

Harlan Reservoir

2013 Angler Survey Summary

Nebraska Game and Parks Commission
Brad Newcomb, District Manager

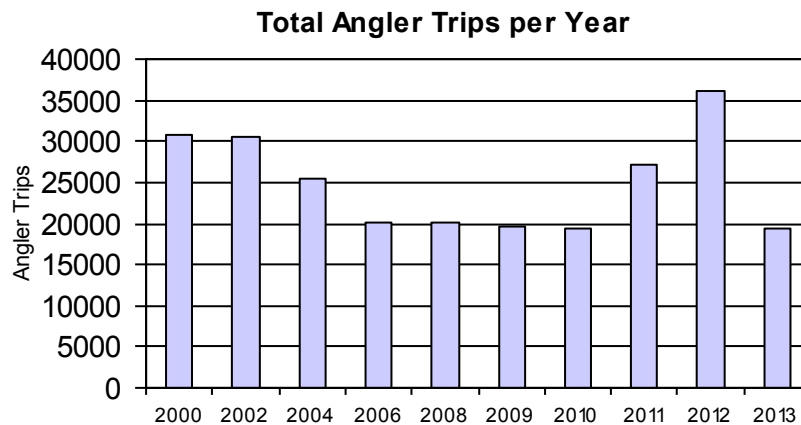


An angler survey was completed at Harlan Reservoir from April through October 2013. During that time period, angler counts and interviews were completed on 20 days per month, which included 14 weekdays and 6 weekend days. A total of 140 days were surveyed with 1,018 angler interviews. Angler surveys provide estimates of angling effort, catch and harvest, catch per hour, and sizes of fish caught. From 1990 to 2000, angler surveys were completed annually, but changed to an alternate year format from 2002 to 2008. Starting in 2009, a contract for annual angler surveys at Harlan was planned through 2013.

The following text and graphs contain this year's survey information with comparison to past years.

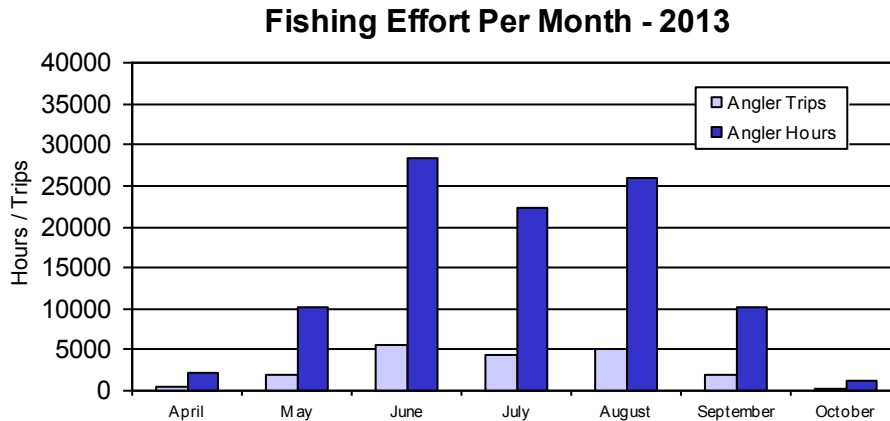
Fishing Effort Summary

An estimated 19,358 angler trips were made to Harlan Reservoir during the seven month survey period in 2013, which was ended an upward trend over the last few years. Anglers spent a total of 100,225 hours fishing (7.4 hours per acre), with the average complete trip lasting 5.2 hours. The following Nebraska counties contributed the most Harlan anglers: Harlan (20%), Adams (12%), Buffalo (10%), Phelps (10%), Lancaster (9%), Franklin (4%), and Hall (4%). Non-residents made up 3.4% of all anglers.



