Merritt Reservoir
2014 Fall Survey Summary

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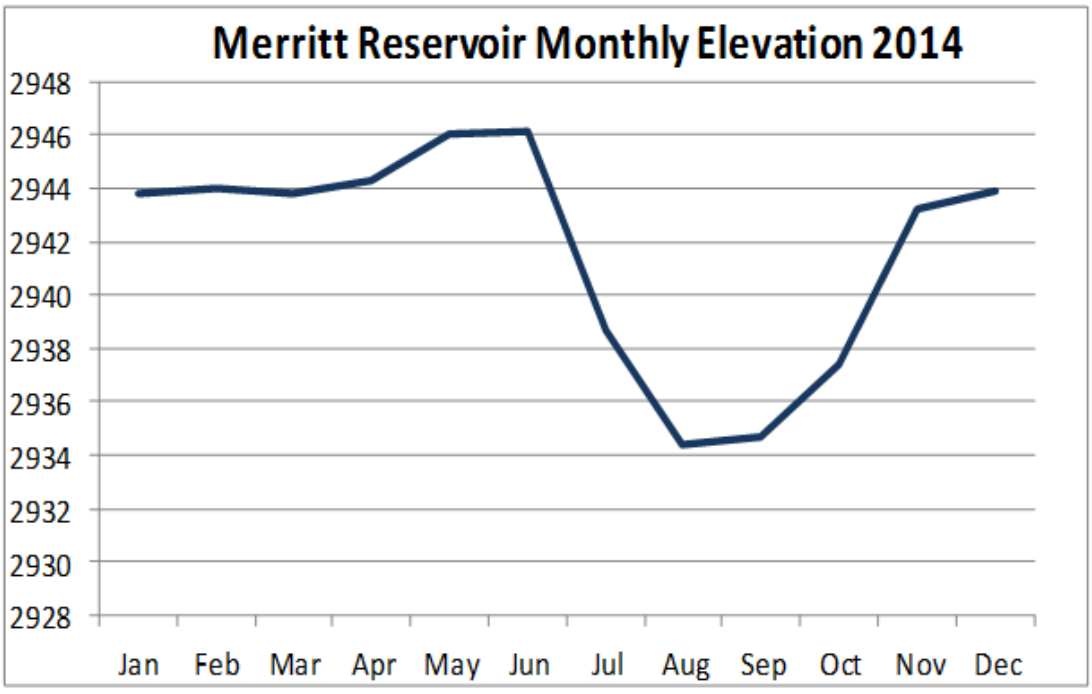
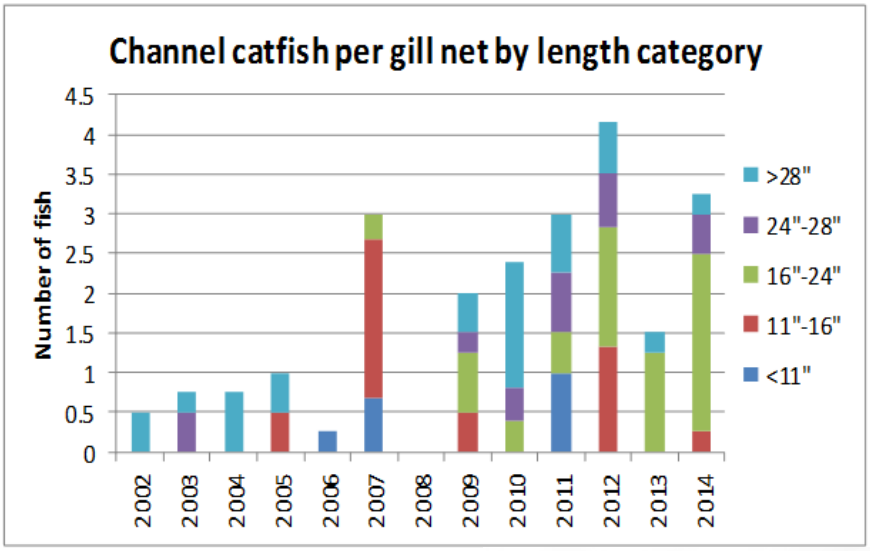
Merritt Reservoir is located in the Nebraska sandhills approximately 26 miles southwest of Valentine, NE. The area is comprised of 2,905 acres of water with 6,000 acres of land adjacent to the reservoir. The reservoir was built in 1964 by the Bureau of Reclamation for irrigation purposes. When built, the Snake River was dammed near its confluence with Boardman Creek, flooding both valleys along with the Powder Horn arm of the reservoir. Flows from both the Boardman Creek and Snake River contribute to filling the reservoir to full pool each year. A graph showing fluctuations in lake levels over the last year can be seen below. The water and land adjacent to the reservoir is managed by the Nebraska Game and Parks Commission for fishing, hunting, and recreational activities. Fishing is available year round and several different fish species are present in Merritt Reservoir which include: alewife, walleye, white bass, muskellunge, northern pike, yellow perch, bluegill, pumpkinseed, black crappie, largemouth bass, smallmouth bass, freshwater drum, black bullhead, white sucker, and common carp.

