



## 2012 Hungry Mother Lake Angler Survey

Hungry Mother Lake is a 108-acre reservoir located within Hungry Mother State Park in Smyth County, Virginia. The reservoir has a maximum depth of 32 feet and an average depth of 16 feet. Six miles of shoreline offer a variety of habitats ranging from gentle sloping clay banks to rock bluffs. The water is moderately clear, with visibility ranging from less than three feet in spring to over 10 feet during the summer.

In a typical year the lake is covered with ice from late December through January. Surface water temperatures climb into the 40's during February and the 50's during March. The lake stratifies into several different temperature layers during the summer. A maximum annual surface temperature of about 80 degrees is reached in July or August. During the months of July and August there is not enough dissolved oxygen to support fish life at depths greater than 15 feet. Fall turnover begins in September, and by early December the lake is the same temperature (40's) from top to bottom.

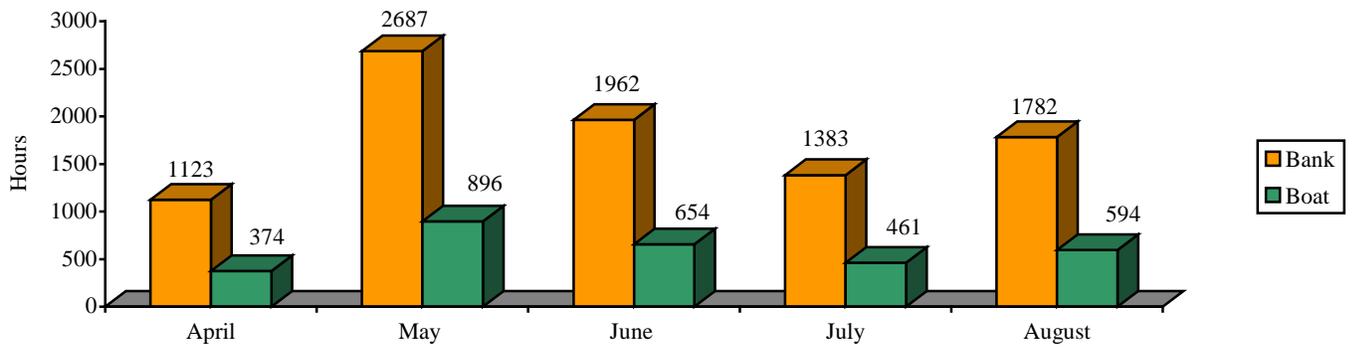
The lake supports self-sustaining populations of largemouth, smallmouth, spotted bass, bluegill, black crappie, rock bass, and common carp. Walleye, hybrid striped bass, musky and channel catfish populations are maintained with periodic fingerling stockings. Grass carp are occasionally stocked to control vegetation. Alewives provide the primary forage for most sport fish in the lake.

Hungry Mother Lake is managed to provide a diversity of sport fishing opportunities. Routine management activities include fish population sampling, fish habitat enhancement, angler surveys and sport fish stocking.

In April-August of 2012 a day time angler survey was conducted by the Division of State Parks staff. Technical assistance was provided by the Department of Game and Inland Fisheries. The roving creel survey was conducted by boat over the entire lake. The survey was conducted for 10 days per month on an AM or PM survey period chosen randomly. The survey was designed to encounter anglers fishing Hungry Mother and to solicit answers to a series of questions about their angling practices and preferences.