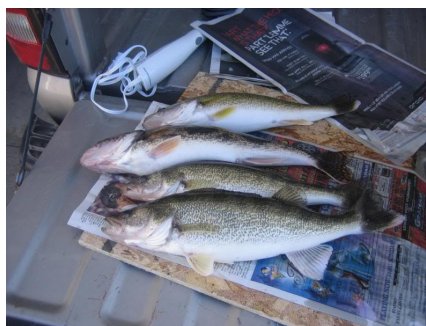
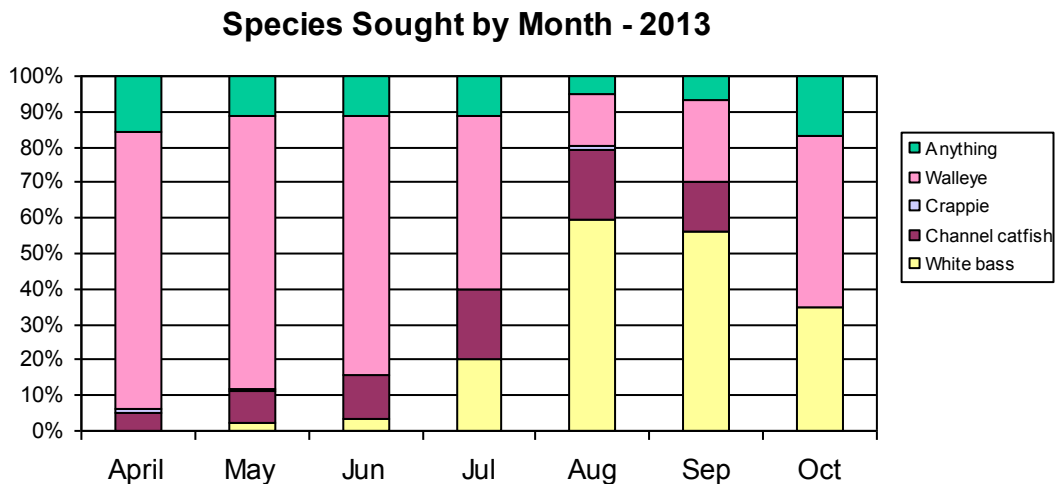
Fishing Effort by Month

Due to cooler weather, May had reduced fishing pressure in 2013. The highest angler use was from June through August, and these months contributed 77% of the fishing effort during the seven month survey period.



Fish Species Sought by Anglers

Most anglers sought walleye in the early months, while white bass anglers dominated in August and September. Over the entire survey period, 25% of Harlan anglers sought white bass, 48% sought walleye, 15% sought channel catfish, 1% sought crappie, 1% sought largemouth bass, and 9% fished for anything.



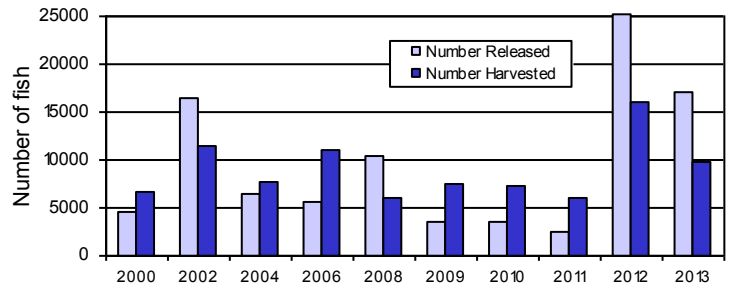
Channel Catfish

Harvest and release of channel catfish in 2013 was slightly lower than 2012, but still near the best observed over the last 10 surveys. A total of 9,846 catfish were harvested and 17,011 released. There were 918 catfish measured during the survey, with an average length of 18.5 inches, and range of 6 to 31 inches. The total catch rate for anglers seeking channel catfish was 0.87 fish/hour, with a harvest rate of 0.49 fish/hour.

