Northwest District Sandhills Lakes

2015 Survey Summary

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Introduction

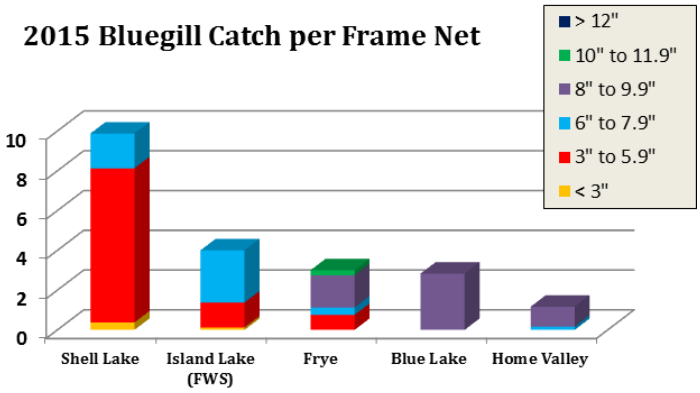
The sandhills region of Nebraska is a unique geographical region comprised of stabilized sand dunes, exposed groundwater lakes in the valleys, and perched mineralized lakes on poorly drained soils. A few lakes are watered by artesian wells and springs while the majority of lakes depend on the water table 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 typically 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 2015. Fisheries data from the Valentine NWR is available in its own summary at http://outdoornebraska.gov/fishsamplingreports/. An interactive map of lake locations and species composition can be found at http://maps.outdoornebraska.gov/fishing/.

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. The following graphs and commentary are from surveys conducted in 2015 with suggestions on which Sandhills lakes should produce quality fishing for each species. Most fish surveys conducted in 2015 targeted northern pike, bluegill, and yellow perch.

Bluegill:

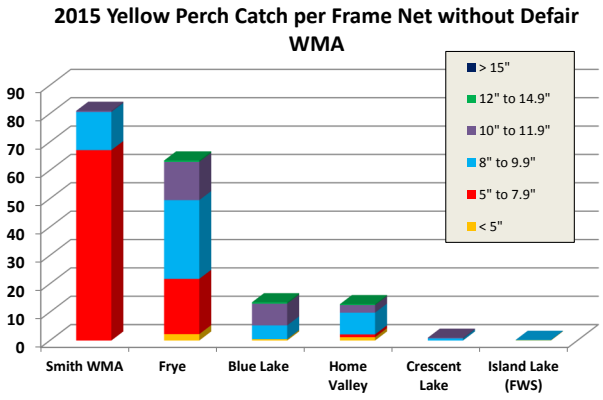
2016 should be another great year for big bluegill in the Sandhills. Frye, Blue Lake, and Home Valley had bluegill populations with a majority of the fish longer than 8 inches. The 2015 surveys suggest that anglers looking for the biggest bluegill should try Frye Lake as it produced several fish over 10 inches. Smith Lake WMA was not surveyed in 2015 but also consistently produces fish over 10 inches. Shell Lake had the highest density of bluegill in 2015 with a catch rate of 9.8 fish per net, but most were under 6 inches and skinny. Anglers fishing from the bank seeking bluegill should consider Island Lake or Walgren Lake. Both of these lakes should produce fish approaching 8 inches and have fishing piers for accessability. Shore fishing on most sandhill lakes is challenging due to abundant vegetation and is best approached with waders or a float tube.

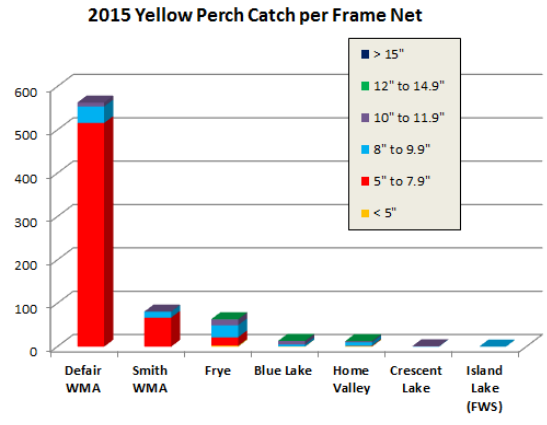


Yellow Perch

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.