Facilities at Merritt Reservoir include eight campgrounds (three with electrical hookups and one with ADA accessible shower), one dump station, vault toilets, picnic shelters, two fish cleaning stations, five boat ramps with lighted parking lots, and an area concessionaire which provides permits, groceries, fee camping with RV hookups, boat rentals, fuel, cabins and guide services.



The following text and graphs are the results of netting surveys completed during October 2014 at Merritt Reservoir. For comparative purposes it shows the results from previous years. Biologists use gill nets to sample species that are primarily found in open water such as walleye and white bass and trap nets to sample shore oriented species such as bluegill, black crappie, yellow perch and northern pike. Electrofishing surveys will be conducted every other year at Merritt Reservoir to sample species such as largemouth and smallmouth bass. The nets and electrofishing stations are sampled each year at approximately the same locations and dates as previous years to allow for trend comparisons.

Channel Catfish



Although abundance of channel catfish is low in Merritt Reservoir the lake produces some trophy catfish each year. The state record was caught here in 1986 and weighed 41.5 pounds.

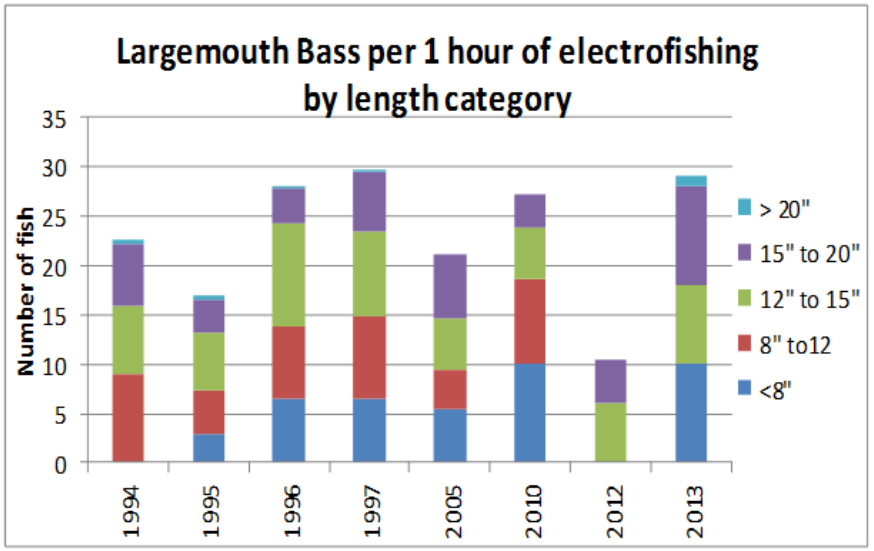
Gill net catch for channel catfish in 2014 increased from the 2013 survey with 3.25 fish caught per net. This is almost double that of the average since 2002 of 1.73 fish per net. Even though abundance remains low the population shows excellent size structure and 92% of the fish sampled were over 16 inches in length. Catfish sampled averaged 19.7 inches with the largest fish measuring 31.8 inches.

Abundance of catfish has always remained low in Merritt Reservoir , beginning in 2013 approximately 21,750 channel catfish were stocked. This is a stocking rate of 7.5 fish per acre. This stocking rate will be continued and monitored annually to document catfish numbers and size structure at Merritt to provide a quality channel catfishing opportunity.