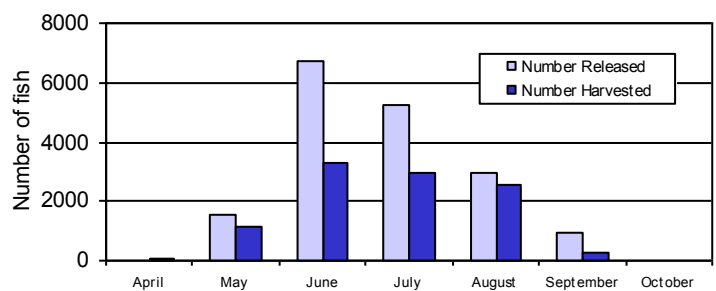


Monthly catch of catfish peaked in June, with good catches in June through August.

Channel Catfish Caught Per Year



Channel Catfish Caught Per Month

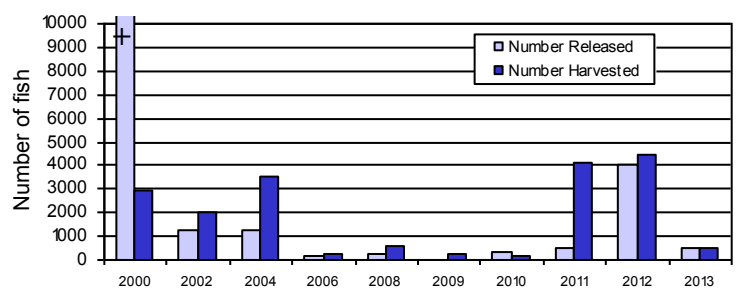


Crappie

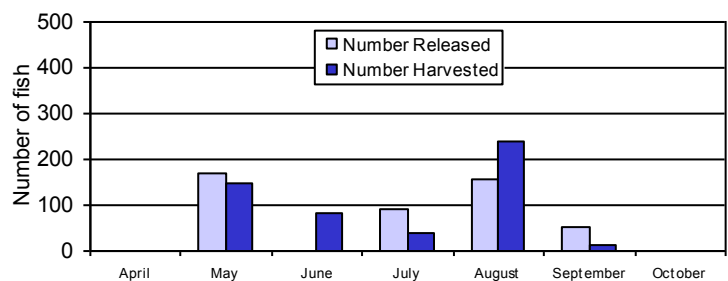
Crappie catch and harvest were much lower in 2013, likely caused by lower reservoir water levels. Estimated crappie harvest in 2013 was 521, with 469 released. Crappie anglers caught 0.31 crappie per hour, and harvested 0.25 crappie per hour. Although there was excellent crappie recruitment with high water levels from 2007 to early 2012, lower water levels in 2012 and 2013 have negative impacts on crappie recruitment and affect distribution of crappie for anglers.

Crappie catch in 2013 peaked in May and August, but low water levels affected overall catch and seasonal distribution.

Crappie Caught Per Year



Crappie Caught Per Month



Walleye

Walleye anglers had a good year at Harlan in 2013. Estimated harvest (4,742) was similar to last year, and near the best for the last 10 angler surveys. Estimated release (13,423) was the second highest recorded in the last 10 surveys. Catch per hour for walleye anglers was 0.33 walleye per hour with a harvest rate of 0.08 fish per hour. These catch rates are both improvements over last year. Good walleye recruitment from 2009 through 2012, and reduced flooded vegetation should contribute to good walleye fishing in the next few years.