Defair Wildlife Management Area had the highest abundance of perch in 2015 with 563 perch per frame net although the largest fish measured just over 10 inches. These perch are in good condition but anglers will likely struggle with the abundance of perch under 8 inches while seeking the few larger fish.





Yellow Perch (Continued)

Smith Lake WMA had the second highest perch abundance with a catch rate of 81 fish per net. Known for its high abundance of little perch, Smith Lake is going through a shift and starting to produce some quality fish over 10 inches.

Frye Lake will be the best sandhill lake for both size and abundance of keeper perch. The 2015 survey had a catch rate of 63 perch per net with 65 percent of the population over 8 inches. Frye Lake can be difficult to fish at times due to excessive vegetation even through the ice.

Both Blue Lake and Home Valley had similar catch rates around 13 fish per net. The average size perch surveyed in Blue Lake and Home Valley were 10 inches and 8.8 inches respectively. Although there are some fish over 12 inches in Frye Lake, Blue Lake, and Home Valley, fishing pressure over the past couple years has reduced the abundance of the larger older fish.

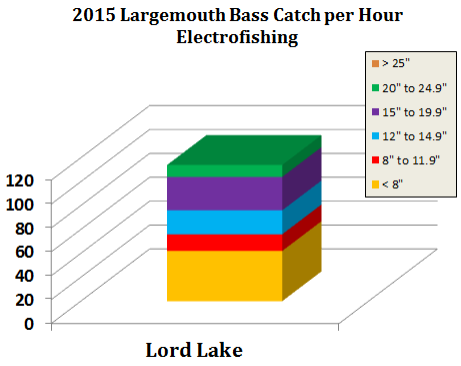
Perch surveyed in Crescent and Island Lakes were captured during bluegill surveys and do not represent the actual populations. The condition of perch in Island Lake has improved from the past few years as perch are looking healthy and plump. Crescent Lake may be the best lake for fish over 13 inches. Although anglers typically struggle on finding perch in Crescent, this population has had little exploitation since the lake was renovated in 2008.

New Perch Regulation:

Beginning January 1, 2016, yellow perch from Rat and Beaver Lakes will have a 12-inch minimum size limit.

Largemouth Bass:

Lord Lake on the Samuel R. McKelvie National Forest was the only sandhill lake surveyed for bass in 2015. Lord Lake has a great bass population with a catch rate of 114 bass per hour electrofishing and approximately 33 percent of the population over the legal length of 15 inches. This will also be a great location for trophy anglers looking for a master angler as nearly 10 percent of the catch was over 20 inches. These fish were in excellent condition with relative weights over 90 for all size categories.

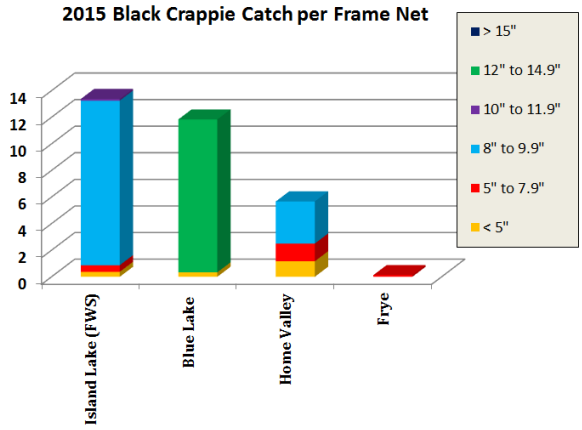


Anglers looking for big bass should also consider Smith Lake WMA in Sheridan County or Island Lake on the Crescent Lake NWR. Both lakes should produce fish over 4 lbs. With the shift in the Smith Lake fishery, a strong year-class of young-of-the-year bass were reported by fishermen. Smith Lake has had a low density bass population in the past with limited recruitment.