Channel Catfish Regulations: Daily bag limit of 5 fish with a possession limit of 20 fish.

Largemouth Bass

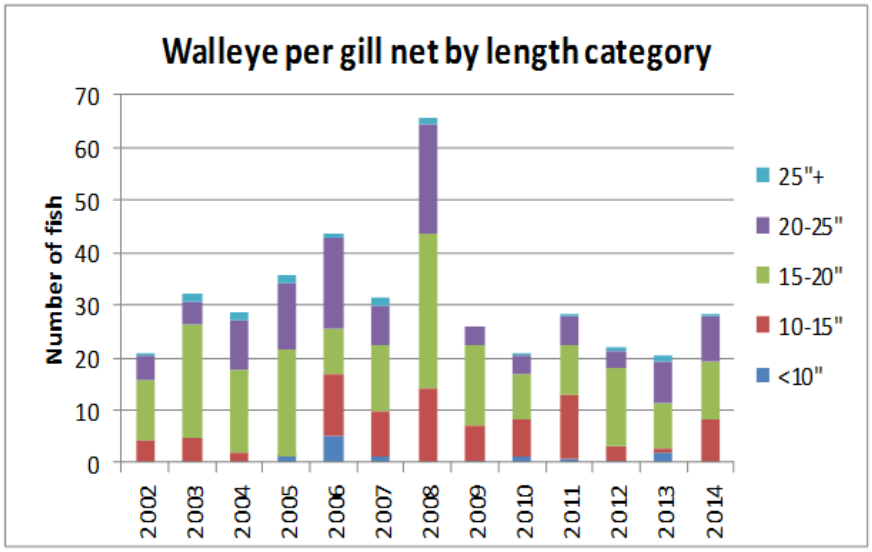
Merritt Reservoir has been fairly consistent over the past several decades when it comes to size structure of fish caught. Beginning in 2013 surveys will be conducted on alternate years therefore no surveys were conducted in 2014. Angler reports reveal that fishing at Merritt for this species can be great enjoyment at times especially during a top water bite.



Largemouth Bass Regulations: Minimum length of 15 inches with only one fish longer than 21 inches in the daily bag. Daily bag limit of 5 fish and a possession limit of 10 fish

Walleye

The walleye gill net catch in 2014 was up from the past several years with a catch rated of 28.25 fish per net. This catch rate is slightly below the average since 2002 of 31 fish per net. Every length category was sampled except for fish under that 10 inch mark. Of those fish that were sampled 70% of them were over the statewide minimum of 15 inches and 32 % were over 20 inches in length. Twelve year classes were sampled and these fish averaged 17.6 inches with the largest measuring 26.4 inches.



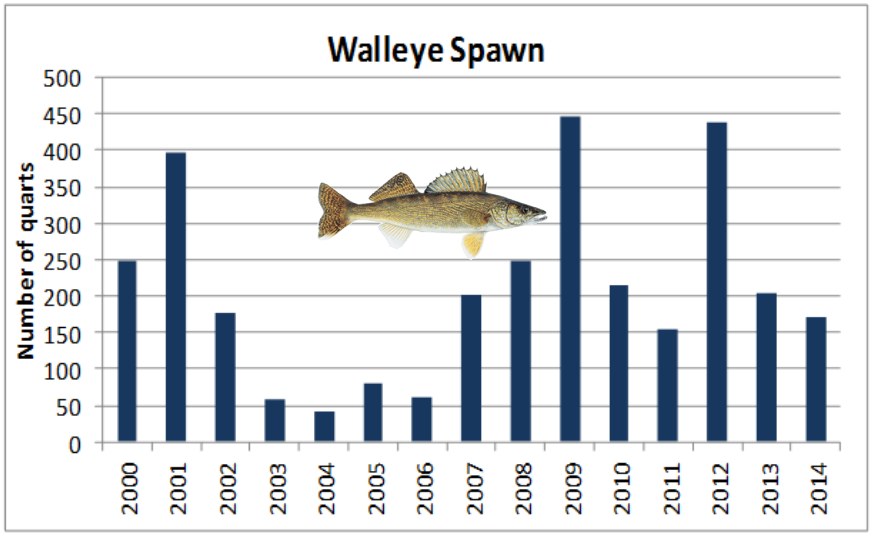
Merritt Reservoir was stocked in 2014 with approximately 217,875 fingerling (2 Inch) walleye in June to maintain the population. This is an increased stocking rate from 50 per acre to 75 fish per acre. This stocking will be continued and monitored over the next several years with fall gill netting to document species abundance and the health of the fishery.

