

Davis Creek Reservoir 2010 Fall Survey Summary

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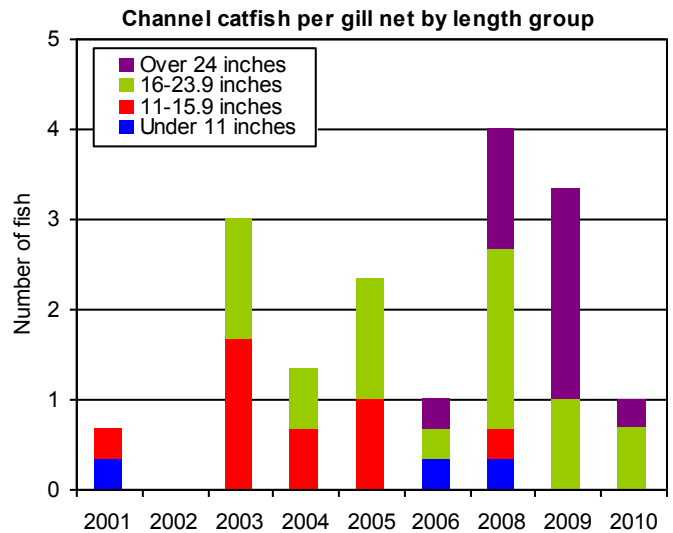


The following text and graphs are the result of netting surveys completed during September 2010 at Davis Creek Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Davis Creek using gill and frame nets. Gill nets are used to sample fish species found primarily in open water, such as walleye, while frame nets are used to sample shoreline oriented species, such as crappie. The nets are set each year at approximately the same locations and dates as previous years. This reduces variability and allows for trend comparisons of species abundance and size distribution. 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.

Channel Catfish

Channel catfish abundance has historically been low at Davis Creek Reservoir, as the average catch from 2001 to 2010 is only 1.9 catfish per gill net. The 2010 catch was below average and most of the sampled catfish ranged from 16 to 24 inches. The abundance of fish greater than 24 inches was lower than the past two years. The largest catfish sampled in 2010 was 34 inches long.

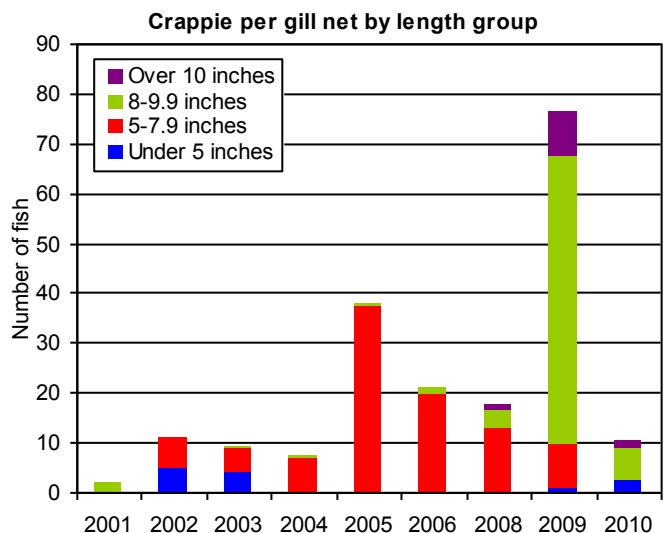
Catfish anglers should expect fair fishing success in 2011 and good opportunities exist for trophy size catfish. Anglers are reminded that the daily bag limit for channel catfish was reduced to five fish per day effective January 1, 2011.



Crappie

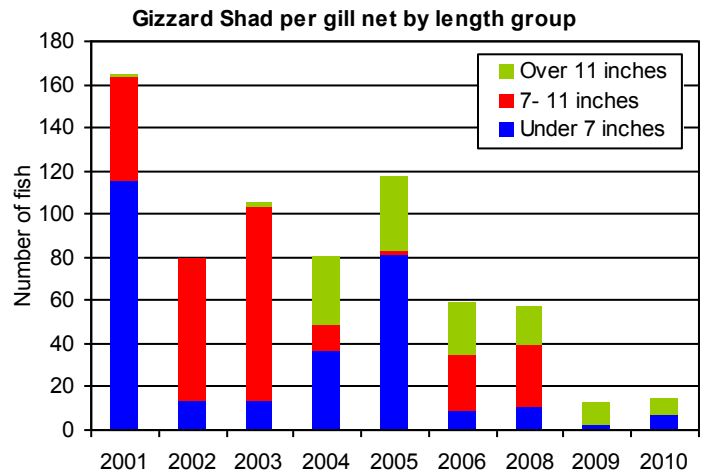
Crappie catch has been highly variable the past ten years at Davis Creek Reservoir. While the 2010 catch was substantially lower than the 2009 catch, it remains near the long-term average. Most of the crappie sampled ranged from 8 to 10 inches long. There were a fair number of crappie larger than 10 inches. The average crappie collected in the survey was 9.1 inches and the largest fish were 12.5 inches.