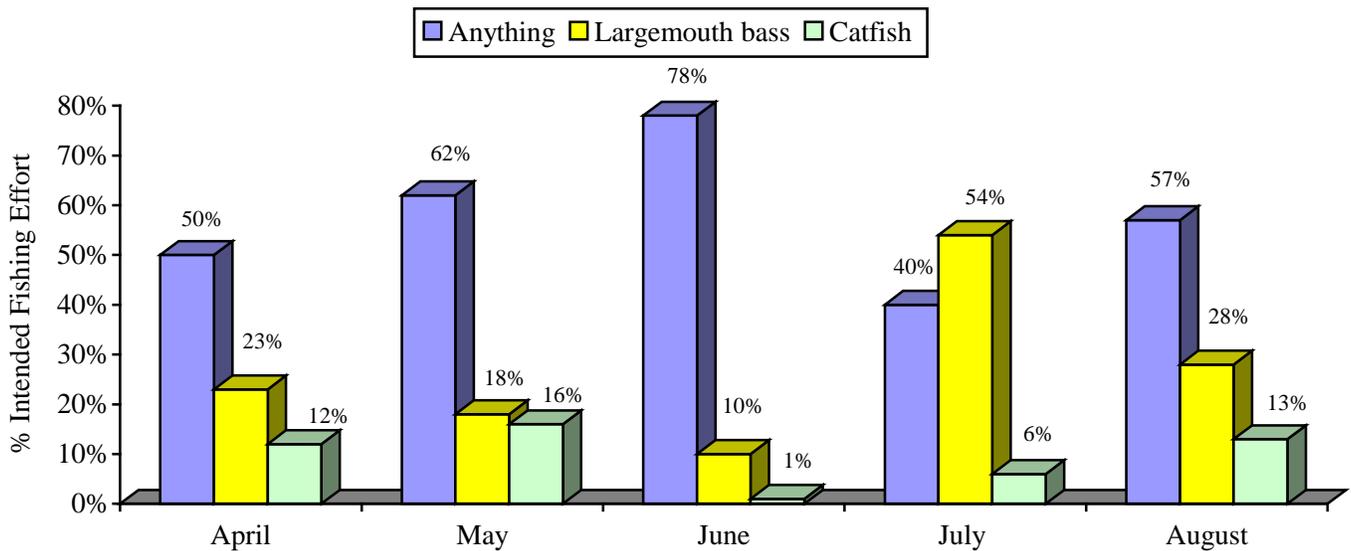
Each interview gathered information dealing with the number of people in the fishing party, whether anglers were bank fishing or using a boat and the start and estimated ending time of their fishing trip. Anglers were asked about expenses incurred for the fishing trip. Specifically they were asked how much they spent on fuel, food, bait and lodging. Anglers were questioned about the distance they traveled for their fishing trip, what species of fish they were targeting, and what they had caught, kept and released. What follows is the summary of results for the entire survey period.

The following chart displays the number of hours fished for bank and boat anglers for the survey period by month. It was estimated that anglers spent a total of 11,917 hours fishing Hungry Mother Lake during the April-August fishing season.



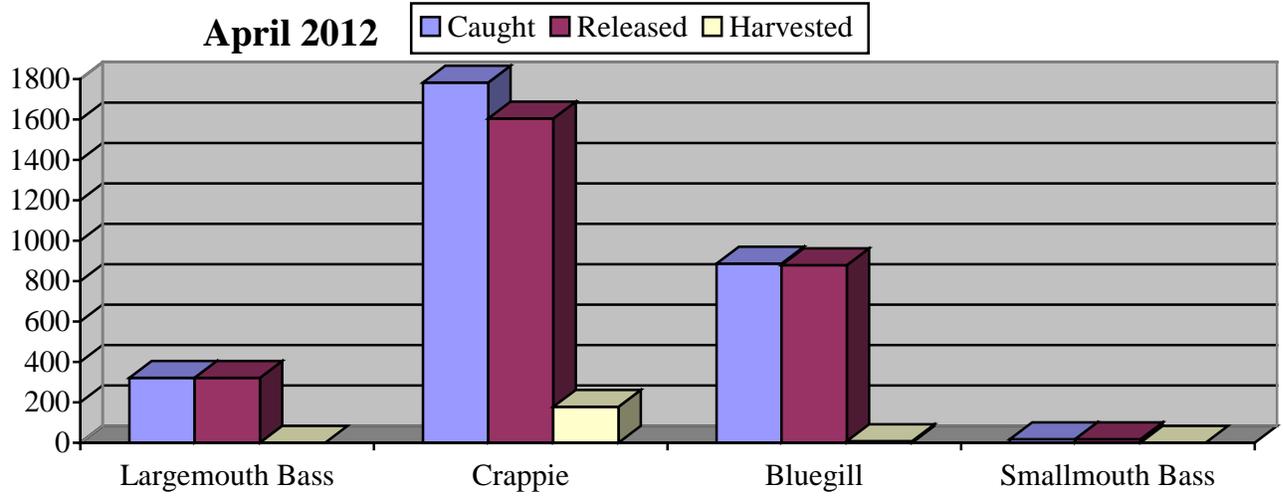
May, June, and August were the most active fishing months on Hungry Mother Lake. A total of 10,147 fishing trips were estimated for the April-August survey period.

