be happy to continue to work with you on this. While sampling, I noticed a cove on the south side of the lake contained several stands of water willow. This would be excellent stock for transplanting to other areas of the lake.

In addition, I recommend you place brush fish structures in the lake, in both shallow water (2-4 feet deep) as well as some in deeper water (12 feet deep). In the deeper water, weight the trees at the trunk so they stand up when sunk. Place these structures in groups of 5-10 trees.