Although catch was lower in 2010, the crappie population has shown improvement in size distribution over the past four years. Anglers should find good angling opportunities while pursuing crappie at Davis Creek Reservoir during 2011. Anglers are reminded that the statewide bag limit for panfish was reduced to 15 fish per day effective January 1, 2011.



Gizzard Shad

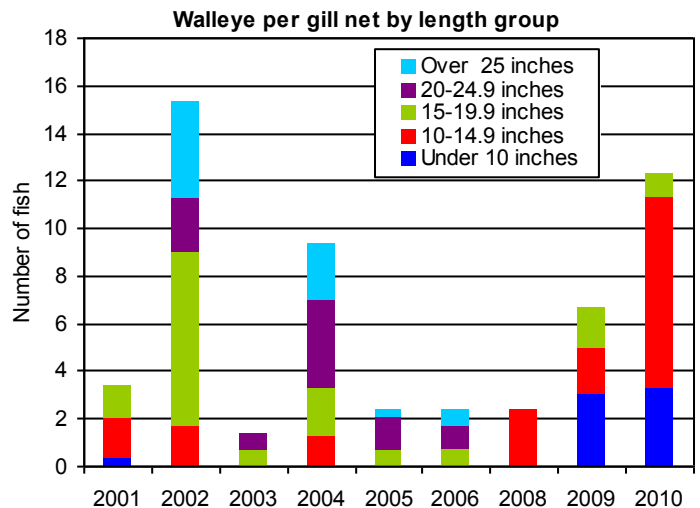
The gizzard shad population is monitored because they serve as the primary food source for walleyes, white bass, and wipers at Davis Creek. Shad abundance was very high from 2001 to 2008, but has substantially declined the past two years. There has also been a shift in size structure, as no 7 to 11 inch shad have been collected during the last two surveys. The size distribution of the current shad population is preferable. High densities of intermediate sized shad can result in increased competition for food resources with juvenile game fish and can reduce survival of young-of-the-year walleye and wipers.



Walleye

Walleye net catch has greatly improved the past two years, and the 2010 catch of 12.3 walleye per net was double the ten year average. Walleye from the 2009 and 2010 year-classes contributed 86% of the walleye collected in the survey. Fish from the 2009 year-class ranged from 11 to 14 inches and should contribute to the harvest during 2011. For the third consecutive year, there were no walleye larger than 20 inches collected. The average walleye collected in the survey was 12 inches and the largest fish was 16.5 inches.

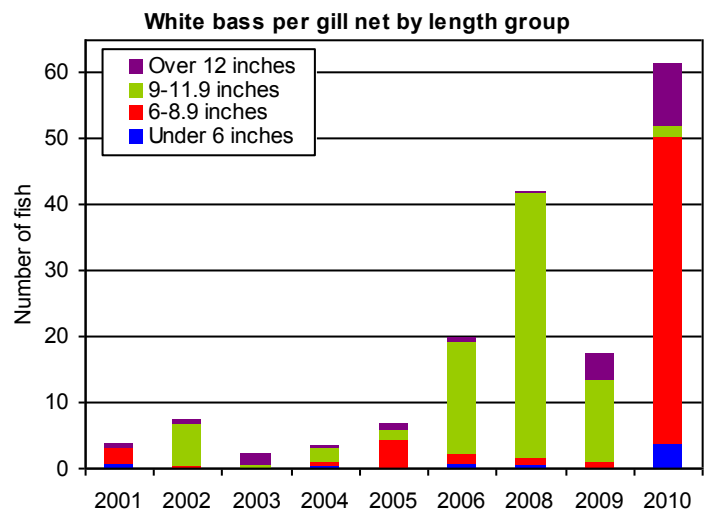
Based on the last two years of survey data, it appears that stocking walleye fingerlings is improving walleye densities at Davis Creek. The two strong year-classes produced should provide excellent angling opportunities for the next several years.



White Bass

The 2010 white bass catch was the highest in ten years. Fish were captured in all size categories, but six to nine inch fish were most abundant. Age-0 fish comprised 80% of the sample and ranged from 5 to 8.5 inches. This age-class should provide excellent fishing opportunities in future years. Abundance of fish greater than 12 inches was also much improved. Most of the fish in this size group are from the 2007 year-class and fish up to 14 inches were sampled.

Good angling success on white bass was experienced during the fall of 2010 at Davis Creek and this should continue into 2011. Excellent opportunities should exist for large white bass.

