Calamus Reservoir 2012 Fall fish Survey and Creel Survey Results

Nebraska Game and Parks Commission
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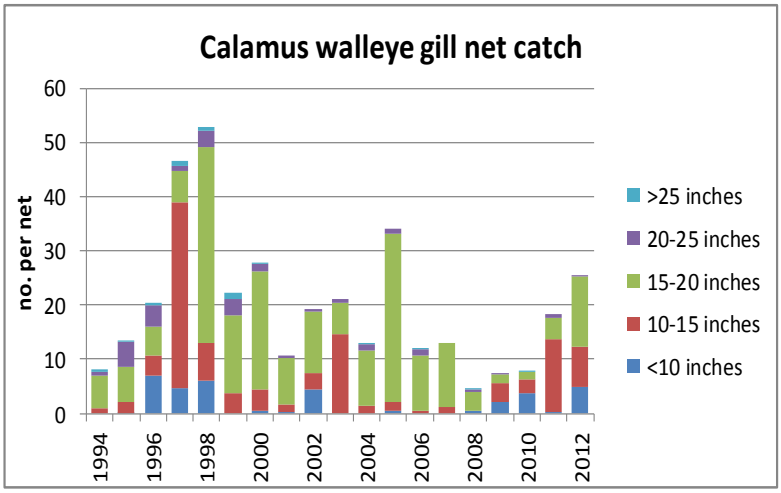
2012 Calamus Fall Fish Survey

The following text and graphs are summaries from the 2012 fall gill net sampling conducted during October. Gillnets are used to sample fish species which primarily live in open water environments such as large reservoirs. Sampling effort in 2012 was 5 nets and sample stations are located in the mid to lower reaches of the lake. The same general areas of the lake are utilized for sampling locations each year for standardization. Walleye, channel catfish, and wiper populations are maintained through annual fish stocking. Muskellunge are stocked in low numbers biannually to maintain their population and angling opportunity. In 2012, 7.5 million fry and 271,000 fingerling walleye, 9,300 fingerling wipers, 29,607 channel catfish as 10 inch advanced fish and 6,450 3-inch black crappie were stocked. Planned stocking in 2013 includes walleye fry, OTC marked walleye fingerling, channel catfish, wipers, muskellunge and northern pike. Species stocked and numbers will depend on availability.

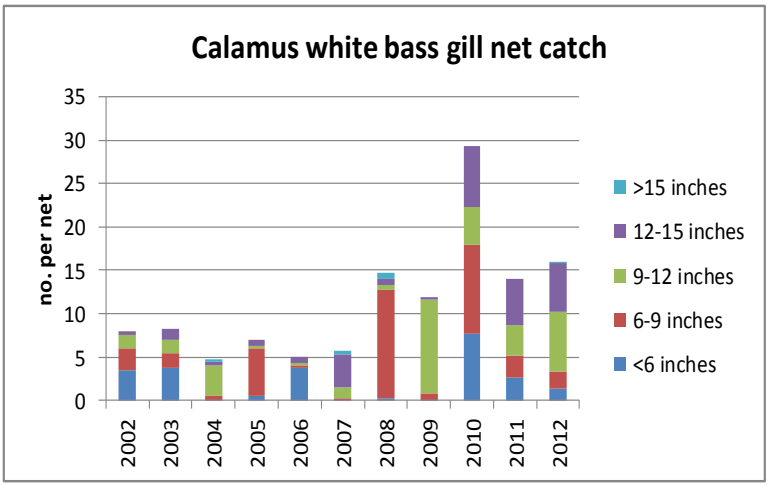
Walleye

Walleye numbers in the fall survey are the best they have been since 2005 and 5th best overall. Good survival from the 2009 and 2010-11 stockings have led to good numbers of 10 to 18 inch fish. About 50% of the walleye in the 2012 survey were of harvestable size. Current regulations allow for anglers to harvest one fish between 15 and 18 inches while the remainder of the 4 fish bag must be over 18 inches with only 1 over 22 inches . Walleye are reaching 15 inches in a little over 2 years and reaching 18 inches after 4 years.