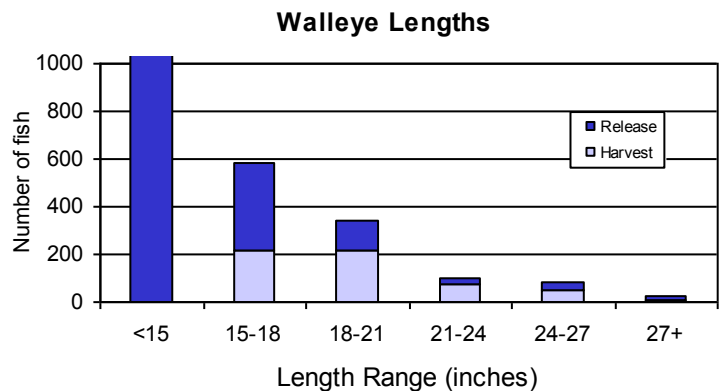
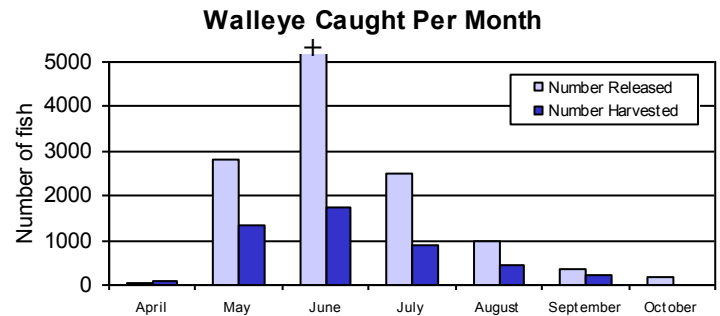
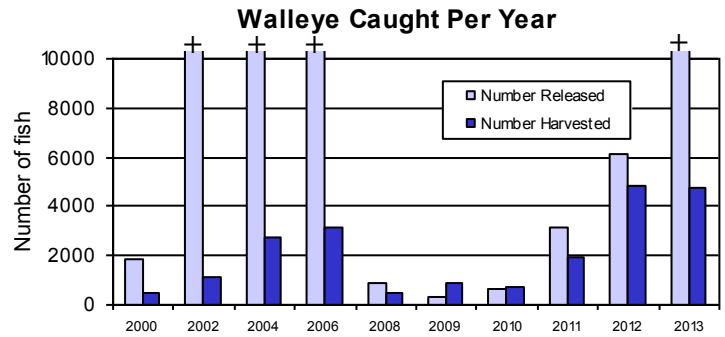


June was the best walleye fishing month in 2013, but good fishing was observed from May through August.

This graph contains lengths of walleye collected by the creel survey clerk in 2013. Harvested walleye ranged from 15 to 31 inches, with an average of 19 inches (553 walleye were measured).

Compliance with the walleye size limit was very good, with no harvested walleye under 15 inches encountered during the angler survey.

Walleye from 15-18 inches made up 40% of the harvest and 27% of released fish. Walleye over 20 inches made up 31% of the harvest, and walleye over 25 inches made up 7% of the harvest.



White Bass

White bass fishing experienced a considerable drop from the extremely high levels of 2012. Harvest and release numbers both dropped to near average from the last ten surveys.

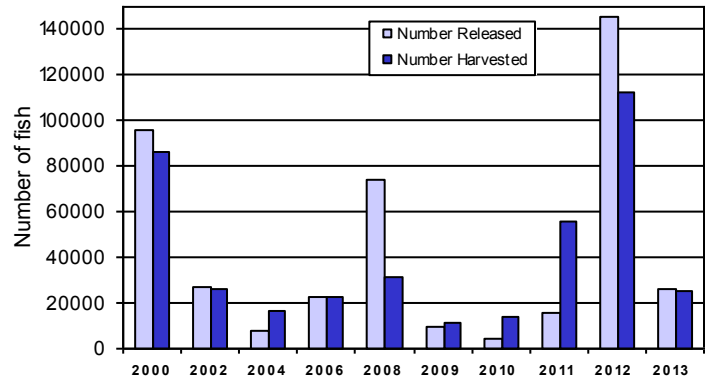
There were an estimated 25,591 white bass harvested, and 25,964 released in 2013. Catch rates for anglers seeking white bass were 1.18 fish caught per hour and 0.75 harvested per hour. All these numbers are much lower than the high levels observed in 2012.