Walleye Regulations: Anglers at Merritt are allowed a daily bag limit of four walleye which may include one from 15 to 18 inches (it is allowable to have all fish over 18 inches) but only one fish over 22 inches is allowed in the daily bag.

Anglers in 2015 should see improved success compared to the past several years on fish 15-25 inches in length.

Walleye Spawn

During the 2014 walleye spawn operation at Merritt Reservoir, fishery personnel collected approximately 172 quarts of eggs. Fisheries division personnel will be conducting spawning operations again in 2015 at Merritt, Sherman, and McConaughy reservoirs. These operations generally occur in late March or early April and last until hatchery production needs are met. Large mesh nets are set parallel to the dam or shore in order to collect females as they venture in to spawn. These nets are marked with a buoy on each end and anglers are reminded not to cast between the buoys or lures will be lost.



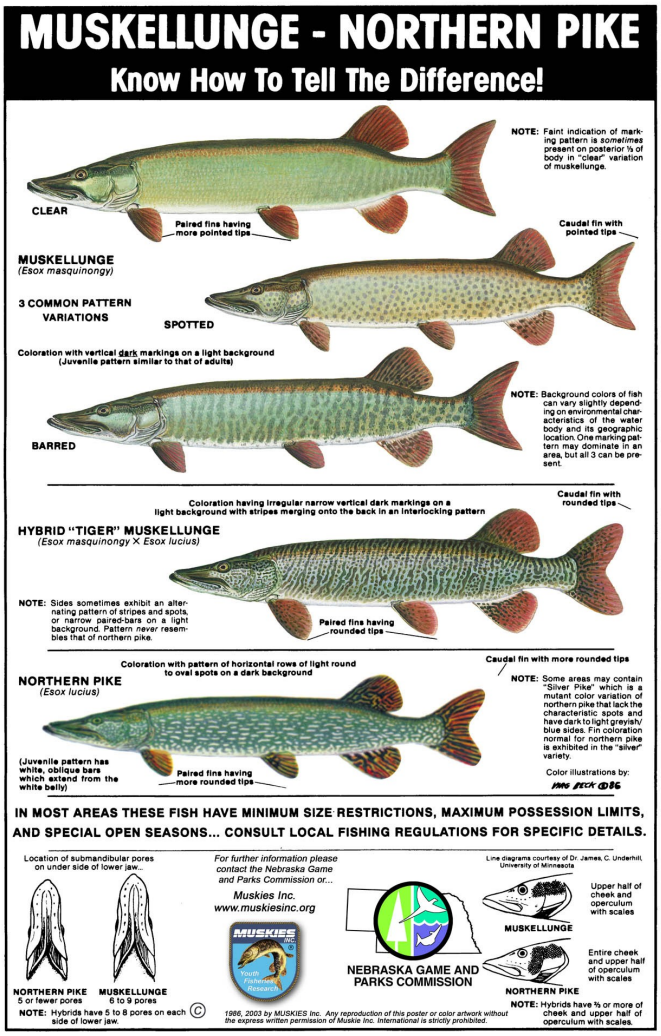
Muskellunge and Northern Pike

Merritt Reservoir is one of top places for anglers to target trophy muskellunge and northern pike. The state record muskellunge came from Merritt in 1992 and weighed 41.5 pounds. Increased abundance of northern pike over the past several years have also added additional angling opportunities.

Each spring nets are set to collect northern pike and muskellunge brood fish which will help produce northern pike, pure strain muskellunge, and hybrid tiger muskellunge (northern pike x muskellunge) for production needs. During the 2014 collection, the largest northern pike measured 42 inches and weighed approximately 19 pounds and the largest muskellunge collected measured 46 inches and weighed 31 pounds.