White Bass

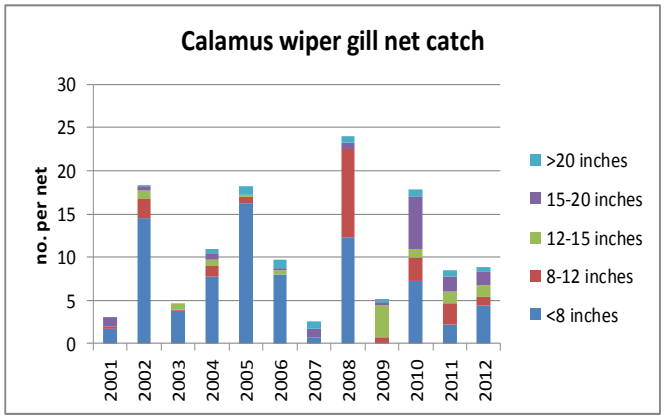
White bass numbers are up slightly from 2011 and is the second highest catch recorded the past ten years. There is a good distribution over most size classes including a few fish over 15 inches. White bass growth slows considerably between ages 2 through 4 and that combined with a high harvest contribute to the general lack of fish over 15 inches. Many factors influence year class strength for white bass including weather conditions during the spawn and food availability, particularly young-of-the-year gizzard shad. White bass are reaching nearly 10 inches after two growing seasons and nearly 12 inches after three growing seasons. As in 2011, there was good fishing in 2012 with creel survey data estimating over 35,000 white bass caught and over 16,000 harvested. The majority of the fish harvested were in the 10-14 inch range. Expect good fishing again in 2013.



A new regulation is in effect in 2012: only 1 white bass/wiper greater than 16 inches is allowed in the daily bag limit.

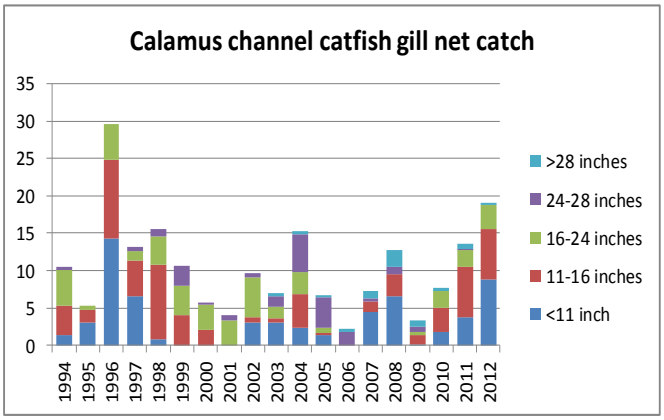
Wipers

Wiper catch rates in fall gill nets can vary widely at the Calamus and high catches of young-of-the-year fish (<8 inches) does not necessarily mean lots of big fish. The 2012 catch rate was similar to 2011 and is above average for number of bigger fish. There is a good distribution of fish over all size classes including wipers over 20 inches which will interest anglers hoping to catch a big wiper. Wipers are a schooling fish and they can be a "hit or miss" sample. Wipers exhibit much faster growth than white bass with fish reaching 15 inches in three growing seasons and over 20 inches in five growing seasons. Like white bass, prey availability in the form of young gizzard shad influences year class survival and growth rates. A new regulation in effect beginning in 2012 is geared to protect and produce larger wipers. **Only 1 wiper/white bass greater than 16 inches is allowed in the daily bag.**



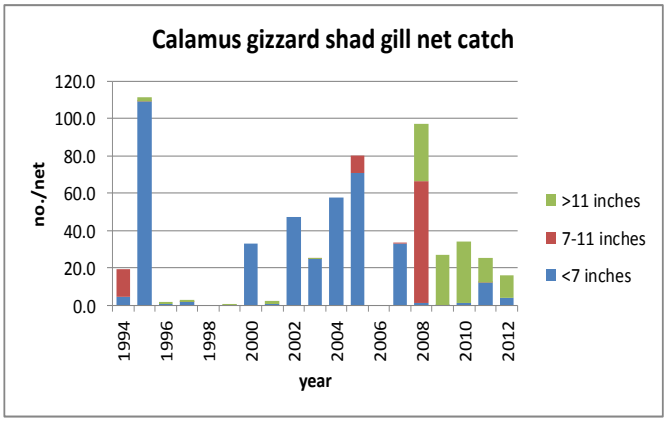
Channel Catfish

Channel catfish CPUE was above average in 2012 with 19 fish per net. In fact, the gillnet catch was the second highest on record thanks mostly to high numbers of fish less than 16 inches. The numbers of catfish smaller than 16 inches indicates good recruitment to the population. There are good numbers of fish in the 16-24 inch size class along with a few trophy sized fish that were over 28 inches. Anglers should have good catch rates for channel catfish in 2012.