Anglers were asked to identify the fish species they were targeting when surveyed. The following chart summarizes the percent of intended fishing effort for the three most popular responses (anything, largemouth bass, catfish) by month for the survey period. The majority of anglers did not target any specific species and were classified as “fishing for anything” during the survey. Intended fishing effort for “anything” response accounted for 60% of the total effort. Fishing effort for largemouth bass was 24.3% of the total and intended fishing effort for catfish was 10%.

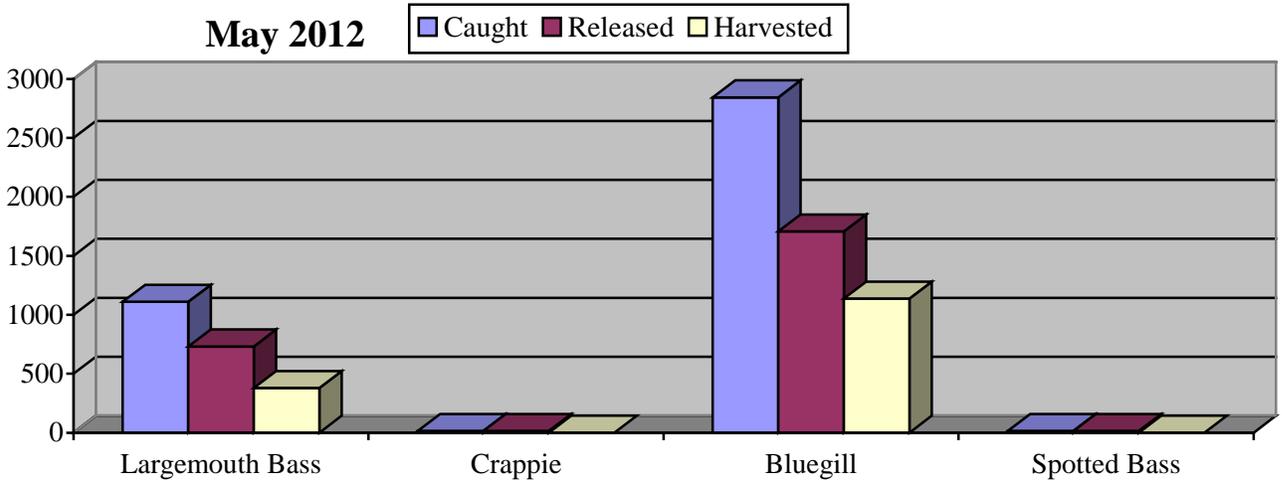


During the survey, anglers were questioned about the numbers and kinds of fish they caught and what they were harvesting. The series of charts that follows shows by month the estimated numbers and species of fish anglers caught, released, and harvested for the survey period. Species vary by month based on reported catches by anglers. It was estimated that over the entire survey period anglers harvested 19% of all catfish caught, 22% of all bluegill caught, 12% of all crappie caught, and 13% of all largemouth bass caught.