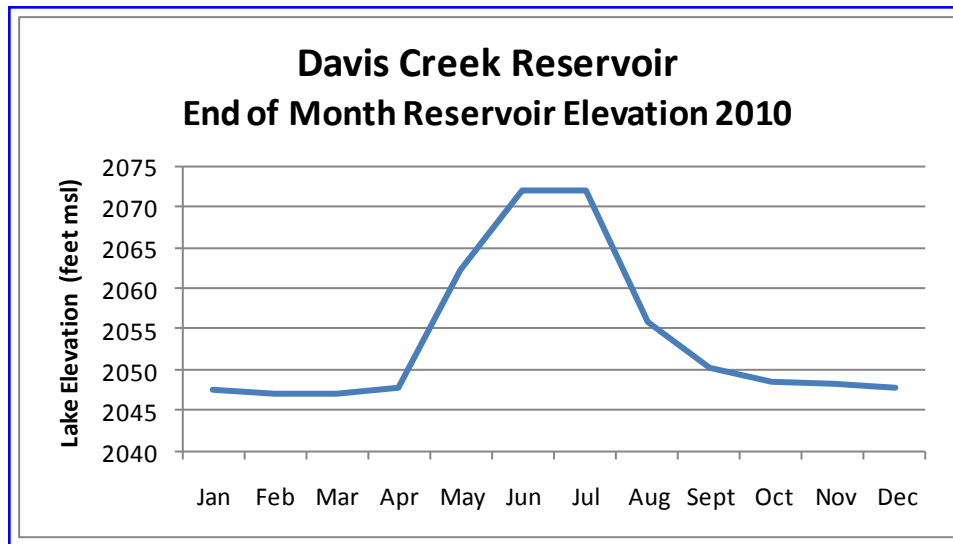


Wipers

Wipers were first stocked at Davis Creek in 2009, and another stocking occurred in 2010. Wipers from the 2009 stocking were collected during the 2009 survey, but no wipers were sampled in the 2010 netting survey. Wiper fingerlings are scheduled for stocking again in 2011. Wipers are being stocked to utilize abundant prey species available in Davis Creek Reservoir and to provide additional angling opportunities. Future stockings will continue dependent on prey availability.

Additional Information about Davis Creek Reservoir

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



Fish stocking in 2010 consisted of 66,000 walleye fingerlings and 11,240 wiper fingerlings. Both walleye and wiper fingerlings are scheduled for stocking in 2011.

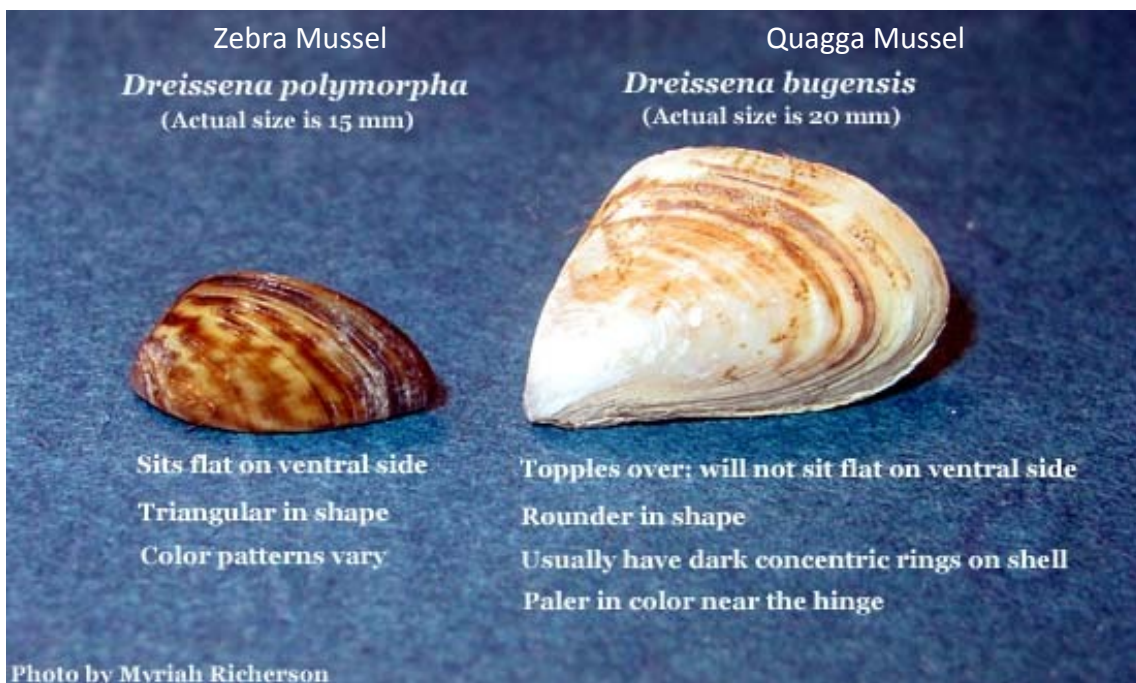
Information regarding camping facilities at Davis Creek Reservoir can be found at Lower Loup NRD's website: <http://www.llnrd.org/recreation.html>



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 confirmed at Zorinsky Lake in Omaha and are present in several reservoirs in Kansas and Colorado. Monitoring was completed at several Nebraska reservoirs during 2010 and no evidence of mussels were found. Unfortunately, adult mussels were found during the fall of 2010 at Zorinsky Lake by a private citizen. This lake is currently closed to public access and efforts are being made to eradicate the mussel population. Statewide monitoring efforts will be expanded in 2011 to determine if mussels are present in other water bodies.

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/>.



For additional information about fisheries management at Davis Creek Reservoir, please contact the NGPC Kearney office at 308-865-5310, or by email at the addresses listed below.

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