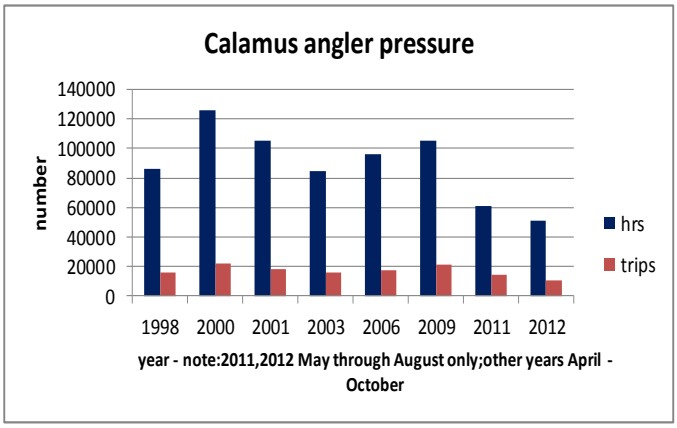
Gizzard Shad

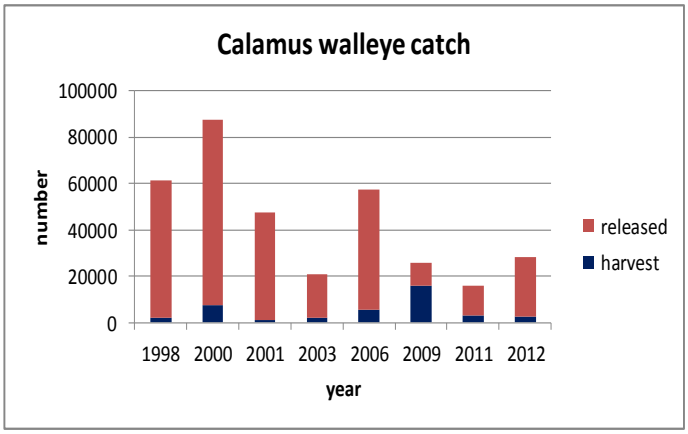
Gizzard shad are the primary forage for managed sport fish in Calamus Reservoir and their size distribution is critical for proper growth, recruitment and maintenance of desirable sport fish species. It is desirable to have high numbers of young-of-the-year shad to provide food for the desirable sport fish such as walleye and white bass. Moderate numbers of adult shad were collected in gill nets in 2012 with good reproduction. Observation over the summer indicated young shad numbers were likely much higher than the gill net catch shows. Ideal shad size distribution would be like that found in 2005. A very undesirable shad population would be like that seen in 2008 and 2009. Little can be done to manage the adult shad population other than to hope there is high winter mortality on the adult shad which leads to more production of small shad the following year.

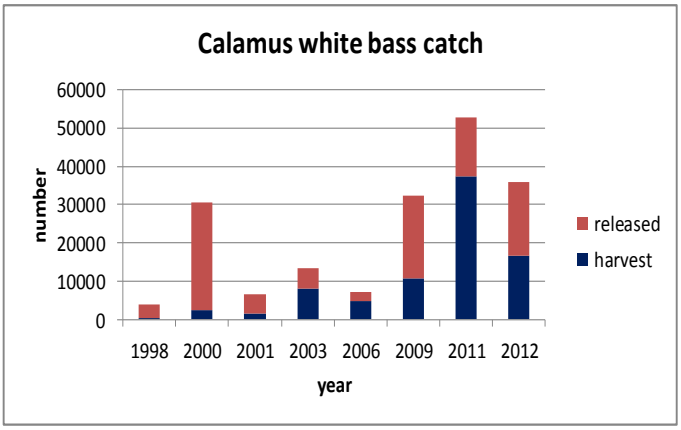


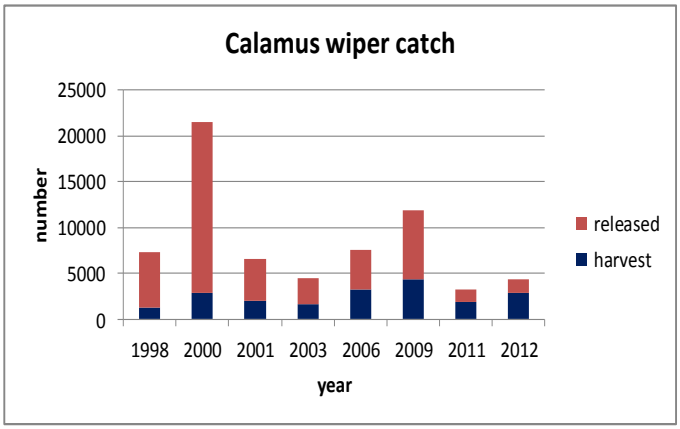
2012 Calamus Angler Creel Survey Summary

