Davis Creek Reservoir 2013 Fall Survey Summary

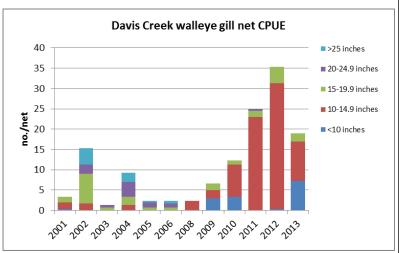


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The following text and graphs are the result of netting surveys completed during October 2013 at Davis Creek Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each year at Davis Creek using gill and frame nets. Gill nets are used to sample fish species found primarily in open water, such as walleye, while frame nets are used to sample shoreline oriented species, such as crappie. Gill nets only were used in Fall 2013 as frame nets were dropped from the sample due to high variability. Frame nets will be utilized in a Spring survey in 2014 in an attempt to better sample panfish populations. The following graphs show the total number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

Walleye

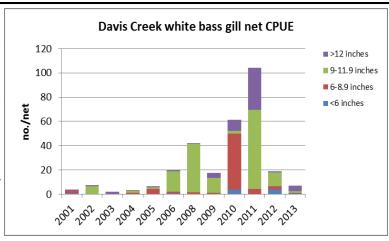
Walleye net catch has greatly improved since annual fingerling stockings were initiated in 2009. The walleye net catch dropped by about 45% from the high catch seen in 2012 but still remains very good at about 19 per net. Recruitment from stocking remains strong as seen by the fish from the 2013 year class that are under 10 inches in length. Growth rates are excellent and fish will cycle through the 15 inch size over the 2014 growing season. Walleye are exceeding 15 inches in three growing seasons. Year classes age 0-3 made up 95% of the walleye sample. Angling success in 2014 will likely be lower than seen in 2013 but still should be very good. Davis Creek is managed with a



15 inch minimum length limit for walleye to maximize walleye harvest for the angler.

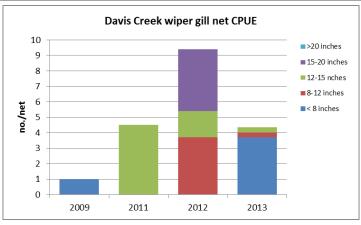
White Bass

White bass numbers in the gill net survey dropped for the second consecutive year. Although white bass are a schooling fish and can be hit or miss with nets, angler harvest undoubtedly had an effect on fish numbers the last two years. While numbers are lower going into 2014, some quality fish are present and will give anglers some fine fishing opportunity. White bass are exceeding 12 inches in length in their third growing season. Abundant prey in the form of age 0 gizzard shad have led to good growth rates for white bass the last couple of years. Hopefully a strong year class will be produced in 2014.



Wipers

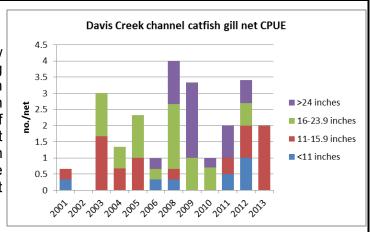
The gill net catch of wipers in 2013 dropped by about 50% from 2012 and most of the fish collected were from the 2013 year class. Wipers are being stocked to utilize abundant prey species available in Davis Creek Reservoir and to provide additional angling opportunities. Wiper abundance has increased since stocking was initiated. Wipers were stocked in Davis Creek Reservoir in 2009, 2010 and 2013. The key to producing higher numbers of wipers at Davis Creek hinges on receiving the numbers requested for stocking. Wipers can be difficult for our hatcheries to produce some years and not all stocking requests are wiper over 16 inches is allowed in the daily bag limit.



produce some years and not all stocking requests are filled. Anglers are reminded that only one white bass/

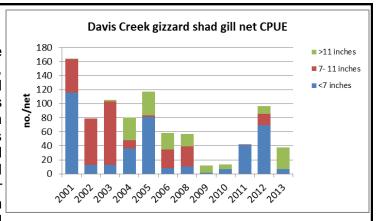
Channel Catfish

Channel catfish abundance has historically been low at Davis Creek Reservoir and 2013 sampling indicated that remained the case. Future catfish stockings, which began in 2012 and will occur in alternate years, should result in higher numbers of catfish for the angler. Catfish anglers should expect limilted fishina success in 2014 although opportunities exist for an occasional trophy-size catfish. Anglers are reminded that the daily bag limit for channel catfish is five fish per day.



