

Calamus Reservoir 2015 Fall Fish Survey

Nebraska Game and Parks Commission

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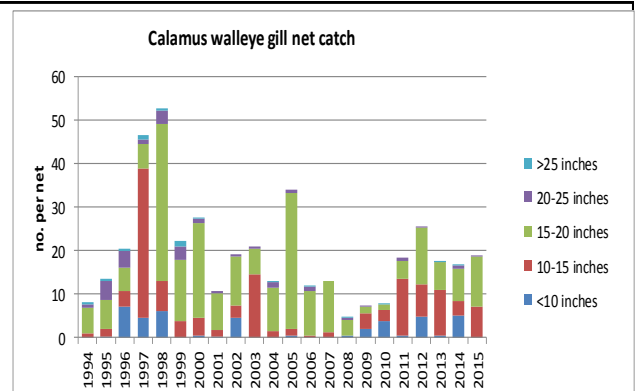
2015 Calamus Fish Management Summary

The following text and graphs are summaries from the 2015 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 2015 was 5 nets located in the mid to lower reaches of the lake from October 5-6. 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 2015, 8.1 million fry and 252,218 fingerling walleye; 25,000 fingerling wipers; 4,583 10-inch channel catfish; 21,815 6-inch channel catfish; 28,000 1-inch northern pike and 1,000 13-inch muskies were stocked. Fish stocking in 2016 will include walleye, wipers, and channel catfish.

A new walleye regulation is in effect beginning in 2016. The daily bag is 4 walleye, however, anglers may have no more than 2 fish between 15 and 18 inches and no more than 2 fish over 18 inches. Keep in mind only one fish in the daily bag may be longer than 22 inches in length. With high angler catch rates of 15 to 18 inch walleye, we ask anglers to harvest those legal fish that may be injured or "bleeding" when caught. This may decrease the walleye mortality from angler catch and release.

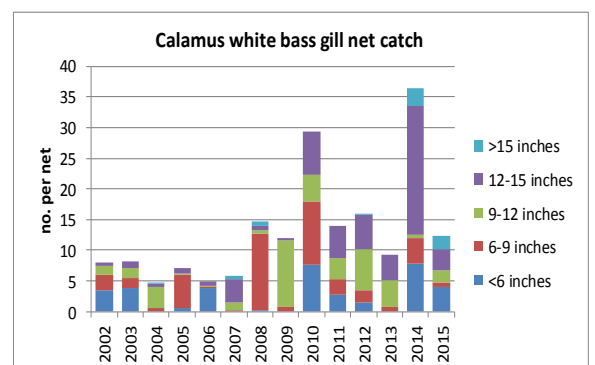
Walleye

Walleye numbers in the fall survey were similar to those found from 2011 to 2014. In fact, the gillnet catch per net is right on the five year average of 19.5 from 2011-2015. The walleye sample catch in 2015 was a slight improvement over that seen in 2013 and 2014. Stocking survival in 2015 was adequate with 50 per hour collected nighttime electrofishing in August. However, no young-of-the-year fish were collected with gillnets in 2015. The 2015 Fall survey data indicated 37.9% of the walleye under 15 inches, 46.4% in the 15-18 inch range and 15.7% over 18 inches. Harvestable walleye represented 62.1% of the fish collected in the Fall survey. This indicates angler success in 2016 should be good with the majority of the fish available in the two harvest length categories. Walleye growth was good in 2015 with abundant young gizzard shad available as prey. Walleye are reaching 15 inches in a little over 2 years (3 growing seasons) with some fish reaching 18 inches by 3 years of age and all reaching 18 inches by age 4 (5 growing seasons). Ninety percent of the walleye sampled were age 3 or younger. The dual stocking of walleye fry and fingerling will continue in 2016 in an attempt to maintain high walleye recruitment levels and prevent a missing year class. **A new walleye regulation is in effect beginning in 2016. The daily bag is 4 walleye, however, anglers may have no more than 2 fish between 15 and 18 inches and no more than 2 fish over 18 inches. Keep in mind only one fish in the daily bag may be longer than 22 inches in length.**



White Bass

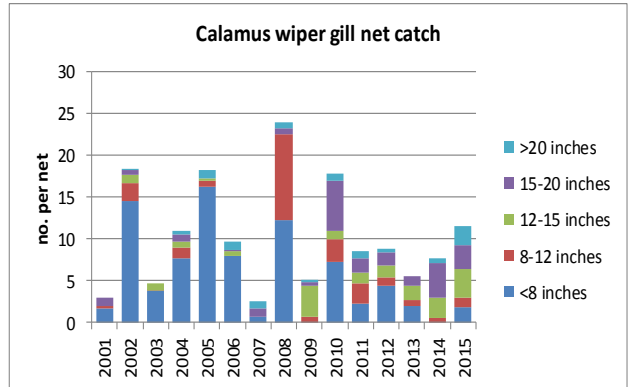
White bass numbers in the 2015 survey were lower than the record numbers seen in the 2014 survey but was still good at 12.4 per gill net night. 2015 was an excellent year for white bass fishing at the reservoir and there was a high angler harvest. With that said, the 2015 gillnet catch was just a little below the last 5 year average of 17.6 per gill net night. All size groups of white bass were collected from good numbers of young-of-the-year to fish over 15 inches. Anglers should be pleased with the size quality of white bass available for the 2016 fishing year. 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. In 2015, gizzard shad production was excellent which led to very good white bass growth. White bass are reaching 10 inches in two growing seasons and 12 inches after three growing seasons. **Remember only 1 white bass/wiper greater than 16 inches is allowed in the daily bag limit.**



