

2015 Northeast District Flood Control Reservoir Survey Results

Nebraska Game and Parks Commission
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Several flood control reservoirs dot the landscape of the Northeast District ranging in size from approximately 25 to 700 surface acres. The primary species making up the fish communities in most of these lakes are largemouth bass, bluegill, black crappie, and channel catfish. However, Willow Creek Reservoir near Pierce is the largest of the flood control reservoirs in the Northeast District and management is geared toward a large reservoir fishery that includes walleye, wipers, white bass, and channel catfish. It also provides some very good opportunities for crappie anglers. Walleye are found in some of the smaller reservoirs also but in relatively low numbers. However, sampling in Maple Creek and Maskenthine over the last two years has revealed good walleye populations in those lakes. Most of the flood control reservoirs receive annual stockings of channel catfish while about half are stocked with walleye on an annual basis. Species in these lakes other than the channel catfish and walleye maintain their populations through natural reproduction and recruitment.

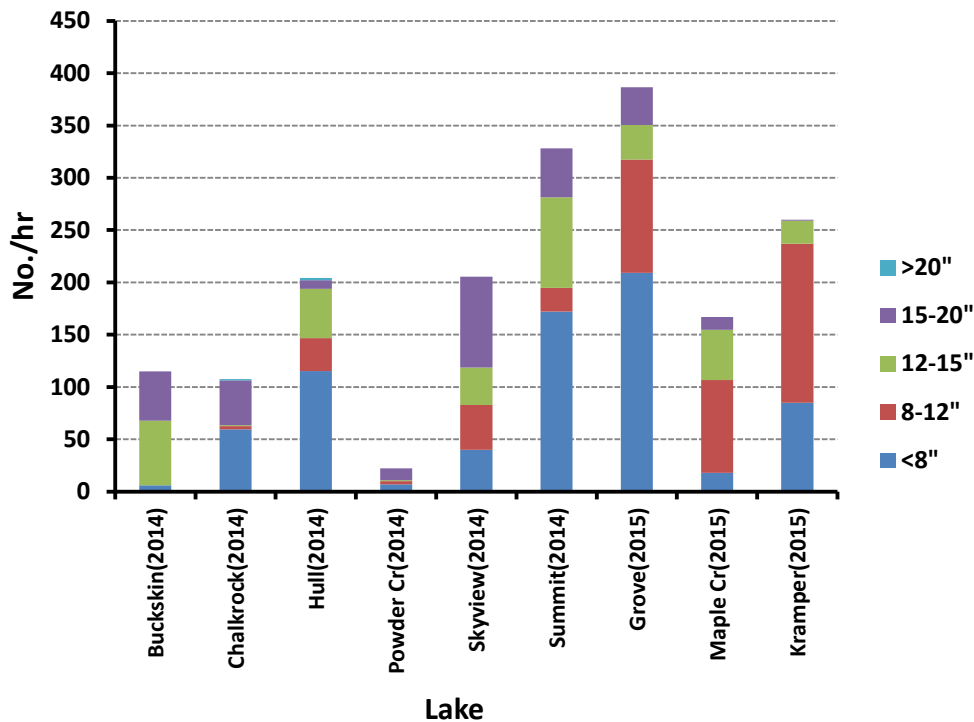
In 2015, another flood control reservoir was added to the pool of fishing opportunities in this part of the state. Kramper Lake, located on the Danish Alps Recreation Area just east of Hubbard, encompasses approximately 250 surface acres and has been initially stocked with largemouth bass, bluegill, black crappie, channel catfish, and walleye. Through sampling efforts and angler interviews, the lake's fish community appears to be developing quite well with good numbers of bass and harvestable-sized bluegill and channel catfish already present.

Many of the Northeast District Lakes contain dense beds of aquatic vegetation on a seasonal basis. Curly-leaf pondweed is found in this area and is classified as an Aquatic Invasive Species. Those lakes that develop especially dense stands of curly-leaf include Pibel, Grove, Summit, Buckskin, & Maskenthine. In a typical year curly-leaf pondweed begins growing aggressively as the water temperature warms in the month of April, peaks in density in May and early to mid-June, and dies back to more tolerable levels by the first part of July. **Anglers are again reminded of the regulations that went into effect in 2013 requiring any boat that has been on a waterbody to drain all water from all compartments, equipment, or containers before leaving the launch area and to remove all aquatic vegetation from the boat and trailer before leaving the launch area.** These regulations are meant to control and/or limit the spread of aquatic invasive species such as zebra mussels, Eurasian watermilfoil, and the aforementioned curly-leaf pondweed to name a few. Nonresident boaters are also reminded of the Invasive

