

## **Kinderhook Lake Surveys 2001 – 2013**

A series of fish surveys were initiated in Kinderhook Lake in 2001. One rationale for the surveys was to evaluate any effects from the treatment of Kinderhook Lake with alum to control phosphorus levels. The lake association treated the lake with alum every summer starting in 2001 and ending in 2010. A pretreatment survey was conducted by this office prior to the first use of alum in 2001, for the purpose of establishing a base line. More recently, the rationale for the fish surveys has been the high numbers of white perch seen since 2006, and the stocking of tiger muskies which began in the fall of 2006.

White perch have existed in Kinderhook Lake for decades, but the population size during the 1990's seemed to be moderate. An extensive survey in 2001 collected 97 white perch. The 2006 survey collected just over 500 white perch and each survey since then has seen similar high number of white perch. Some residents have expressed concern that sunfish populations have declined as a result of the white perch population increases. Our survey data suggests that while the sunfish population has fluctuated over the last 15 years, no permanent decline has been seen. The latest fish survey earlier this month found average numbers of bluegills and pumpkinseed sunfish. The black crappie population appears to be higher than in previous years.

Yellow perch populations appeared to be declining until 2010, when the population appeared to rebound substantially. However, the recent fish collection showed that yellow perch numbers are down again.

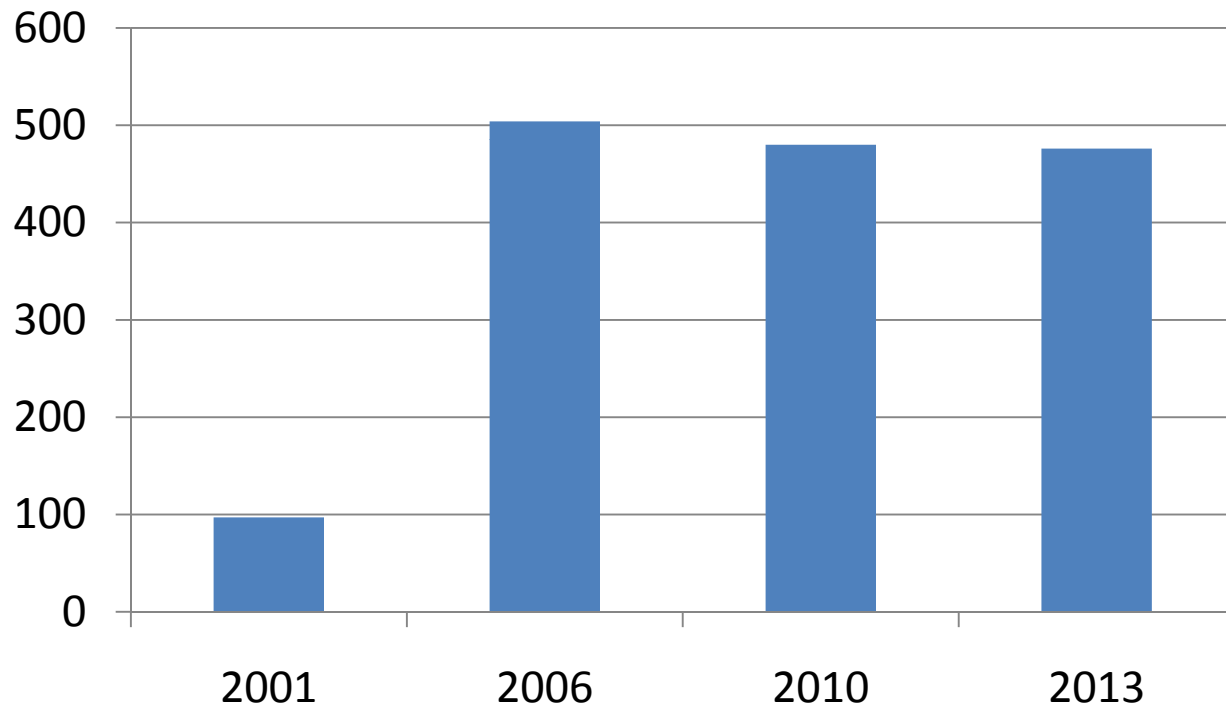
Smallmouth bass numbers have been trending up over the last 15 years, but may have peaked. Largemouth bass numbers were trending down, but the latest fish survey found good numbers of Largemouth, indicating a rebound in the population. The results from the latest survey suggest that smallmouth dominate the deeper basins to the south, while Largemouth predominates in the shallow waters found in the northern basins of Kinderhook Lake.

