2015 Survey Summary I-80 Lakes Lincoln and Dawson Counties



Jared Lorensen, Fisheries Biologist

There are 20 Interstate 80 (I-80) lake fisheries in Lincoln and Dawson Counties that are actively managed by fisheries personnel from the North Platte District Office. These lakes range from 6 to 53 surface acres and primarily exist as Wildlife Management Areas (WMAs). For more information concerning I-80 Lakes consult our <u>Fishing Across</u> <u>Nebraska</u> publication and the <u>2016 Fishing Guide</u>.

On average, five of these I-80 Lake fisheries are sampled per year. During the spring, boat electrofishing is used to sample largemouth bass while modified fyke nets are used to sample other shoreline-oriented species such as bluegill and redear sunfish. The following text and graphs depict survey data that was collected only during 2015. Although these lakes are small, the fisheries are dynamic and in many cases heavily influenced by angling pressure. For historical survey information investigate <u>Historical Survey Summaries</u> on NGPC's website.

*Note

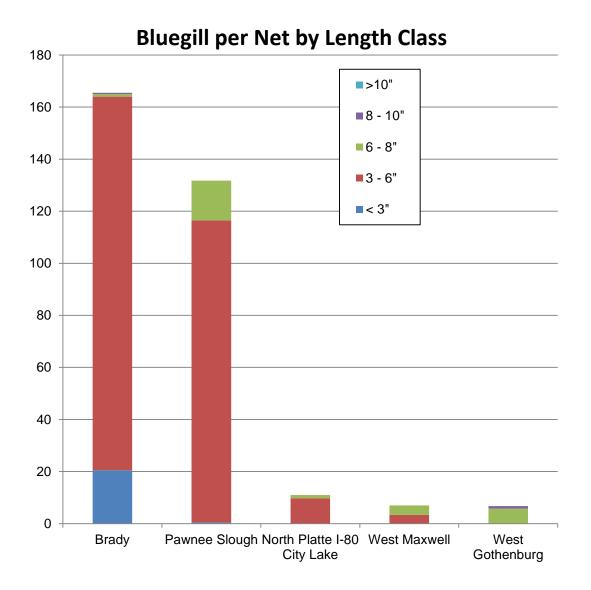
The majority of I-80 Lakes discussed below are WMAs. Please don't litter as there is no designated litter control method in place. Condition of boat ramps and roads vary at these lakes so please use discretion when accessing these WMAs. Investigate <u>WMA</u> <u>Regulations</u> (Chapter 4) and the <u>2016 Boating Guide</u> for more specifics including allowed vessels.



Bluegill are prevalent in all I-80 Lakes and serve as the primary prey item for predatory species. For their size, bluegill are "scrappy" fighters on light tackle. Their tendency to inhabit near shoreline habitats make them good targets for bank anglers.

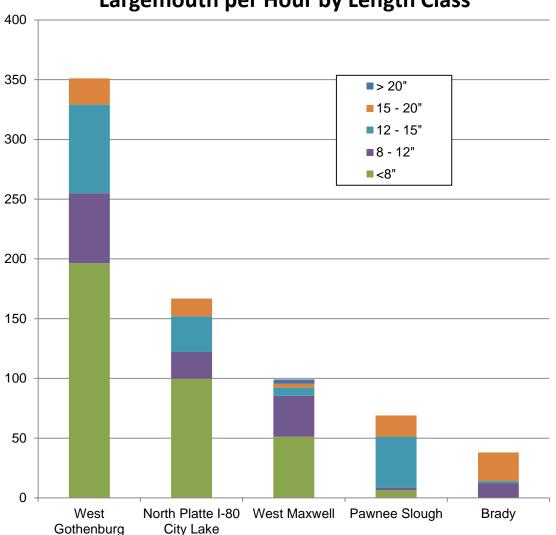
Statewide regulations for panfish apply to most I-80 Lakes but West Brady and East Hershey remain Catch and Release Only (C&R) for all species.