Species sticker requirement. The sticker provides funding for dealing with invasive species that are already present in addition to education and prevention activities that are meant to limit their spread. Nonresident boaters must have one of these stickers affixed to their watercraft before launching in any Nebraska water. Resident boaters also contribute to this fund through a surcharge on their boat registration. The new funding and the "Clean, Drain, and Dry" regulations set forth in 2013 become all that much more important following the discovery of zebra mussels in Lewis and Clark Lake and the Missouri River in 2014 and 2015. Additional information about aquatic invasive species and preventing their distribution can be found in the 2016 Nebraska Fishing Guide (pp. 30-31) and at the University of Nebraska Invasive Species website: <http://www.neinvasives.com>. More information for Northeast District lakes such as location, boat ramps, species present, special regulations etc. can also be found in the Nebraska Fishing Guide.

Largemouth bass

Largemouth bass CPUE

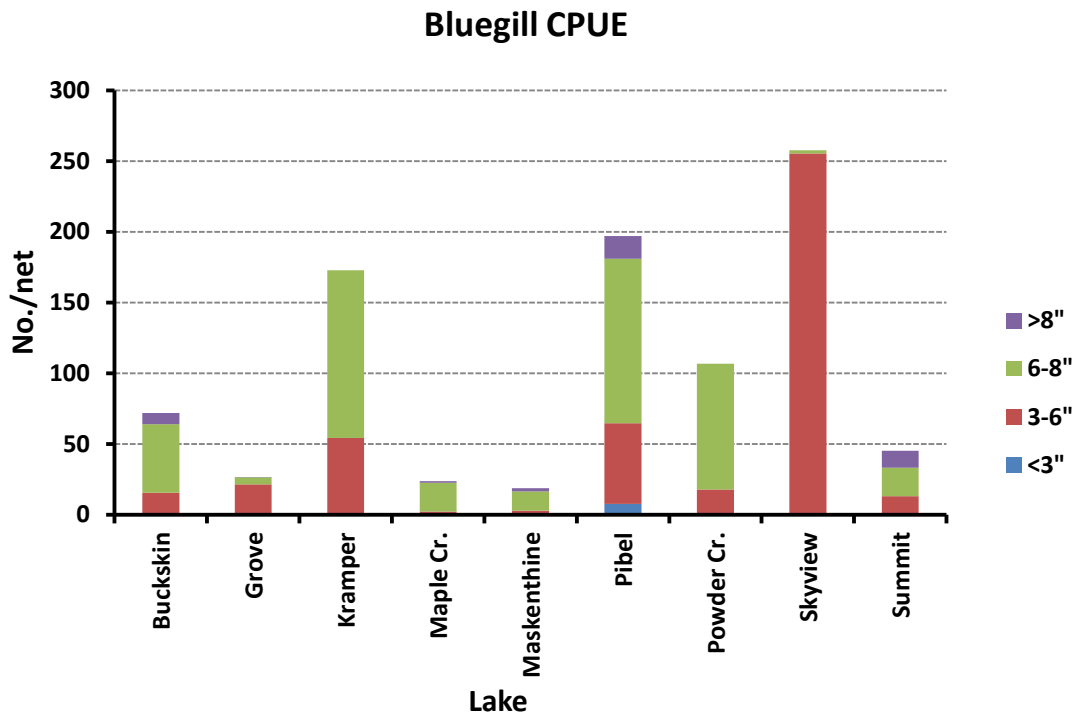


Bass are collected by night-time electrofishing efforts that are conducted in the spring of the year. A catch rate of at least 150 bass per hour of electrofishing is desirable. This minimum catch rate not only equates to good catch rates for anglers seeking bass but also limits panfish recruitment so that desirable growth rates and size structure on those panfish can be maintained.