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:

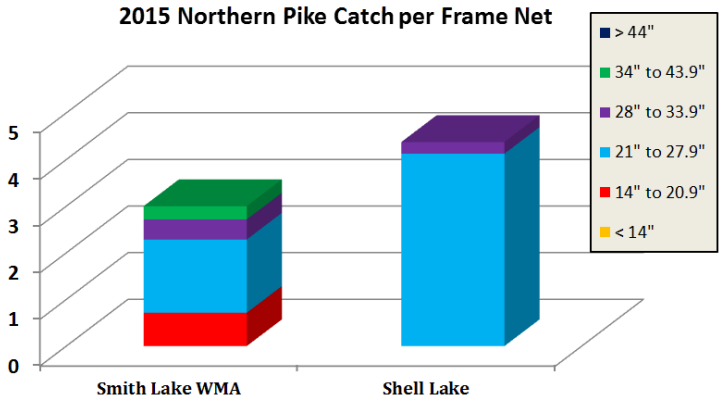
Crappies were surveyed in four sandhill lakes in 2015. Island Lake had the highest density but was down to 13 fish per net compared to 130 fish per net in 2014. The average size crappie in Island was 8.6 inches with some fish over 10 inches. Blue Lake had a similar crappie abundance to Island with 12 fish per net but averaged 12.1 inches. Although some recruitment was documented in Blue Lake, almost all the crappie sampled were from the stocked fish in 2009. Home Valley was stocked with crappie in 2013 and are doing excellent. Five crappie were collected per frame net with an average size of 7.9 inches. This lake should produce a quality crappie fishery in the next few years as the population takes off.



Frye Lake was not surveyed for crappie in 2015 but some crappie recruitment was documented during the yellow perch survey. Anglers fishing for crappie in Frye Lake should find fish over 12 inches. Early May is the best time of the year to target crappie in the sandhills. Fishing small jigs, inline spinners, beetle spins, and minnows on a bobber where live baitfish are allowed are all popular methods for catching crappies.

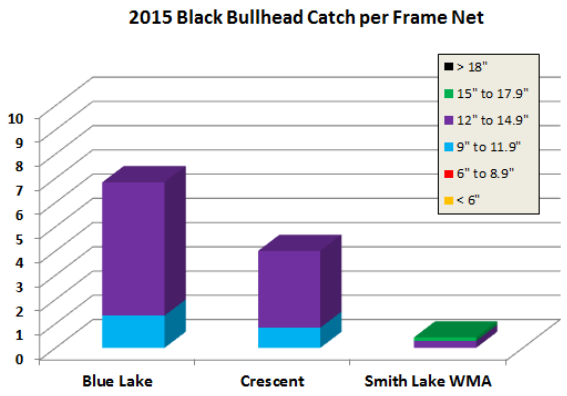
Northern Pike:

Smith Lake WMA and Shell Lake were the only two sandhill lakes surveyed for pike in 2015. Northern pike abundance in both lakes is low with less than 5 fish per frame net. Although both lakes produce pike over 28 inches, Smith Lake consistently produces pike over 34 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 http://outdoornebraska.gov/fishsamplingreports/). Walgren Lake, Cottonwood State Recreation Area, Ballards Marsh WMA and Big Alkali also have fishable pike populations.



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, Crescent Lake, and Smith Lake WMA all had some very large bullheads in 2015. 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, Home Valley, Big Alkali, and Island Lake all contain walleye. Big Alkali and Cottonwood-Steverson WMA both get stocked annually with walleye. Island has been stocked since 2013 annually with fingerling walleye. Frye Lake and Home Valley both have natural recruiting populations of walleye with some fish over 5 lbs. Crescent Lake WMA was stocked with sauger in 2013, and 2014 . In 2015 walleye and sauger stockings were replaced with saugeye in Cottonwood-Steverson WMA, Big Alkali, and Crescent. Saugeye is a hybrid between a walleye and a sauger. These fish seem to be more shoreline oriented and Fall electrofishing surveys indicate excellent survival in these sandhill lakes.

Both Cottonwood- Steverson WMA and Crescent Lake have been stocked with muskellunge. Crescent has only had one year of stocking, but Cottonwood-Steverson has a good musky population with some fish over 40 inches.

Invasive Species

Curly-leaf pondweed showed up in 2015 at Smith Lake WMA. This invasive plant has a tendency to grow fast and shade out native vegetation while making fishing difficult. In 2015 culy-leaf pondweed covered nearly 90 percent of the lake. This plant was likely brought in attached to a boat as it only takes a piece of this plant to get established. It is important to remove all vegetation from your boat and trailer before leaving the boat launch area and **CLEAN, DRAIN,** and **DRY** your watercraft and fishing equipment before launching on another body of water.

Curly leaf pondweed at SmithLake WMA

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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