Gizzard Shad

The gizzard shad population is monitored because they serve as the primary food source for walleye, white bass, and wipers at Davis Creek. Shad abundance declined in 2013 from the high numbers seen in 2012 and a higher percentage of larger fish were collected in gill nets. The spring of 2014 was extremely cold and late and that may have affected gizzard shad reproduction. A preferred gizzard shad population is one dominated by young-of-the-year fish that serve as excellent forage for sport fish species such as walleye, white bass, wipers and



crappie. Good brood fish numbers of shad are present for 2014 and hopefully environmental conditions allow for good reproduction and abundant young fish. Despite the poor gill net catch of small shad in 2013, growth rates and body condition of monitored sport fish remain good.

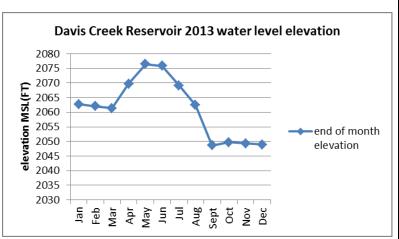
Additional Information about Davis Creek Reservoir

Fish Stocking

Walleye have been stocked annually since 2009 at a rate of 50 fingerling per acre or about 60,000 per year. Wipers have been requested annually since 2010 but were only available for stocking in 2010 and 2013. Wipers are requested for stocking at about 10 fingerling per acre or about 11,000 fish. Channel catfish supplemental stocking began in 2012 and will be conducted in even years at 6,500 ten-inch fish. Wipers and walleye were stocked in 2013 at the above rates and are requested again for 2014 along with the channel catfish.

General Information

Typical of irrigation reservoirs in Nebraska, fluctuating water levels have a large impact on available aquatic habitat at Davis Creek Reservoir. Shoreline habitat is best when the reservoir is near conservation pool and reduced when the reservoir is low in the fall and winter. The addition of deep water habitat structures may improve winter survival of shoreline-oriented fish species such as crappie. Current lake elevations can be found on the U.S. Bureau of Reclamation website:http://www.usbr.gov/gp-bin/arcweb_dane.pl



Information regarding camping facilities at Davis Creek Reservoir can be found at Lower Loup NRD's website: http://www.llnrd.org/recreation.html

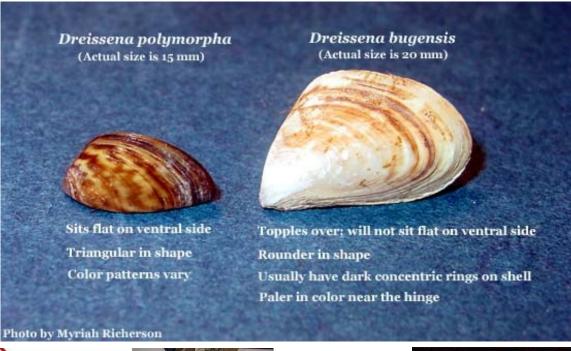


Zebra & Quagga Mussels

Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes. While no mussels have been identified at Davis Creek Reservoir, zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in Kansas and Colorado. Monitoring was completed at several Nebraska reservoirs during 2013 and no evidence of mussels were found.

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/

Special Note to Boat Anglers—>As of January 1, 2013, new regulations require that any boat that has been on a waterbody must drain all water from all compartments, equipment, or containers before leaving the launch area and that all aquatic vegetation must be removed from the boat and trailer before leaving the launch area. Additional information about preventing the spread of aquatic invasive species can be found in the 2013-2014 Nebraska Fishing Guide (pp. 28-29) and at the University of Nebraska website listed above.









For additional information about fisheries management at Davis Creek Reservoir, please contact the NGPC Norfolk office at 402-370-3374, or by email at the addresses listed below.

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