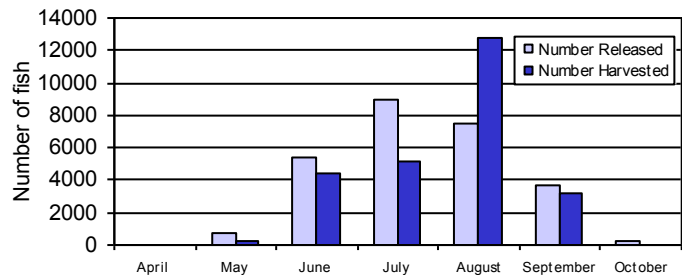
White bass fishing in 2013 started very slow in April and May, and gradually improved to the peak observed in August.

This graph contains lengths of white bass collected by the creel survey clerk in 2013. Harvested white bass ranged from 8 to 18 inches, with an average of 11.8 inches (2,103 measured). White bass from 10-12 inches made up 56% of the harvest in 2013, while fish over 12 inches made up 44% of the harvest.

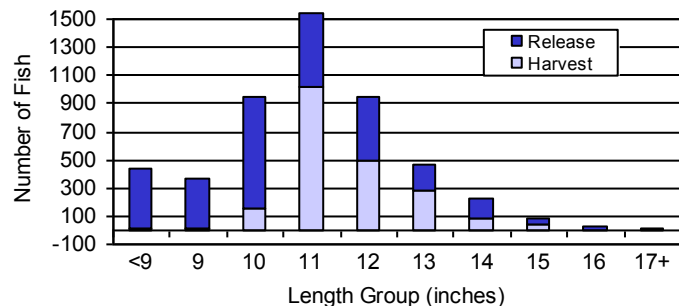
White Bass Caught Per Year



White Bass Caught Per Month



White Bass Lengths



Wipers

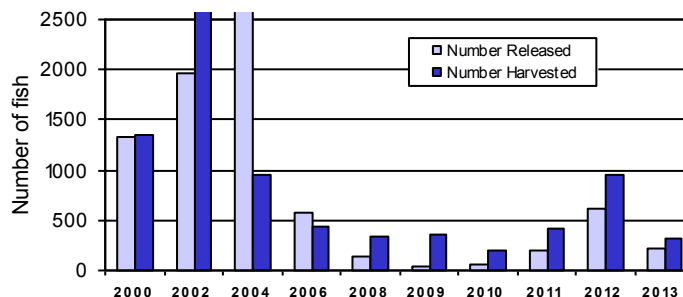
Angler catch and harvest of wipers went down in 2013, and ended an increasing trend observed from 2010-2012. Overall, the four wiper stockings from 2005 through 2013 are resulting in improved wiper fishing.

In 2013, there was an estimated 314 wipers harvested and 211 released. Harvested wipers ranged from 11 to 35 inches long, with an average of 21.9 inches (28 measured).

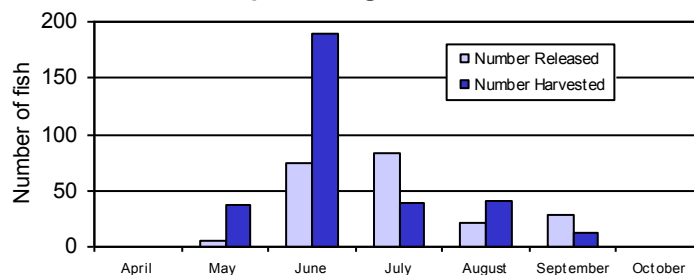
June was by far the best month for wiper fishing, with fair catches in most remaining summer months.