According to the 2015 survey data, Brady has a bluegill population that consists primarily of small individuals. An angler could catch many bluegill at this lake but would be hard pressed to catch any over six inches. Pawnee Slough's population looks to be similar but the chances of catching bluegill greater than 6 inches may be greater. North Platte I-80 City Lake's survey data indicates low density but recent angler reports suggest otherwise with larger specimens being observed. West Maxwell and West Gothenburg may be an anglers best option to catch larger bluegill according to the 2015 survey data. Access <u>Historical I-80 Lake Information</u> to review survey data from other lakes.



Largemouth bass are the main predatory species in most I-80 Lakes. Statewide regulations for largemouth bass apply to most I-80 Lakes but West Brady and East Hershey remain catch and release only for all species.

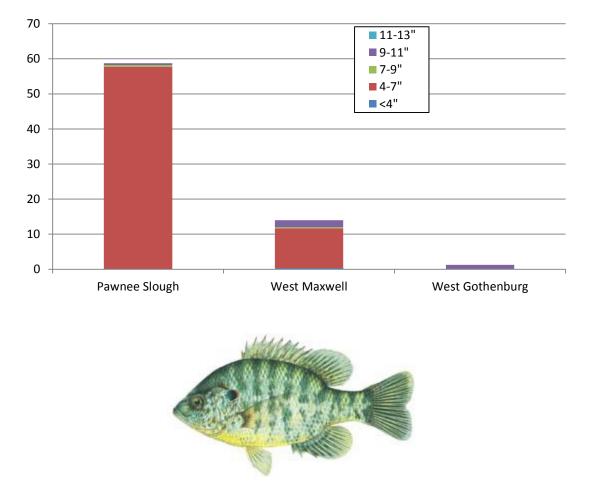
According to the 2015 survey data, West Gothenburg has the highest density population. A large portion is small (<8") bass but larger specimens are represented well. North Platte I-80 City Lake has a similar size structure but at a much lower density. This fishery is growing. (details provided below). West Maxwell's largemouth population is dominated by <12" bass but a small number of large (>20") do exist. Pawnee Slough has suffered a severe decline in largemouth abundance but some large (>15") bass still exist. Brady had the worst showing. Turbidity inhibits largemouth bass feeding behaviors in this lake. Of those sampled, a large portion were >15". Access Historical Sampling Surveys to view other largemouth bass survey data.



Largemouth per Hour by Length Class

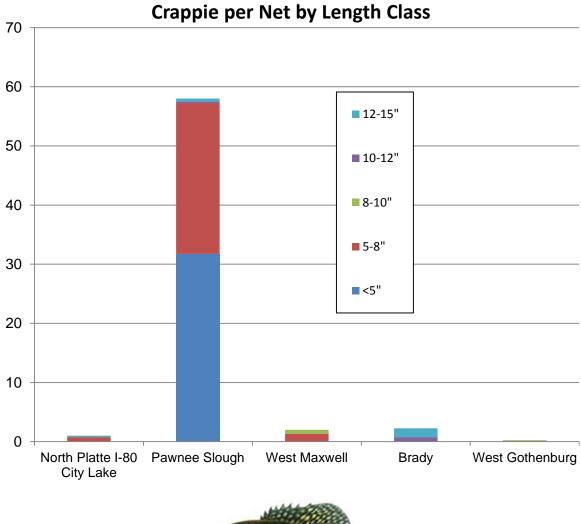
Redear sunfish is typically a southern species but they have found a niche in several I-80 lakes and Master Angler sizes have been produced. The red or orange margin of their gill cover tab gives this fish its name. The body is olive, with orange or yellow breast. Redear sunfish are typically less aggressive and have smaller mouths than bluegill and as adults their diet consists primarily of snails. For more identification information visit <u>NGPC's Fish</u> <u>Identification</u> website. Statewide regulations for redear sunfish apply to most I-80 Lakes but West Brady and East Hershey remain catch and release only for all species.