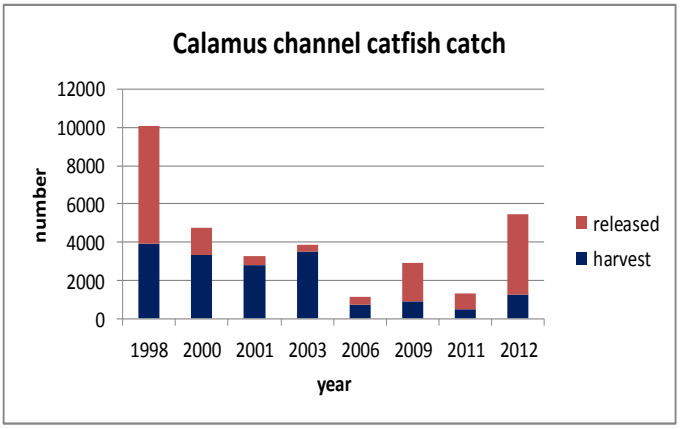
Angler counts and interviews were conducted from May through August in 2012. A total of 75 days were surveyed within this time frame, 54 week days and 21 weekend days. A total of 500 angler interviews were conducted. Total angler hours estimated from May through August was 50,863 with 10,901 angler trips, a slight decrease from 2011. Eighty percent of all angler parties contacted were successful in catching fish. The following charts depict angler use and catch between creel years at Calamus Reservoir. Be aware that 2011 and 2012 were shortened creel survey periods from May through August while most creel surveys occurred an additional two to three months from April through September or even October. The 2012 creel data resulted in a total fish catch estimate of over 89,000 with over 25,000 harvested. As for individual species, white bass led the way with an estimated 35,746 fish caught and 16,653 harvested. While white bass catch was below that seen last year, 2012 was still a very good year for catching white bass and the second highest catch and harvest recorded. About 90% of the walleye caught were released with 2,599 of the 28,079 fish caught harvested. The 2012 walleye catch by anglers was very good but low numbers were harvested due to the young fish moving up through the size classes. Channel catfishing was improved in 2012 with a number of smaller fish