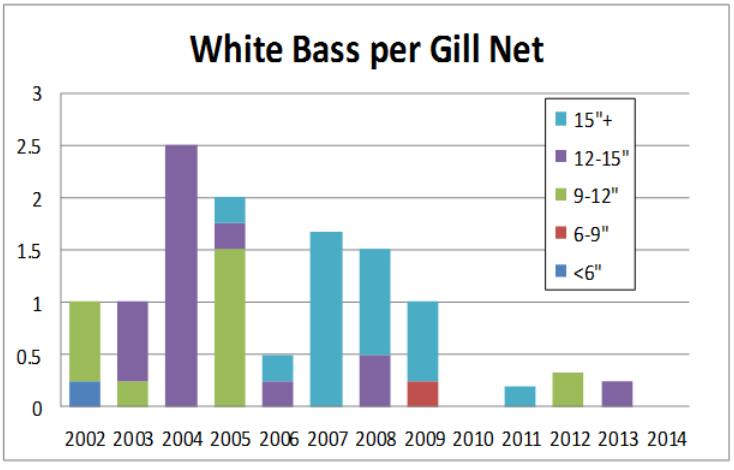
Regulations for northern pike allow a daily bag limit of 3 fish with a possession limit of 10 fish. Only 1 fish is allowed in the daily bag limit for muskellunge with a minimum of 40 inches in length.

Anglers should see similar to improved catch rates for northern pike and muskellunge with strong year classes of 32-38 inch fish for both species.



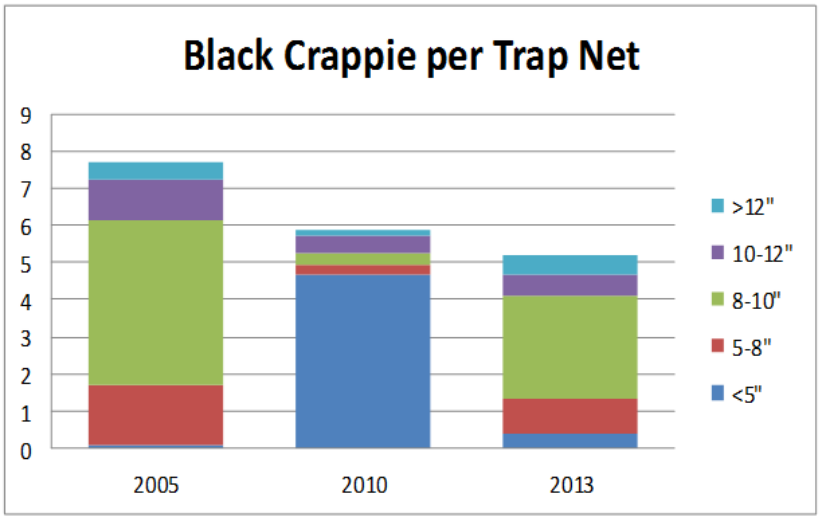
White Bass

Abundance of white bass has remained low over the past several years and no fish were collected during the standardized surveys in 2014. However, angler reports were documented with catches of white bass up to 16 inches in 2014. Efforts had been made over the past several years with supplemental stockings of white bass to increase the population and provide a late summer fishery. These stockings have been discontinued for now due to hatchery constraints and statewide white bass stocking requests.



