## **North West District Sandhills Lakes**

# **2014 Survey Summary**

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#### **INTRODUCTION:**

The sandhills region of Nebraska is a unique geographical region comprised of stabilized sand dunes, exposed groundwater lakes in the valleys, and perched mineralized lakes on poorly drained soils. A few lakes are watered by artesian wells and springs while the majority of lakes depend on the water table and fluctuate with its seasonal levels. Most lakes in the sandhills region are either too shallow or too alkaline to support a long-term fishery. Sandhills lakes are typically shallow, vegetated, highly productive systems with fisheries that usually consist of yellow perch, bluegill, black crappie, largemouth bass, northern pike, black bullhead, and green sunfish. The following summary is for sandhills lakes with public access that were surveyed in 2014. Fisheries data from the Valentine NWR is available in its own summary at www.outdoornebraska.ne.gov/fishing/programs/sampling/index.asp. An interactive map of lake locations and species composition can be found at www.outdoornebraska.ne.gov/gisapps/fishing.asp.

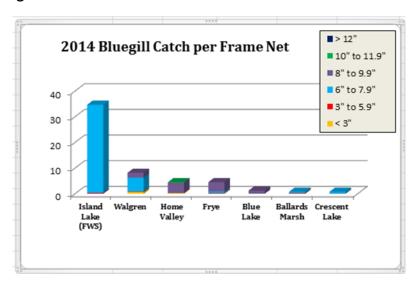
#### Sampling Methods

Sandhills lakes typically get surveyed at least once every 3 years for each priority species. Largemouth bass are surveyed at night by electrofishing while shoreline oriented species (bluegill, crappie, yellow perch, and northern pike) are sampled using frame nets. Species collected during a survey are counted, measured, weighed, and some scales removed for aging before releasing them back. Biologists use this information to monitor the health and size structures of each fish population. During 2014, some of the more popular sandhills lakes did not get sampled but will be noted in comments if they are still a quality destination for certain species.





#### Bluegill:





Sandhill lakes are historically known for producing trophy bluegill. These highly productive systems can produce an 8 inch bluegill in as little as 5 years where it may take up to 10 years to produce an 8 inch "gill" in Nebraska's reservoirs or small ponds. The 2014 survey suggest that anglers looking for the biggest bluegill should try Home Valley Lake WMA. Smith Lake WMA was not surveyed in 2014 but also produces fish over 10 inches. Island lake had the highest density of bluegill in 2014 with an average size of 6.7 inches. Anglers looking for adittional opportunities for quality bluegill (> 8 inches) should try Frye Lake, Blue Lake, or Walgren. Mid-May is the best time to look for bluegill on spawning beds, and typically produces some of the best panfish angling of the year.

#### **Yellow Perch**

Yellow perch are one of the most sought after panfish species in the sandhills. These highly productive lakes have the potential to grow perch between 12 and 15 inches if they can evade anglers long enough. Yellow perch are aggressive most of the year making them a great species to start new anglers on.

Blue Lake had the highest abundance of perch in 2014 with 48 perch per frame net. A few big fish remain in Blue Lake with 2 % of the population over 12 inches. Strong recruitment is helping maintain the heavy fishing pressure Blue

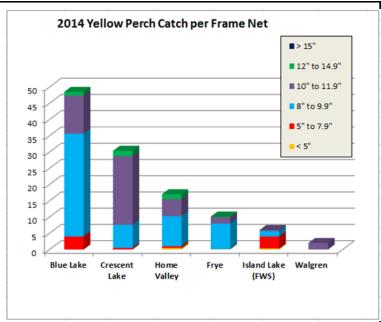


Lake has seen over the past 3 years. Anglers fishing Blue should find most harvestable fish in 2015 will be 4 years old and around 10 inches. Anglers looking for the biggest perch should try fishing Crescent Lake. Recently renovated at the same time as Blue Lake in 2008, Crescent Lake has not received the fishing pressure that Blue has. The 2014 perch survey indicated a good population of perch over 10 inches with some individuals approaching 14 inches.

#### Yellow Perch (Continued)

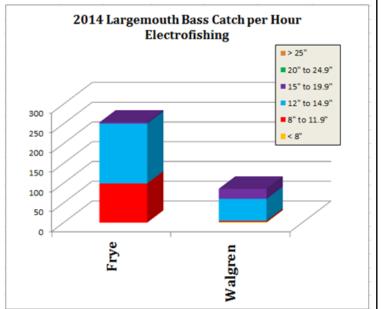
Home Valley and Frye Lake will also be some of the best sandhills lakes to fish for yellow perch. Both of these lakes can be difficult to fish as Frye Lake gets heavily vegetated and access to Home Valley is limited to hiking over a mile of sandhills or crossing the ice surface of Cottonwood and Steverson Lakes.

Smith Lake WMA was not surveyed in 2014 but has had a shift in its perch population. Historically known for a high population of small perch, anglers are pleased to find an abundant population of perch over 8 inches.