A major rationale for the current survey efforts is the evaluation of the tiger muskie stocking most years since 2006. Despite almost 5 hours of electrofishing, no tiger muskies were collected. Typically, fish in the pike family are difficult to capture with electricity. We have not collected any pickerel in any survey over the last 25 years in Kinderhook Lake. Northern Pike, however, have appeared recently with the first fish collected in 2008. A netting survey in 2009 collected 4 northern pike, but none were seen in our electrofishing survey in 2010. However, we did collect 2 pike in the most recent electrofishing survey earlier this month including one juvenile about 4 inches long and one adult near 30 inches in length.

Another rationale for conducting the recent survey effort was the collection of American Eel for testing of various contaminants. The current health advisory suggests eating no more than one eel per month from Kinderhook Lake. We collected 7 eels for testing so that the health advisory could be updated.

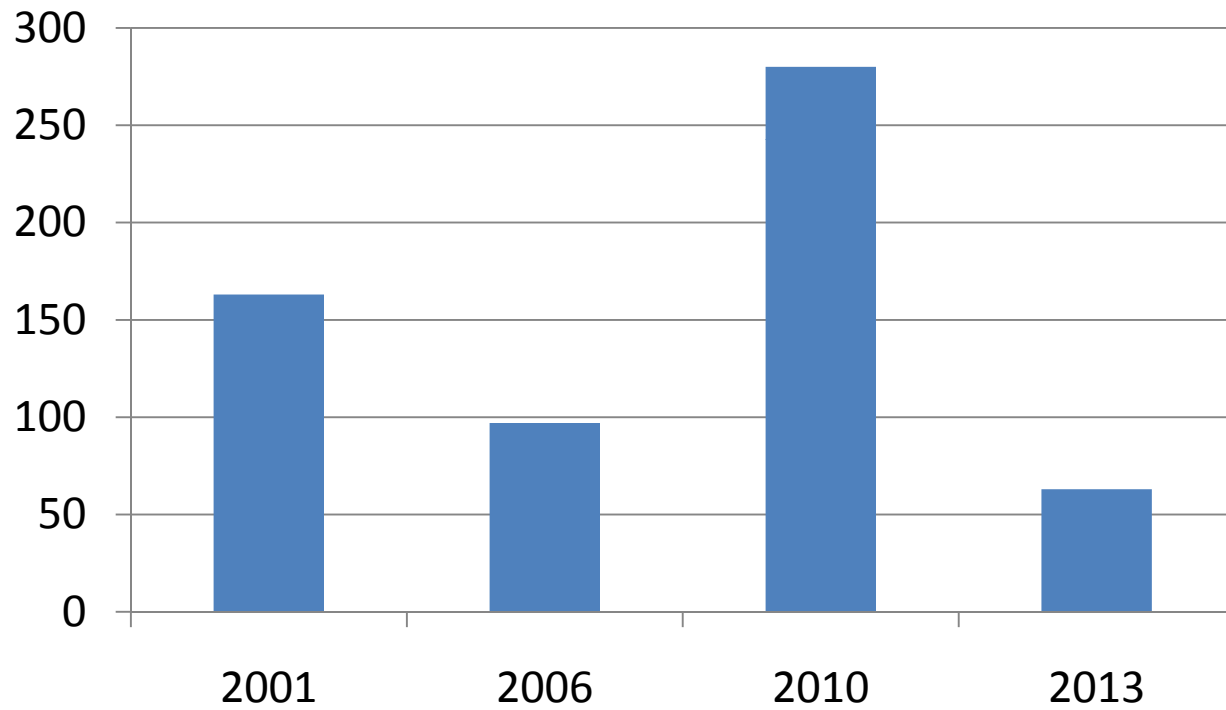
# Kinderhook Lake Surveys

## White Perch



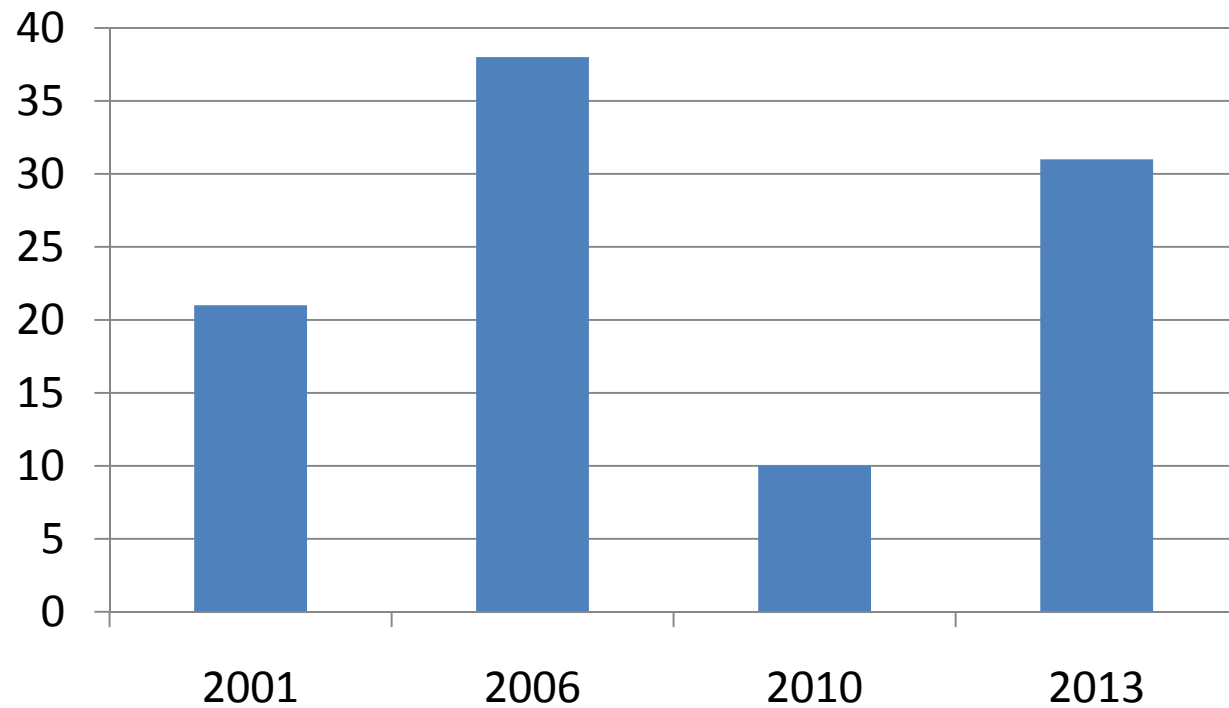
# Kinderhook Lake Surveys

## Yellow Perch



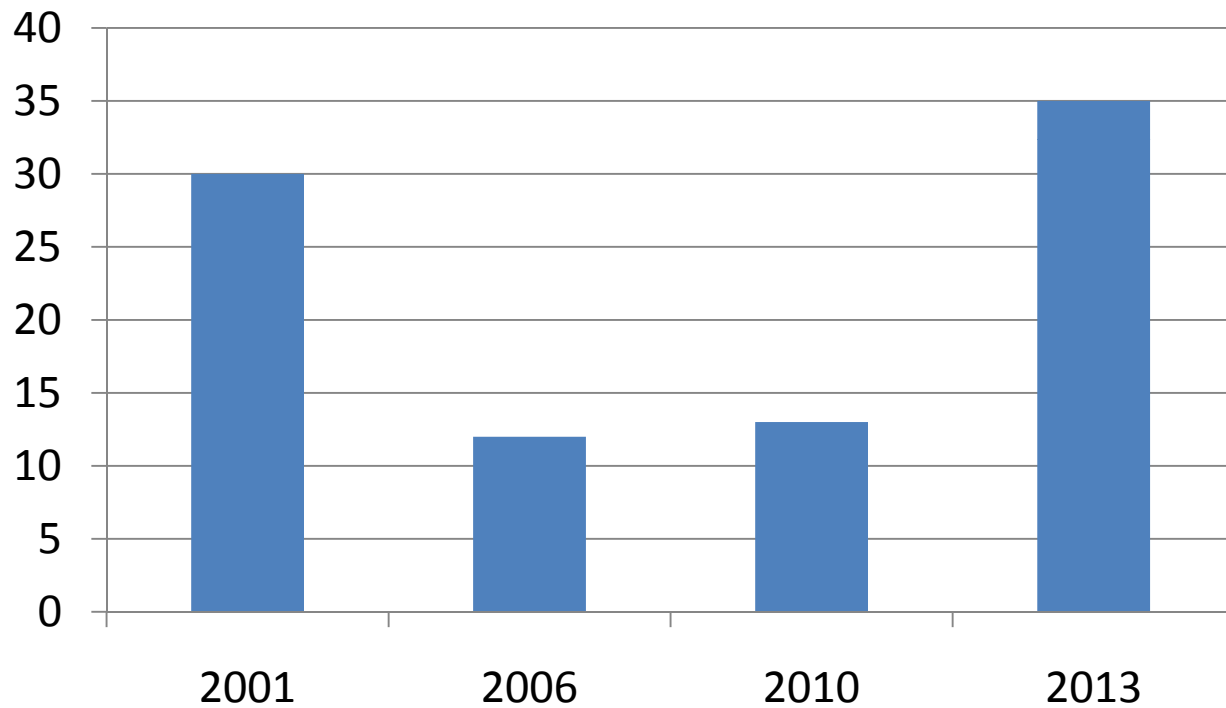
# Kinderhook Lake Surveys

## Pumpkinseed



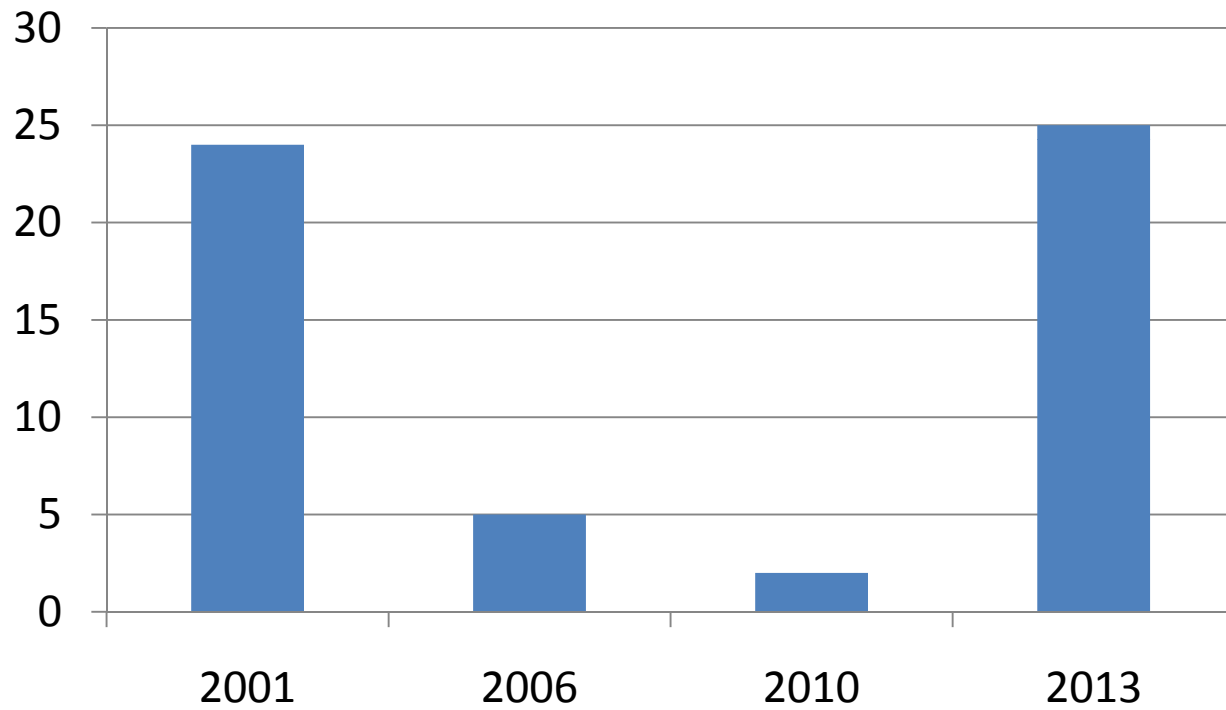
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## Bluegill