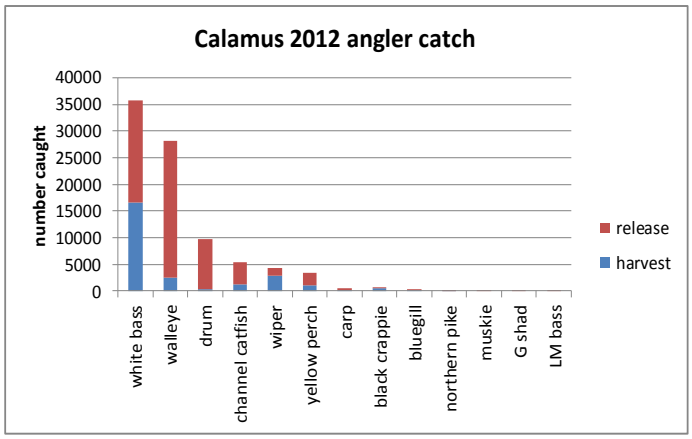


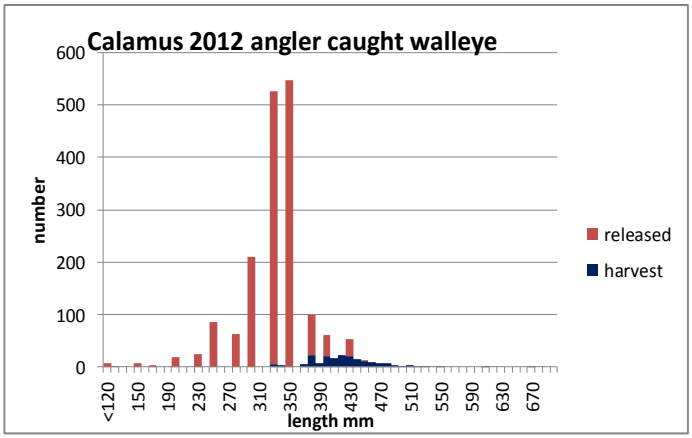


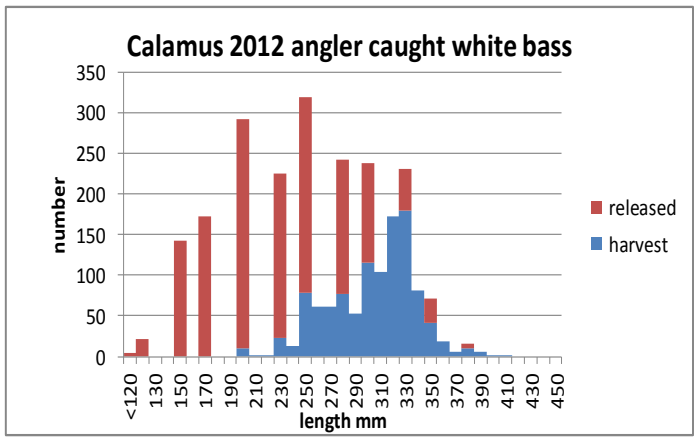


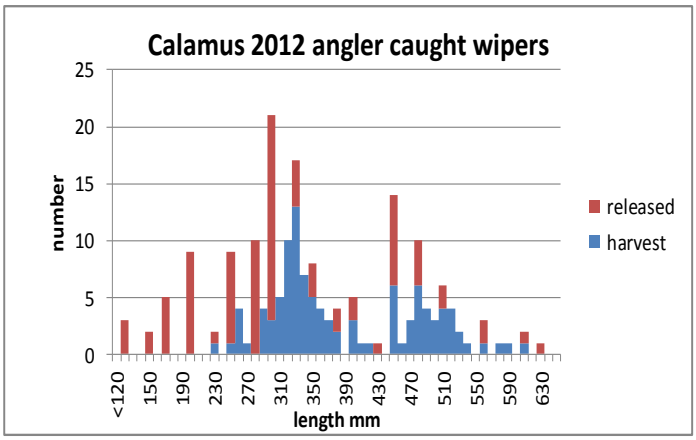


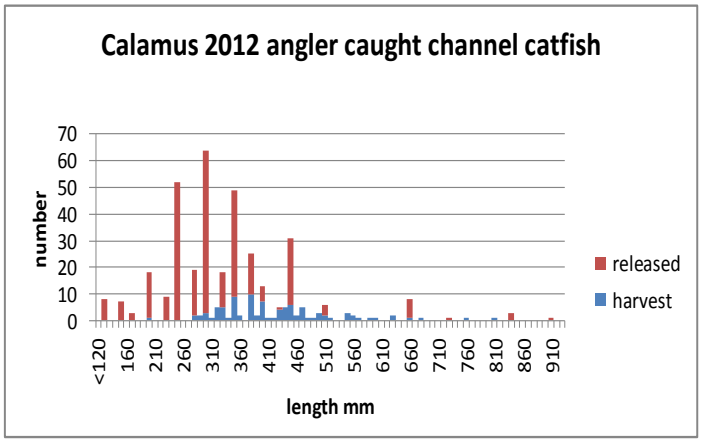
The following charts are specific to the 2012 angler creel survey and depict the length frequency of angler caught fish by species. Fish lengths are actual lengths taken from angler harvested fish and angler estimated released fish. The length data was collected during the 500 angler interviews.











Zebra & Quagga Mussels

Anglers and recreational boaters should continue awareness for zebra and quagga mussels while using Nebraska Lakes. Monitoring was completed at many Nebraska reservoirs during 2012,including the Calamus, and no evidence of mussels was found. Currently in Nebraska, zebra mussels have only been documented near Omaha at Offutt Air Force Base, Zorinsky Lake, and the Missouri River. Invasive mussels have been documented in several neighboring states, including Colorado, Iowa, Kansas, and Missouri.

Invasive mussels will attach to almost any surface and have detrimental impacts on industry (power plants, water intakes, irrigation, etc), native fish and mussels, and recreational users (fouling boat motors, impacting beaches, etc). Invasive mussels cause an estimated $5 billion per year in economic impacts in the United States for monitoring and control efforts. Inadvertent transfer by humans is the major source of new infestation for zebra and quagga mussels; primarily by boats, boat trailers, and fishing gear. Boaters and anglers are reminded that it is important to **clean, drain and dry** their equipment and boats before moving to different bodies of water. Anglers and boaters are encouraged to educate themselves on these and other aquatic invasive species. An excellent source of information regarding invasive species can be found on the University of Nebraska's Invasive Species Project website: http://snr.unl.edu/invasives/.

New regulations in effect beginning in 2013 mandate that all vessels and conveyance be drained of water prior to leaving a lake to prevent the spread of invasive species. This means all livewells, baitwells, and boat hulls shall be drained of water and all aquatic vegetation removed from boats and trailers prior to leaving a lake. Boats are subject to inspection by authorized personnel.

For more information on fishing rules and regulations visit the Nebraska Game and Parks website at OutdoorNebraska.org.

For more information on the fisheries at Calamus Reservoir contact:

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