Panfish

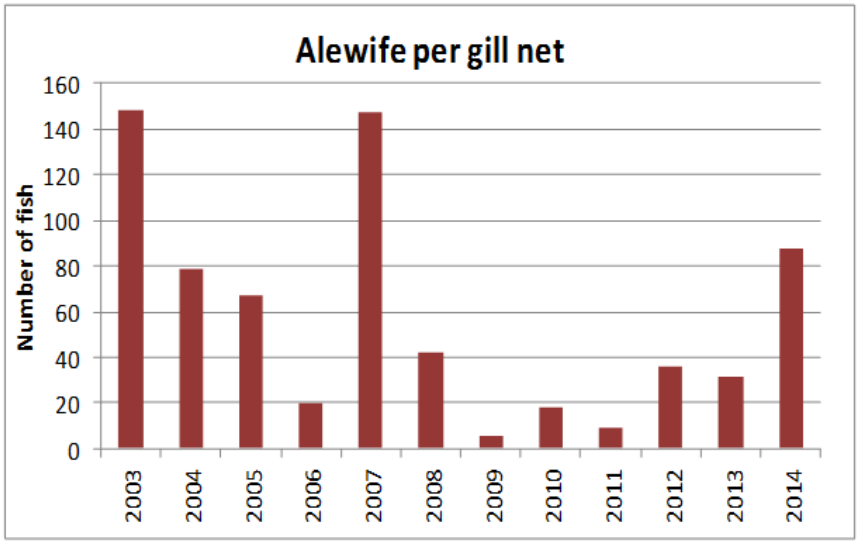
Panfish such as black crappie and bluegill will be sampled in 2015. Sampling efforts in 2013 indicated a great size structure for black crappie and has also been documented by angler reports during the open water and ice fishing seasons of 2014-2015.



Panfish Regulations: Bag limit of 15 in combination and a possession limit of 30 fish.

Alewife

These fish are the primary prey fish in Merritt for fish such as walleye, northern pike, muskellunge, largemouth bass, etc. They provide an excellent food source for these species. These fish however compete immensely for food that small fish rely on such as zooplankton and other aquatic invertebrates. These fish are also a predator on eggs of other species and is a large factor to why white bass spawning and recruitment is limited at Merritt Reservoir.



For additional information about fisheries management at Merritt Reservoir please contact the following NGPC personnel by phone or email addressees listed below.

District Supervisor: Al Hanson, (308) 763-2940 al.hanson@nebraska.gov

Biologist: Zac Brashears, (402) 376-8080 zac.brashears@nebraska.gov

Biologist: Joe Rydell, (308) 763-2940 joe.rydell@nebraska.gov

Angler Creel Survey

Angler creel surveys will once again be conducted at Merritt Reservoir in 2015. The study is being done by an agreement with the Nebraska Game and Parks Commission and the Nebraska Cooperative Research Unit through the University of Nebraska at Lincoln. This will be the 7th year of this joint effort and the survey will be conducted from April 1 until October 31, 2015. During the survey anglers are counted and interviewed for twenty randomly selected days per month, fourteen week days and six weekend days. Information gathered allows fisheries managers to look at estimates of angling pressure, size structure of fish caught, catch and harvest per species, and catch rates per hour. This information will assist managers in providing an optimum sport fishery. Cooperation with creel clerks is encouraged; it will only take a few minutes of your time.

Zebra and Quagga Mussels

Anglers and boaters should know that AIS (Aquatic Invasive Species) issues have become a rising concern in Nebraska. Zebra mussels (pictured right) and quagga mussels are small fingernail-sized mussels and adults are usually 1/4 to 1/2 inches long with alternating yellow and brownish colored stripes on their shell. Statewide monitoring in Nebraska has begun since the zebra mussels were confirmed in Nebraska at Offutt Lake and Zorinsky Lake near Omaha and are present in several reservoirs in Colorado and Kansas. Sampling for veligers (free-swimming larvae of adult mussels) occurs statewide from the months of May through September. No evidence of these mussels has been discovered in any other lakes sampled.

These mussels can spread in their immature form known as veligers by being transported in bilge, ballast, or live –well water or as adults attached to boat hulls, engines, aquatic vegetation, or other surfaces. Once established these mussels can cause millions of dollars in damage to recreation, water systems, and fisheries. Anglers should always remember to **CLEAN DRAIN DRY** which will help to prevent the spread of these unwanted invasive species.

CLEAN– Remove plants, animals, mud , and thoroughly wash equipment that came into contact with the water.

DRAIN– Drain all water before leaving, including wells, bilge, ballast, and any parts or equipment that can hold water.

DRY– Allow all equipment to dry completely before launching into another body of water.

For more information on invasive species in Nebraska make sure to visit neinvasives.com.

NEW FOR 2015: It is illegal to either arrive or leave any water body in Nebraska with water other than from a domestic source (water supply system, well or bottled) except for firefighting purposes. This regulation is intended to prevent or delay the establishment of aquatic invasive species, particularly zebra mussels, in Nebraska waters.