Only 3 lakes were sampled for bass in 2015 due to time constraints and equipment issues. 2014 data is included to provide additional information on bass angling opportunities in the district. The three lakes sampled in 2015 will all provide quality angling opportunities for bass, revealing both good numbers and size structure. Kramper Lake was just opened to the public in the late summer and the fish community is still developing so most of the bass will run a little small. However, in addition to the fish growing quickly in this new reservoir, some adult bass were stocked while the lake basin was still under construction so there are some larger ones present. Powder Creek, on the other hand, may challenge those anglers seeking bass considering the low numbers present but those that are caught should be larger fish. Excellent catch rates and good size distribution were apparent in all of the other lakes, including some larger fish. Other flood control reservoirs in the Northeast District that should provide good bass angling opportunities include

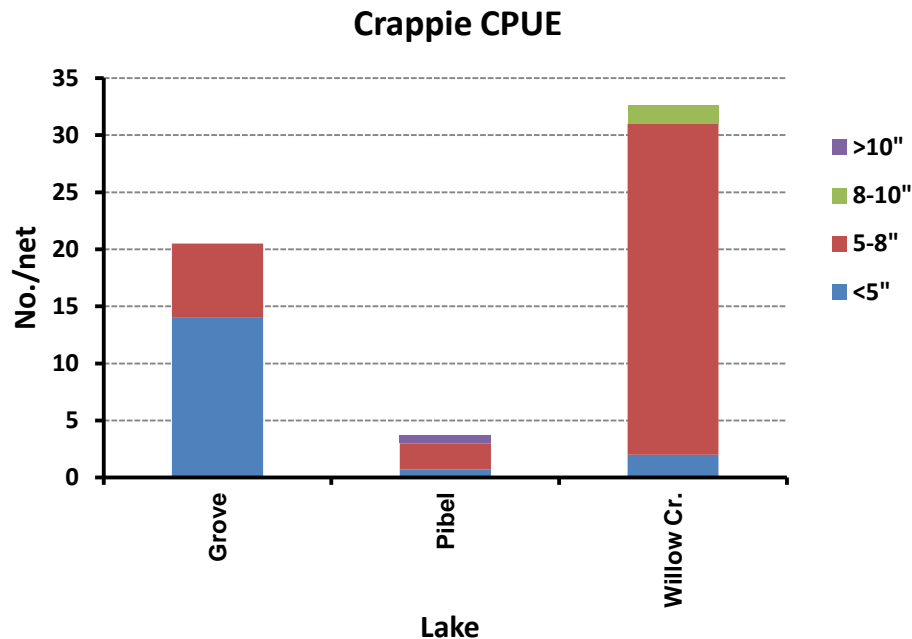
Maskenthine, Pibel, and Cub Creek Lakes. Of the lakes sampled, Buckskin and Powder Creek are managed with a 21-inch minimum length limit while the others fall under the statewide 15-inch minimum length limit.

Bluegill



Frame net sampling for bluegill also takes place in the spring, from late April through June. Nine flood control reservoirs were sampled in 2015. Catching “keeper” bluegill will be a struggle at Powder Creek and Skyview but the remainder of those listed in the graph held good numbers of bluegill over 7 inches, including a fair number exceeding 8 inches in some of the lakes. Bluegill size structure appeared to improve slightly at Powder Creek but sampling at Skyview again revealed an abundance of bluegill less than 6 inches. Summit, Buckskin, Maple Creek, Maskenthine, Grove, and Pibel Lakes will likely be the best bets for nicer bluegill in 2016. Kramper Lake shouldn’t be overlooked either, however, as some nice bluegill are already present but also because they will grow quickly as the population continues to develop in this new lake environment.