The 2015 survey at Pawnee Slough indicated a large population consisting of small individuals. Average length of those sampled at Pawnee Slough was 5". Recent stockings most likely contributed to this observed abundance and hopefully these redear will continue growing to attain desirable sizes. West Maxwell's population consists of many small (4-7") redear but has a sizable portion approaching and surpassing 8 inches. West Gothenburg has historically produced many large redear. Very few were sampled during 2015 but those observed were large. Recent stockings at West Gothenburg will hopefully recruit into the population. Access the historical I-80 Lake information at <u>Historical Sampling Surveys</u> to investigate other redear sunfish fisheries.



Redear sunfish per Net by Length Class

Crappie are present in many I-80 Lakes but densities are low typically. An explosion of crappie abundance was observed at Pawnee Slough. Hopefully these crappie continue growing and reach desirable sizes for anglers. A low abundance of crappie were sampled at Brady but they were large. A hybrid crappie stocking during 2011 has resulted in these large individuals. A 2015 stocking of black crappie will hopefully recruit into the population and provide a renewable resource.





Angler Access Projects

Hershey, Birdwood, Fremont Slough, West Maxwell, West Brady, Brady and West Gothenburg I-80 Lakes received Angler Access upgrades during 2015. Construction of angler platforms occurred to provide level and undeterred access for bank anglers. This utilized funding provided by the Angler Access Program. Other facets of the overall project included tree removal, fenceline construction and parking expansion. In conjunction with bank access improvements, Motorboat Access funds were used to improve boat ramps at each of the sites. All angler platforms are open for use and all boat ramps are complete and open for use except the ramp at West Gothenburg. Relatively small aspects (including West Gothenburg's ramp) of the construction process still remain to be completed. Hopefully this will be done during early 2016. Please respect these long awaited improvements.



Crappie offer another fishery in several I-80 Lakes but exist in low densities. Some of these lakes include North Platte City I-80 Lake, Hershey, Fremont Slough, Brady, Willow Island and West Cozad. The statewide daily bag limit for panfish (all species in conjunction) is 15.

Yellow perch inhabit many I-80 Lakes in low densities. Catchable yellow perch exist in Fremont Slough and Pawnee Slough I-80 Lakes. The statewide daily bag limit for panfish (all species in conjunction) is 15.

Channel catfish offer another angling opportunity in many I-80 Lakes. They are raised to 10" before being stocked to limit predation by largemouth bass and are stocked every other year in many I-80 Lakes to maintain fishable populations. The statewide daily bag limit is five channel catfish.

Rock bass is a unique and rare species throughout most of the state but some I-80 Lakes have fishable populations and produce Master Angler sizes. Rock bass are located in Hershey, East Sutherland, and East Hershey.

Rainbow trout are stocked into Birdwood I-80 Lake each year to provide a unique winter fishery. Trout are stocked twice each year for a total of 8,000 annually. There is no minimum length limit and the daily bag limit is five with only one fish 16" or longer. The possession limit is ten.

Northern pike are stocked into Hershey I-80 Lake intermittently to provide additional predation on abundant panfish populations and offer another angling opportunity. Northern pike 12" in length were stocked in 2012 and 2013. These fish grow quickly and will provide anglers another species to target. Northern pike must be greater than 30" to be harvested from Hershey I-80 Lake.

Smallmouth bass are infrequently stocked into Fort McPherson I-80 Lake as following its 2006 fishery renovation a smallmouth bass fishery was intended. Stocked fish are typically adults greater than 12".



The table below illustrates the locations, species, number and average length of fish that were stocked during 2015. For more details and previous year's stockings visit the <u>NGPC Fish Stockings</u> website.

