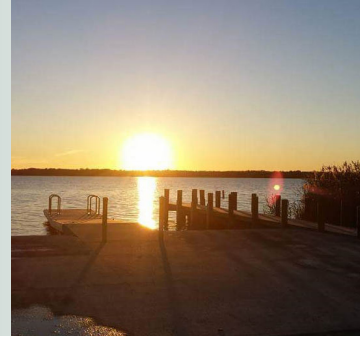




# Sutton Lake Recreational Fishery Creel Survey July 2015-June 2016

September 2016



Kevin Dockendorf

The N.C. Wildlife Resources Commission (NCWRC) completed a year-long survey of anglers on Sutton Lake to gain a better understanding of recreational fishing activity at the lake. Sutton Lake is home to multiple species of fish, including Largemouth Bass, Bluegill, Black Crappie, Redear Sunfish, and invasive Flathead Catfish. Because it is a power cooling lake, Sutton Lake has water temperatures that can exceed 90°F in the summer months and stay unseasonably warm during winter months. This can have impacts on fishes, including their spawning and growth rates. See <http://www.ncwildlife.org/Fishing/Learn-Resources/Monitoring-Surveys> for more information regarding fish populations in Sutton Lake.

A winter harvest moratorium for Largemouth Bass in Sutton Lake from Dec. 1 to March 31 was implemented in 1996 to enhance abundance and size. Although the NCWRC samples Largemouth Bass each year, a better understanding of angler harvest practices was needed. In addition, little information was available to evaluate the Black Crappie population; however, black crappie continue to be sought after by anglers. The last angler survey was conducted on Sutton Lake in 1994 and 1995. These collective needs have prompted the NCWRC to implement a formal recreational creel survey to update its baseline information of angling characteristics to assist its sportfish management efforts at Sutton Lake.

## Project Objectives:

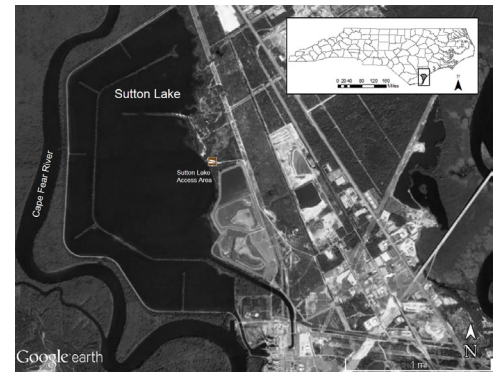
- Identify characteristics of the recreational fishery at Sutton Lake, including species caught, released, and harvested.
- Document angler origin and how much time anglers spend fishing at Sutton Lake.

## Methods:

- A NCWRC creel clerk interviewed anglers each week for 11 months between July 2015 and June 2016 (excluding January 2016) and recorded catch composition, angler effort, and harvest preferences.
- Up to 10 fish harvested per angler were measured and weighed together to get an estimate of size and weight of fish.
- Angler, vehicle, and boat trailer counts were recorded as a measure of angler effort. Several tournaments and related catch data were recorded as well.



Sutton Lake lies adjacent to the Cape Fear River in New Hanover County a few miles north of Wilmington.



Map depicting Sutton Lake, a 1,100-acre power-cooling lake constructed by Duke Energy in 1972. (Map created by Clint Morgeson)



Sutton Lake Access Area.. (Photo by Kevin Dockendorf)



# Sutton Lake Recreational Fishery Creel Survey, July 2015-June 2016

## Preliminary results so far:

- Over 80 percent of the anglers surveyed at Sutton Lake fished for Largemouth Bass. Anglers also targeted sunfish and catfish regularly. Relatively little effort for Black Crappie was observed and few were caught.
- The largest Largemouth Bass measured during this survey was a 22-inch, 6-lb fish caught in August. The largest catfish was a 22.5-lb Flathead Catfish, and the biggest panfish was a 12-inch Bluegill that weighed over a pound. Not bad!
- March 2016 was the most popular time to fish Sutton Lake, comprising over 15% of the interviews during the survey period. July 2015 and April 2016 ranked second and third most popular, each comprising about 13% of the interviews.
- About 23 percent of people fishing Sutton Lake came from New Hanover, Brunswick and Pender counties. However, anglers fishing at Sutton Lake were from as far away as Minnesota, Washington and Texas.

## What's next?:

- Moving forward, data analyses will be summarized into presentations shared with the angling community and a final report comparing angler catch and harvest with NCWRC routine biological surveys of Sutton Lake will be completed by June 2017.
- Current regulations will be evaluated to determine if appropriate to sustain a viable fishery.
- Order new fish attractors and place them at select locations around the lake during winter 2016-2017 to enhance fishing opportunities. Stay posted for an updated fish attractor map at <http://ncpaws.org/wrcmaps/WRCFishAttractors.htm>.



NCWRC Creel Clerk Vic Germanaro interviewing a fly fisherman after a day on the water. Vic conducted over 800 interviews surveying the fishing experience of more than 1,300 people at Sutton Lake. (Photo by Kevin Dockendorf)

## What can you do to keep Sutton Lake a clean and safe environment for everyone?:

- Read and follow posted signage and regulations to ensure viable fish populations.
- Keep the boat ramp, fishing pier, and parking lot clean for everyone to use by making sure you “Pack it in, Pack it out!” Report violations anonymously by calling the Commission’s toll-free wildlife violations number 800-662-7137.
- Report suspicious activity to local law enforcement. Poaching tips and violations can be submitted to the NCWRC by phone at 1-855-WILDTIP or online at <http://www.ncwildlife.org/wildtip>.
- For more information, contact:  
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### How You Can Help

Your purchase of fishing tackle, fishing licenses and motorboat fuel helps support fisheries work conducted by N.C. Wildlife Resources Commission fisheries biologists through the Sport Fish Restoration Program administered by the U.S. Fish and Wildlife Service.



N.C. Wildlife Resources Commission

Inland Fisheries Division

[www.ncwildlife.org](http://www.ncwildlife.org)