### **Largemouth Bass:**

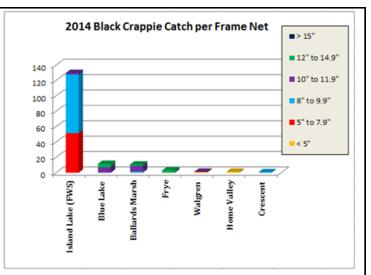
Only two sandhills lakes were surveyed for largemouth bass populations in 2014. Frye Lake WMA continues to have the highest abundance of largemouth bass with 253 bass per hour of electrofishing. This is down from 467 bass per hour in 2012 but similar to 257 documented in 2013. The average size bass sampled at Frye Lake was 12.1 inches which is a slight increase from 2013 at 11.3 inches. The 2014 survey also documented the first bass to reach 15 inches with several just below that legal length limit. Walgren Lake had a good population of legal bass with 30 % of the population greater than 15 inches. Anglers looking for big fish should consider Smith Lake WMA in Sheridan County or Island Lake on the Crescent Lake NWR. Both lakes should produce fish over 4 lbs. Anglers looking for a unique opportunity should consider fishing Blue Lake for bass. Blue Lake was stocked with smallmouth bass and had largemouth bass swim upstream from Crescent Lake WMA during high waters. Blue Lake was last surveyed in 2012 but should have some bass approaching legal length.





#### **Crappie:**



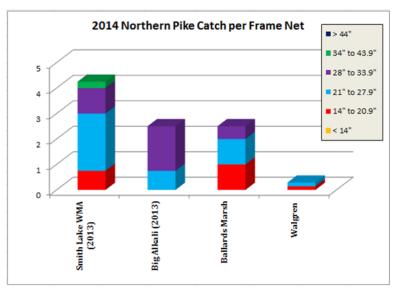


Crappie anglers should expect another great season in the Sandhills. Island Lake FWS has the highest density of crappie in 2014 with 130 crappies per frame net comprised of both white and black crappie. Aproximately 60% of Island Lake's crappie population is over 8 inches compared to 1% in 2013. Anglers looking for big crappie should have a great year. Blue Lake, Frye WMA, Ballards Marsh all had fish over 12 inches in 2014. Smith Lake WMA and Cottonwood- Steverson Lakes are two more sandhill lakes worth checking out for quality crappie fishing.

#### Northern Pike:

Ballards Marsh and Walgren Lake are the only two sandhills lakes surveyed for northern pike in 2014. Both lakes have a low density pike population with abundances less than 3 per frame net. Ballards Marsh had the bigger pike with some nice fish over 28 inches. Anglers looking to pike fish the sandhills should take a look at the Valentine NWR. Several Lakes on the refuge have excellent pike populations and some very large individuals (see the Valentine NWR survey summary at www.outdoornebraska.ne.gov/fishing/programs/sampling/index.asp). Smith Lake WMA and Big Alkali also had good pike populations detected in the 2013 survey. Smith Lake WMA had some fish over 34 inches while Big Alkali had 70% of its fish over 28 inches.





#### **Other Species**

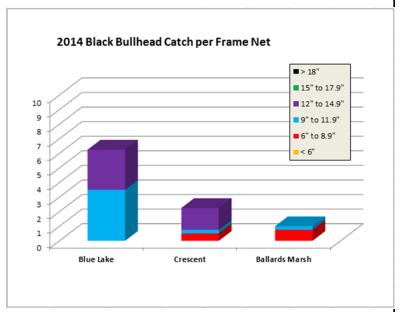
Green sunfish and black bullheads are two native species to the sandhill region of Nebraska and several lakes provide fishing opportunities. Blue Lake and Crescent Lake both had some very large bullheads in 2014. Common carp are plentiful in many sandhill lakes and can cause undesirable impacts to the fisheries. Anglers are encouraged to fish for and keep carp from sandhill lakes. Contact the local fisheries offices for tips on where to look for these species.

Frye Lake, Cottonwood-Steverson WMA and Island Lake FWS all contain walleye. Island was stocked in 2013 and 2014 with fingerling walleye and will take a couple years to get a population of harvestable fish. Frye Lake has the best population of walleye with some fish over 5 lbs. Crescent Lake WMA was stocked with

sauger in 2013, and 2014 and should produce catchable fish in a couple years. Cottonwood-Steverson WMA has a good musky population with some fish over 40 inches.

#### **Aquatic Habitat Program**

The Nebraska Aquatic Habitat Program has once again worked to benefit anglers in the Sandhills. During 2014, NGPC renovated Rat and Beaver Lakes in Cherry County to eliminate rough fish. An estimated 290,872 carp were killed. Common carp and bullheads made up 93.5 % of the fish community by number and over 99% by weight. Rat and Beaver was restocked



following the renovation with yellow perch, bluegill, black crappie, and largemouth bass.





For additional information about fisheries management in the sandhills please contact the following personnel by phone or email address listed below.

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