	Channel catfish	Redear sunfish	Rainbow trout	Largemouth bass	Rock bass	Black crappie
East Sutherland					1,350-3.3"	
West Hershey						
Hershey					3,429-4"	
East Hershey					1,779-4"	
Birdwood			8,958-11"			
North Platte I-80 City Lake	50-30"					7,440-2.2"
Fremont Slough						
Pawnee Slough		1,500-2"				
West Maxwell		1,500-2"				
Crystal						
Maxwell Rest Stop						
Fort McPherson						
West Brady				529-3"		
Brady						7,065-2.2"
West Gothenburg		1,500-2"		1,500-2"		
East Gothenburg						
Willow Island				4,940-1.75"		
West Cozad						
Cozad					937-3.3"	
Dogwood East						

If you have questions or concerns about the I-80 Lakes in Dawson or Lincoln Counties please contact

Jared Lorensen, Biologist 308-535-8025, jared.lorensen@nebraska.gov OR Brad Newcomb, District Mgr. 308-865-5330, brad.newcomb@nebraska.gov



Several I-80 Lakes have been enhanced with fish attracting structure. Trees along shorelines have been hinge cut and dropped into the water to provide shallow cover while cedar trees are cut from surrounding WMAs and positioned on the ice or sunk using a large boat. Artificial structures are constructed and placed for the same reasoning. Artificial structures should be more snag proof and provide longer lasting structure. These projects are done to improve habitat and concentrate fish for anglers. These brush piles congregate game species such as bluegill, crappie and largemouth bass. Since January 1, 2015 brushing projects have occurred at Willow Island and Birdwood.

Jan 23 – 14 cedar trees – Willow Island – N 40°52'38.0" \ W 100°04'03.2" N 40°52'38.5" \ W 100°04'04.3" N 40°52'38.8" \ W 100°04'05.4" N 40°52'38.8" \ W 100°04'05.8" Oct 29 – 7 artificial structures – Birdwood – N 41°06.998' \ W 100°49.997' Nov 10 –7 artificial structures – Birdwood – N 41°07.035' \ W 100°50.239' N 41°07.042' \ W 100°50.328' Dec 10 –10 artificial structures–Birdwood - N 41°06.964' \ W 100°49.862' N 41°06.980' \ W 100°49.850'

Brady WMA-Brady Interchange, SE quadrant

Latitude: 40°59'51.51"N Longitude: 100°22'08.63"W (boat ramp)

Brady I-80 Lake is 25 surface acres and has a maximum depth of approximately 14 feet. Lake Contour Maps are available for many lakes across Nebraska including Brady. This lake's shoreline has zero concrete rip rap. The fishery was renovated during 2006 and restocked with largemouth bass and bluegill. Within the last several years channel catfish and hybrid crappie have been added. The 2015 survey data indicates a very low density largemouth bass population. Bluegill abundance is high with the vast majority being between 3-6". Currently crappie have the most favorable population in this waterbody for anglers. Limited numbers were sampled during 2015 but crappie greater than 13" were observed. Vehicular traffic is limited to the south shoreline. All shorelines are routinely treated to control Phragmites. This activity allows good bank angler access especially along the south shoreline. Brady received angler access improvements during 2015. This included construction of three angler platforms and a concrete boat ramp. The current <u>Boating Regulation</u> allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



Pawnee Slough WMA- This area is located 2W of Maxwell on U.S. Hwy 30 – Latitude: 41°04'56.73"N Longitude: 100°32'33.33"W (boat ramp)

Pawnee Slough is different from many of the I-80 Lakes because it was created to supply the Hwy 30 railroad overpass with material during the 1980s. This waterbody is 30 surface acres and has an approximate maximum depth of 10' and abundant rooted aquatic vegetation. Nebraska Department of Roads (NDOR) and NGPC collaborate management activities at this lake. This fishery recently had a bluegill population with a desirable size structure but the 2015 survey indicates that this has changed. A much declined largemouth bass population along with a greatly increased bluegill population consisting of small (3-6") individuals was sampled. An increase in crappie, redear sunfish and common carp abundance was also observed. Vehicular travel is restricted to the northwest shoreline's corner including the boat launch area. This lake is routinely treated for Phragmite and cattail invasion to improve accessibility for bank anglers. The current <u>Boating Regulation</u> allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