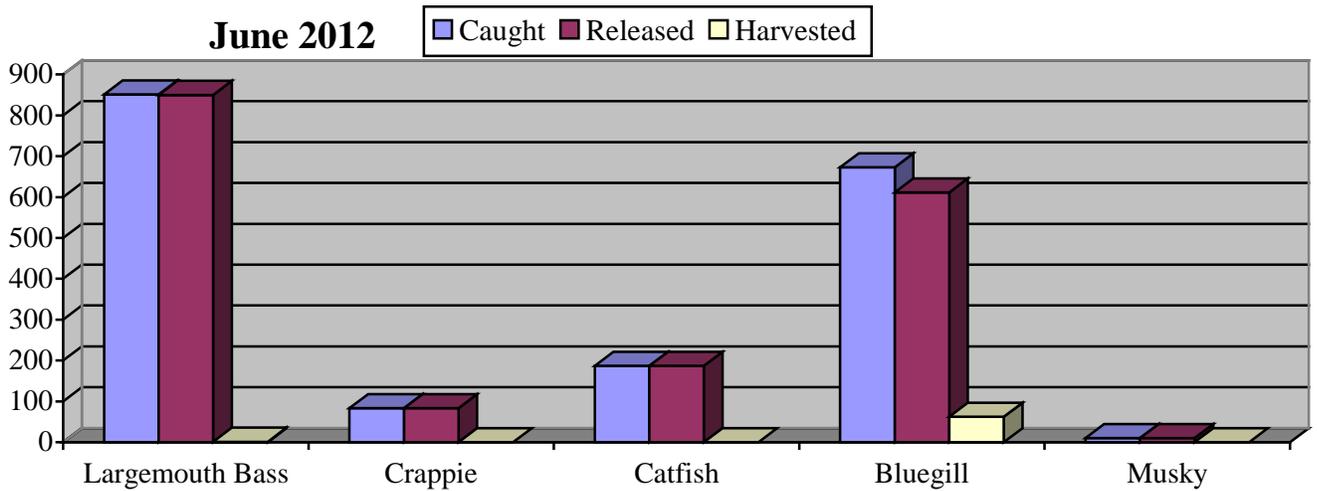
### April 2012

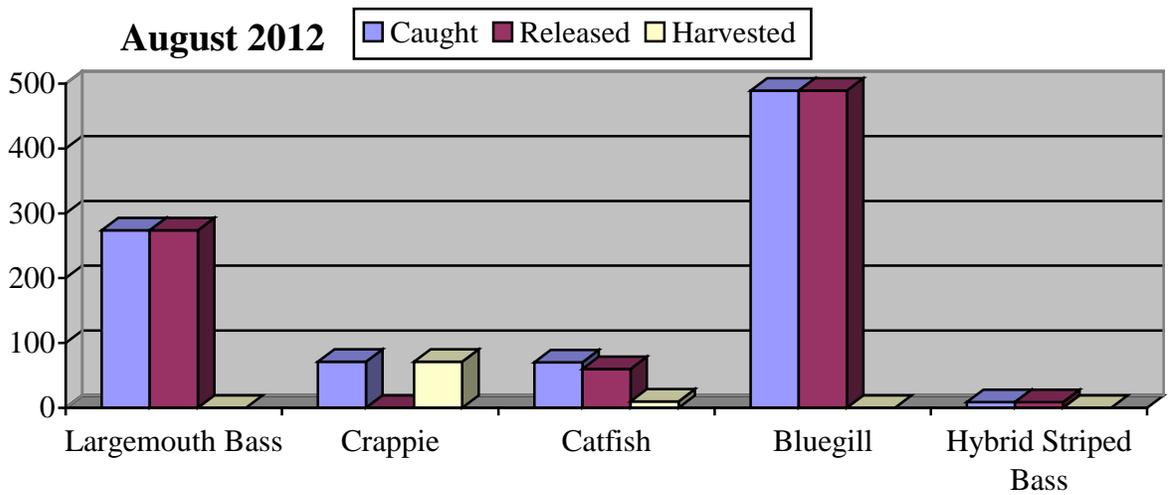
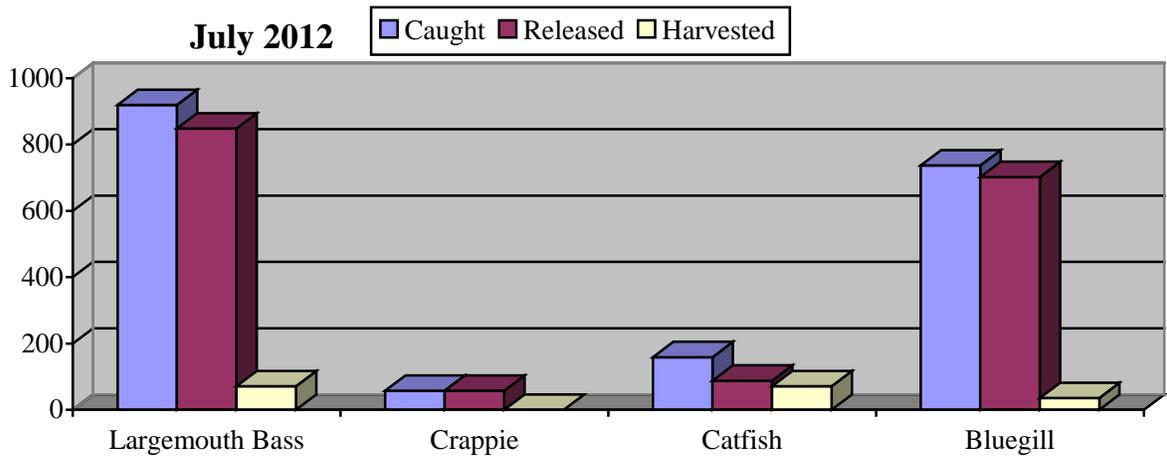