Wipers

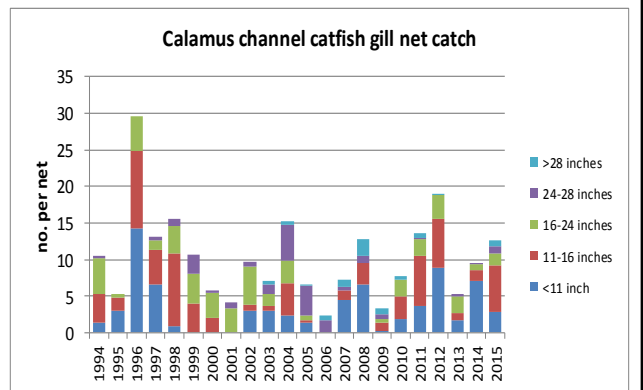
The wiper catch per net night in the 2015 sample was very good at 11.6. A very good population length structure was seen with all size groups represented in the survey. The 2016 survey numbers for wipers is in the top five of all years we have been sampling. The number of 20 inch and larger fish is the best net catch ever recorded. Anglers will see wipers over 20 inches in length in 2016. As always, wipers are a schooling fish and they can be a “hit or miss” sample. However, numbers and size structure for 2016 looks quite good. Wipers exhibit much faster growth than white bass with fish reaching 15–16 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. Anglers should have some excitement in 2016 catching larger wipers.

Only 1 wiper/white bass greater than 16 inches is allowed in the daily bag.



Channel Catfish

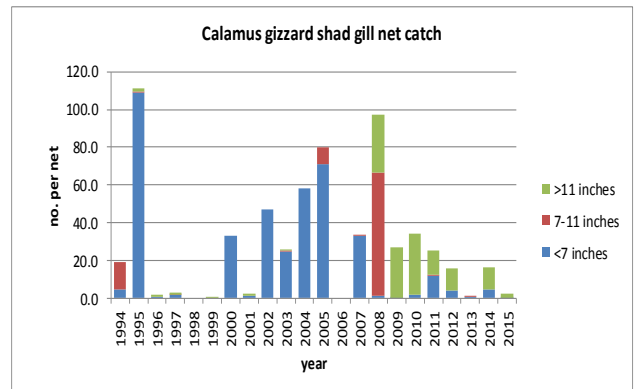
Channel catfish catch per net in the 2015 survey showed an increase in numbers over 2013 and 2014. As you can see from the graph, catfish sample catch numbers tend to vary widely. Mostly due to the numbers of small fish captured during the survey and not due to fluctuating numbers of larger fish. Trophy fish are present in Calamus Reservoir and catfishing can be quite good certain times of the year. The blue and red bars on the graph indicate catfish recruitment which obviously is critical to replenish the numbers of larger catfish as they succumb to angler harvest and natural mortality. Most years the catch of smaller fish has been very good. We look for similar catfish angling opportunity in 2016 as was seen in 2015. We have slightly changed the channel catfish stocking strategy at the Calamus and will closely evaluate the catfish population. Due to the absence of largemouth bass and not having a high density of large piscivores, we are now stocking smaller (6 inch) catfish in the summer rather than waiting to stock larger (10 inch) catfish in the Fall. To complete the numbers requested for stocking, some larger fish will still be stocked in the Fall as was done in 2015. However, the majority of channel catfish will be stocked in the summer at the upper end of the lake.



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Gizzard Shad

Gizzard shad are the primary prey 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. Adult numbers in the 2015 survey were adequate for high reproduction but low enough so as not to impact other fish species by competition for food resources. Young-of-the-year production was very high in 2015 with multiple spawns and the young remained small well into October. Young-of-the-year shad remained available as excellent prey for species such as walleye, white bass, and wipers all summer long and well into the fall. The small size of the young-of-the-year shad is the reason more were not caught in the gill net survey and the fact they were suspended off-shore. Numerous schools of young shad were noticed on the sonar while conducting the Fall survey.



2016 Activities

Planned stocking for 2016 includes nearly 7.5 million walleye fry along with 250,000 walleye fingerling. Other fish requested for stocking in 2016 include 25,000 6-10 inch channel catfish, and 25,000 2-inch wipers. Availability of these fish for stocking is dependent on hatchery production.

An angler creel survey will continue in 2016 from April through October. A creel clerk will be conducting angler counts and interviews several days a week during this time frame. Please be courteous and provide accurate information. This information is important to assist with the management of the lake's fishery resources.

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 2015, including the Calamus, and zebra mussels were found in Lewis and Clark Lake and the Missouri River. Invasive species technicians will be inspecting boats at Calamus in 2016. Please clean, drain, and dry your water craft prior to leaving any water body and never arrive at a lake with water in your boat or live well from anything other than a domestic source. Invasive mussels have also 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://www.neinvasives.com>.

Regulations that took effect 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. Regulations will be strictly enforced. Remember to bring ice on your fishing trip to transport your fish home.

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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Attention motorboat owners operating in Nebraska:

Starting in 2016, boaters whose motorized watercraft are registered in any state other than Nebraska must purchase and display a \$15 Aquatic Invasive Species (AIS) Stamp each year they launch their boat in Nebraska. The stamp will help fund AIS education and inspection programs.



- Boat inspections for AIS prior to launch in Nebraska are NOT mandatory at this time.
- Personal watercraft registered outside of Nebraska must have this stamp.
- Non-motorized craft registered in any state are exempt from the stamp.
- Stamps are not required for boats registered in Nebraska. A \$5 AIS fee is included on the residents' three-year boat registrations.
- Residents who register their boats in other states must have this stamp before launching in Nebraska.

This stamp is available online at OutdoorNebraska.org
or at Nebraska Game and Parks permitting offices.

Learn more about invasive species at neinvasives.com.