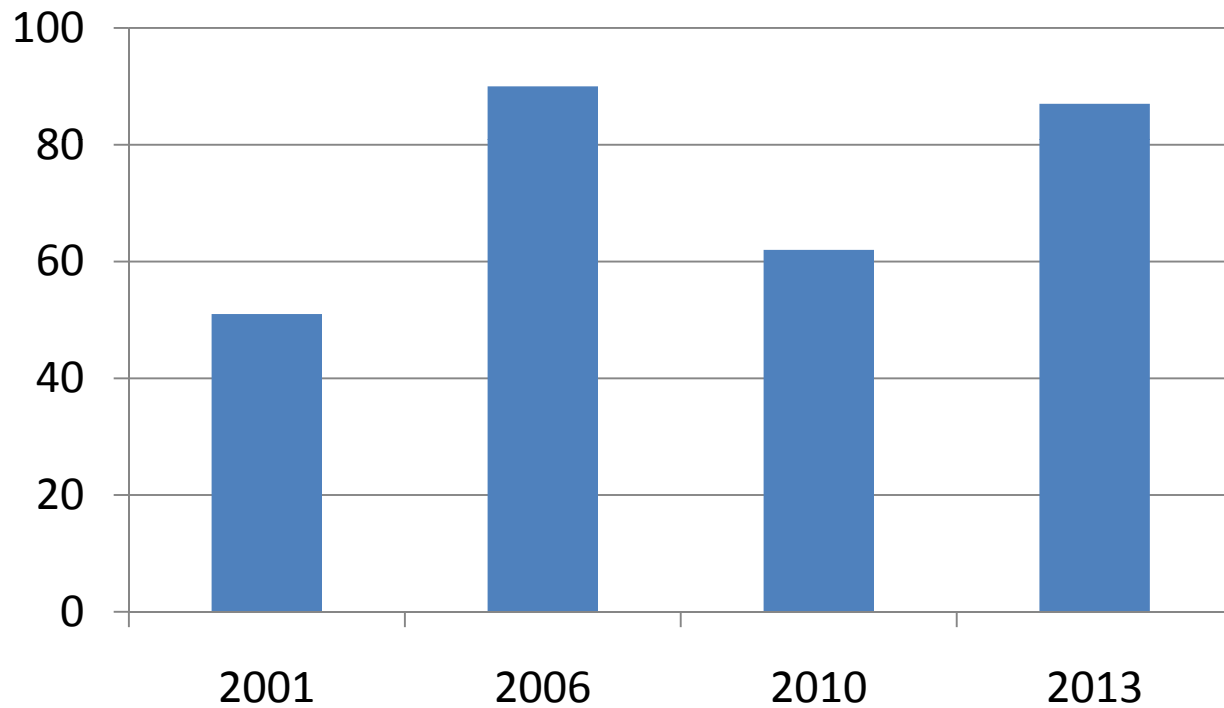
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## Black Crappie



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## Smallmouth Bass



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## Largemouth Bass