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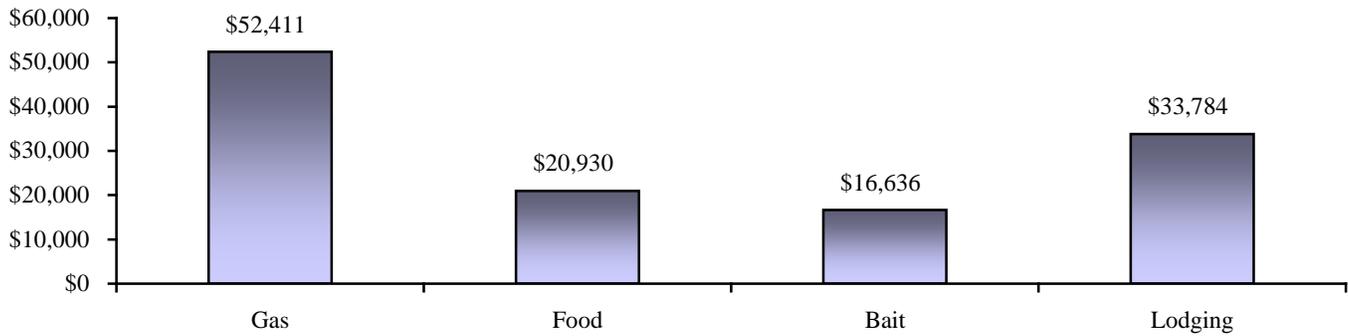


### June 2012





When surveyed, anglers were asked questions about the amount of money they spent for gas, food, bait, and lodging to make the fishing trip. The following chart shows the estimated money expended by anglers for the entire survey. It was estimated that angler expenditures totaled \$123,752 for the April-August survey.



Anglers were questioned about the distance they traveled to fish Hungry Mother Lake. Most anglers (68%) traveled 25 miles or less to fish the lake, while 13% of anglers traveled 26-50 miles and 13% traveled more than 50 miles to fish Hungry Mother. Six percent of all anglers interviewed were non-resident to Virginia.

In summary, most anglers surveyed (60%) in the 2012 survey fished for anything that would bite and did not target one specific species. Twenty-four percent surveyed targeted largemouth bass and 10% targeted catfish. May, June and August were the months with the most fishing activity, while April and July were the lowest. Angler catch was dominated by largemouth bass, bluegill, and crappie. Most anglers surveyed (75%) were bank fishermen. It was estimated that angler expenditures were \$123,752 during the survey period, and most anglers (68%) were local to the area traveling 25 miles or less to fish Hungry Mother Lake. The results from this survey will assist fisheries resource managers and Hungry Mother Park managers in making decisions to best improve fishing opportunities on Hungry Mother Lake.

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