Wipers Caught Per Year



Wipers Caught Per Month



Reminder of Current Fishing Regulations

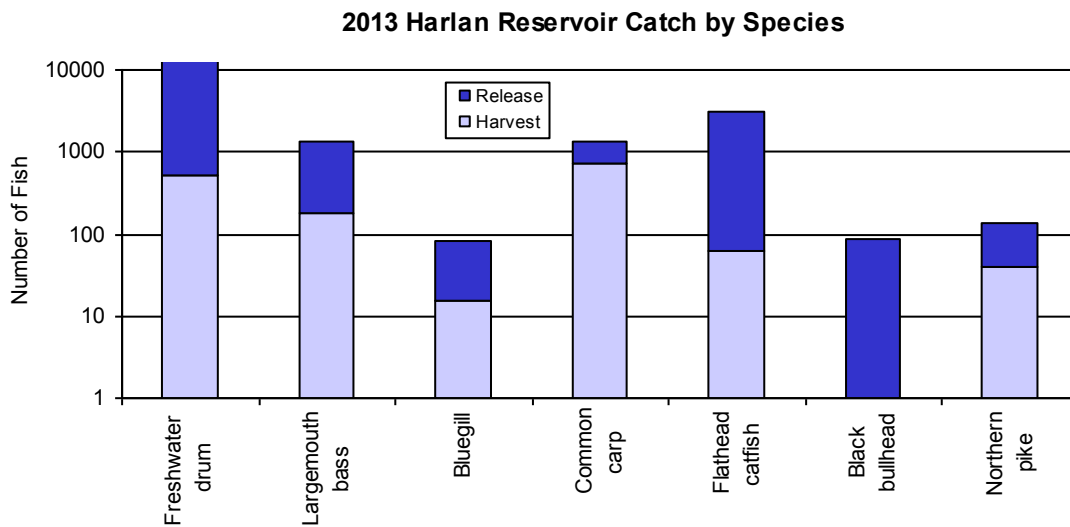
Several new fishing regulations went into effect on January 1, 2013 that may effect Harlan anglers:

- **White bass, striped bass, and striped bass hybrids:** The one-over daily bag restriction was lowered from 18 inches to 16 inches to provide more protection for wipers. The new regulation states the daily bag limit for white bass, striped bass, and their hybrids (combined) can contain only one fish 16 inches or longer - statewide.
- **Channel catfish:** The daily bag limit for channel catfish was increased to 10 on rivers, streams, and canals, but the daily bag limit of five was retained on reservoirs, lakes, and ponds. The possession limit for channel catfish was increased from 10 to 20.
- **Aquatic Invasive Species:** Any conveyance (boat) that has been on a waterbody must **drain all water** from their compartments, equipment, or containers before leaving the launch area. All aquatic vegetation from that waterbody must be removed before leaving the launch area.

Please refer to a current copy of the Nebraska Fishing Guide for more information.

Miscellaneous Species

Seven other fish species were well-represented in the 2013 angler catch, with freshwater drum the most numerous. Largemouth bass and flathead catfish also contributed well to the 2013 angler catch. The 2013 Nebraska High School Fishing Tournament was held at Harlan Reservoir, with encouraging results, despite lower reservoir water levels. Overall in 2013, anglers harvested 177 largemouth bass and released 1,172 largemouth bass. Anglers seeking bass caught 0.16 fish per hour.



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 2011-2013, 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.

Anglers and boaters using Nebraska waters need to stay aware of **current regulations** dealing with aquatic invasive species that started in 2013. The following regulations are in effect to help prevent the spread or introduction of unwanted species in Nebraska waters.

- **Any watercraft that has been on a Nebraska waterbody must drain the lake water from their compartments, equipment or containers before leaving the launch area. It is still illegal to dump baitfish into a Nebraska waterbody.**
- **Livewells need to be drained prior to leaving a launch area: plan ahead and bring a cooler for harvested fish.**
- **All aquatic vegetation from that waterbody attached to the watercraft and/or trailer must be removed before leaving the launch area.**

Anglers and boaters are encouraged to educate themselves on 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://neinvasives.com/>



For additional information about fisheries management at Harlan Reservoir, please contact the Nebraska Game and Parks Commission office in Kearney at 308-865-5310 or by email at the addresses listed below.

District Manager: Brad Newcomb: brad.newcomb@nebraska.gov

Biologist: Brad Eifert: brad.eifert@nebraska.gov