REPLY TO: St. Louis Regional Office

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St. Charles, MO 63304

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June 27, 2005

Steve Probst 100 Cognac Ct. Lake St. Louis, MO 63367

Dear Mr. Probst:

On May 25, 2005, the Missouri Department of Conservation completed an electrofishing survey of the 75 acre impoundment, Lake St. Louise, in St. Charles County. The purpose of the survey was to assess the status of fish populations and overall lake conditions. I have enclosed the results of the survey as well as management recommendations. Thank you for your interest in fisheries management.

Sincerely,

Sarah Oakes

Fisheries Management Biologist

Sarah Oakes

Missouri Department of Conservation

LAKE SURVEY RESULTS AND RECOMMENDATIONS

Missouri Department of Conservation

Lake Conditions and Fish Population Characteristics: Lake St. Louise

- 1) A moderately high number of largemouth bass (99/hour) was taken during the survey. Bass ranged in size from 3.3 to 18.8 inches.
- 2) Moderate numbers of bluegill (125/hour) were taken during the survey, ranging in size from 1.5 to 6.4 inches.
- 3) A low number of crappie (21/hour) was collected, ranging in size from 6.0 to 8.9 inches. We captured both white and black crappie.
- 4) No channel catfish were taken in the survey. One flathead catfish was captured, measuring 14.8 inches. Our electrofishing gear is generally not effective for sampling catfish.
- 5) One hybrid striped bass was collected. It measured 24.7 inches.
- 6) Eleven green sunfish were collected between 3.3 and 7.1 inches.
- 7) The water had a visibility of 6 feet and a surface temperature of 76 degrees F.

Management Recommendations

Largemouth Bass

The largemouth bass population has improved since the electrofishing sample done in 1999. Our catch rate was lower. PSD (percentage of stock size fish which are over 12 inches) increased from 14.6 to 32.6. RSD15 (percentage of stock size fish which are over 15 inches) increased from 4.2 to 8.7. However, there is definitely still room for improvement. Continue to harvest small bass at a rate of 20 per acre per year. Work to improve habitat in the lake. Low fertility conditions in the Lake St. Louise make brushy and vegetative habitat even more critical for maximizing fish growth potential. Fish habitat is discussed below.

Bluegill

Bluegill populations seem poorer than in previous years. Our catch rate was almost double the catch rate of the 1999 sample, however only one fish was over 6 inches. This change may be in response to the improved bass population. Adding more vegetative and brushy habitat may help improve the bluegill population. Anglers may harvest 125 bluegill per acre per year.

<u>Crappie</u>

All crappie caught were small and in poor to fair condition. It is hard to make a recommendation based on a sample size of 17 fish, but the fish we collected indicate a stunted crappie population. I recommend harvesting all crappie caught regardless of size in order to thin out the population, decrease competition with bass and improve fishing opportunities.

<u>Catfish</u>

Harvest channel catfish as you like up to four fish in the aggregate (channel, blue, and flathead catfish combined) per day. Restock channel catfish periodically on a put-and-take basis to replace those harvested plus 10% for natural mortality. Stock 8 inch or larger fish to avoid predation by largemouth bass.

Other species

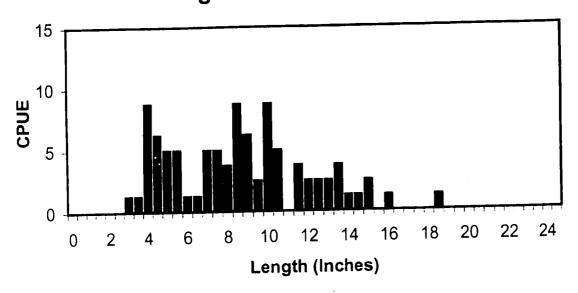
Remove all green sunfish, carp and bullhead as caught up to the statewide daily limit.

Fish Cover

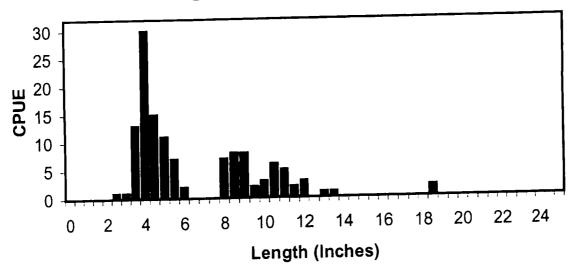
Pond habitat is generally divided into two categories: brushy cover and vegetative cover. Both are an excellent resource for your fish. They serve two major functions. First, they are the medium upon which a myriad of aquatic insects can live and reproduce, providing an abundant food source for the fish in your pond. Second, they provide cover for small fish. Without adequate cover, young fish are extremely vulnerable to predation. An unbalanced predator/prey relationship can result, making life hard on all the residents of your pond.

More brushy cover is needed in Lake St. Louise. Brush piles placed in 4 to 8 feet of water depth will be of most use to fish. It is also recommended that 15-20% of a lake's area contain aquatic plants for optimum fish production. I'm sure that 15% to 20% vegetation cover will never happen in Lake St. Louise because of grass carp and opposition from residents, but do what you can and call if I can be of assistance.

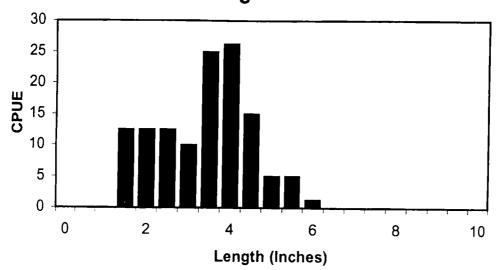
Lake St. Louise Largemouth Bass - 2005



Lake St. Louise Largemouth Bass - 1999



Lake St. Louise Bluegill - 2005



Lake St. Louise Bluegill - 1999