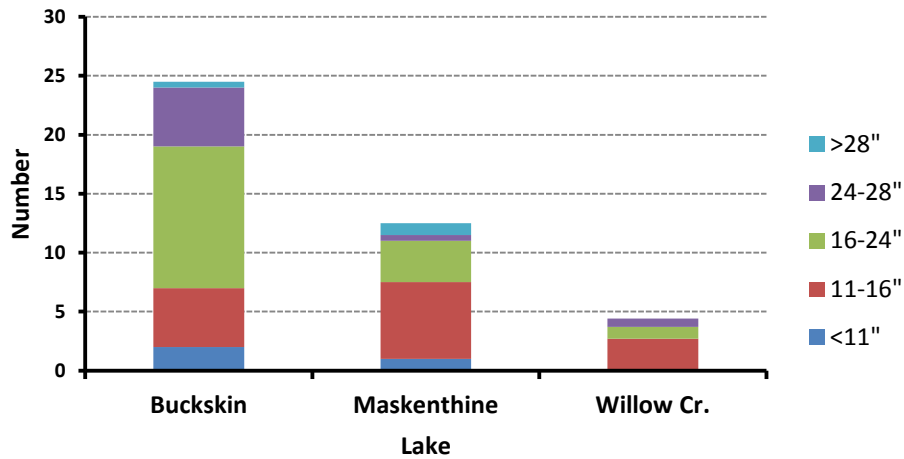
Crappie



Crappie catch can be very "hit and miss" in the spring of the year and very few to none were observed during frame net sampling in the smaller reservoirs in the spring. Spring-time sampling efforts at Grove and Pibel lakes provided reportable numbers of crappie. Conversely, Willow Creek frame netting is conducted in the fall in conjunction with our gill net survey. Not many crappie were captured at Pibel but sampling indicated that some harvestable fish could be present while sampling at Grove and Willow Creek indicated strong year classes that are running small at present but should provide some quality angling opportunities over the next several years. Other smaller lakes in the district that historically provide decent angling opportunities for crappie include Buckskin, Summit, Cub Creek, and Maskenthine. Additionally, crappie were stocked in Maple Creek in 2012 so, although few crappie have been sampled there, some of harvestable-size should be present. Kramper Lake was stocked with crappie in late 2014 and have thus only been through one growing season in the lake. It will probably be at least another year before crappie harvest can occur there.

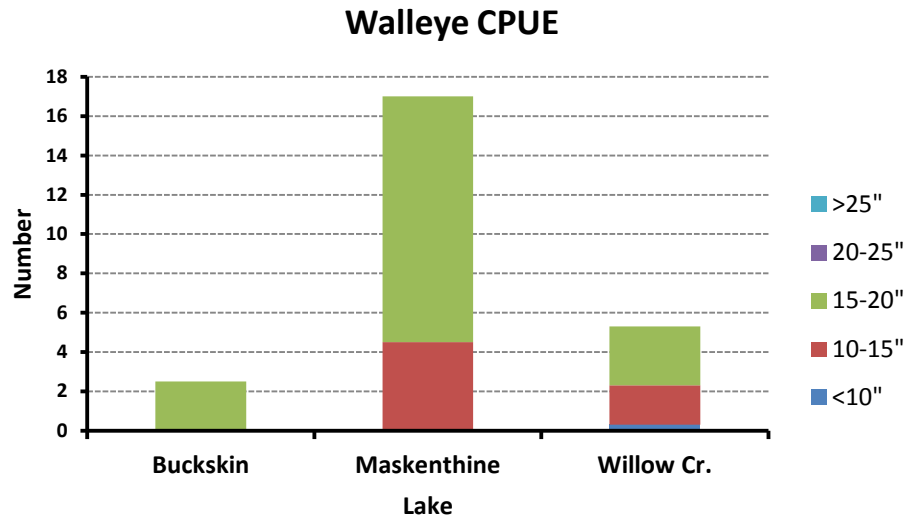
Channel catfish

Channel catfish GN CPUE



Fall gill netting is the standard method for sampling channel catfish populations and three flood control reservoirs were surveyed with gill nets in 2015. Gill net surveys revealed populations with good size structure in each of the lakes. Abundance appeared fairly low in Willow Creek, however, which is likely a product of a catfish die-off that occurred there in the spring of 2014. Incidental catches of catfish in frame nets and past gill net sampling indicate that there are also quality opportunities for catfish (both numbers and size) in other lakes in the district including Buckskin, Powder Creek, Pibel, Summit, and Maskenthine.

Walleye



Fall gill net sampling indicated low walleye abundance in Buckskin and Willow Creek but a bit of a surprise in Maskenthine with 17 per net with the majority being of harvestable length. The catch has been up the last couple of years at Willow Creek but has still been well below our objective. For comparison at Willow Creek, the catch rates from 2009 to 2013 ranged from 0.3 to 2.8 per gill net, whereas we saw 7 per net in 2014 and a little over 5 per net in 2015. Several factors could be limiting recruitment of walleye over the last several years, a couple of possibilities being weather patterns (fairly major cold fronts) around the time of stocking and the degraded water quality that has become an issue in the reservoir. Willow Creek is the only flood control reservoir in the district that is truly managed as a "walleye lake" but there are a few others that do provide some opportunity. A couple of lakes that were not sampled in 2015 but may provide fair opportunity for those seeking walleye are Maple Creek and Summit lakes. Walleye populations in all of these lakes are maintained through stocking. Approximately 2-inch fingerlings are annually stocked in most of the flood control reservoirs except that Summit and Willow Creek are stocked with 3 to 5 day old fry.

Those interested in additional information on these and other lakes in the Northeast region can contact Jeff Schuckman (jeff.schuckman@nebraska.gov) or Phil Chvala (phil.chvala@nebraska.gov) at 402-370-3374.