North Platte I-80 City Lake (Iron Horse Park)– North Platte I-80 Interchange, exit 177, south on U.S. Hwy 83 first left turn Latitude: 41°06'27.16"N Longitude: 100°45'32.48"W (boat ramp)

North Platte I-80 City Lake is 26 surface acres, has favorable underwater structure, water quality and an approximate maximum depth of 12'. This fishery was renovated in August of 2012. Largemouth bass, bluegill, channel catfish and black crappie have since been stocked. The 2015 survey indicates existence of largemouth bass over 15". Although bluegill were captured in low numbers and small sizes, greater size exist in this waterbody as they were observed by anglers throughout 2015. Other species already inhabit this waterbody due to illegal stockings. These species include yellow perch, white crappie, smallmouth bass, rock bass and walleye. In conjunction with the City of North Platte a Americans With Disabilities Act (ADA) approved boat launch facility was constructed during fall 2015. This area also provides a fishing pier located along the SE shoreline. Vehicle traffic is limited to the west and south shorelines. The current <u>Boating</u> Regulation allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



West Maxwell WMA – From Maxwell interchange, 3/4N,3/4W and 1/4S. Latitude: 41°03'25.31"N Longitude: 100°32'33.49"W.

West Maxwell is 7 surface acres and has a maximum depth of approximately 12 feet. Bluegill were fewer and smaller in the sample than expected as anglers have reported decent success. Redear sunfish were stocked lately and seem to be doing well with individuals longer than 9" observed. Largemouth bass exhibited a favorable length distribution and one individual greater than 20" was sampled. During 2015 this lake received Angler Access improvements including construction of two fishing platforms and a concrete boat ramp. This lake is surrounded by trees so it is frequently utilized by anglers looking to get out of the wind.

Vehicle traffic is limited to portions of the north and east shorelines. The current <u>Boating</u> <u>Regulation</u> allows nonpowered or electric motor powered vessels only.



West Gothenburg WMA - From Brady Interchange – 4 $\frac{1}{2}$ E on U.S. Hwy 30 and $\frac{1}{4}$ S across tracks. Latitude: $40^{0}59'08.56"$ N Longitude: $100^{0}18'04.76"$ W.

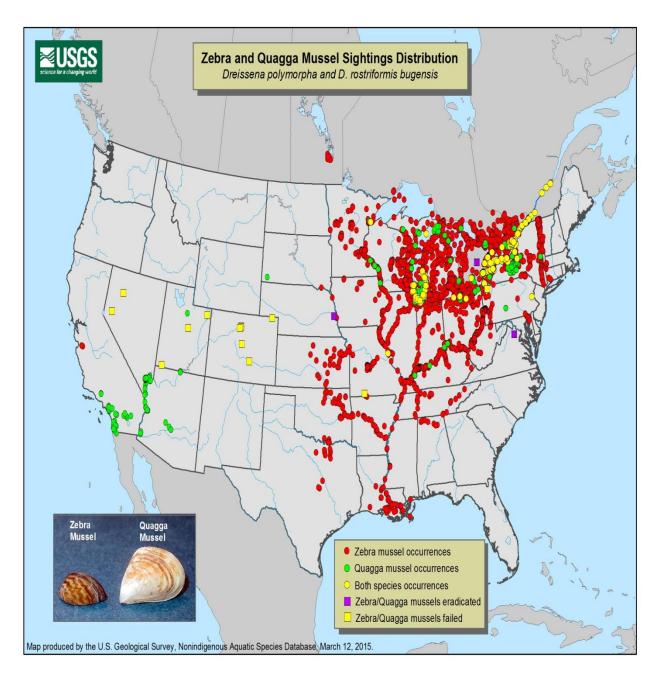
West Gothenburg is 15 surface acres and has a maximum depth of approximately 17 feet. Of the five I-80 Lakes sampled during 2015 this lake had the highest largemouth bass density. Bluegill and redear sunfish populations were sampled in low quantities but were represented by large individuals. Bluegill anglers reported good success during 2015. Two new fishing platforms were created at this lake during 2015 and early 2016 along with a concrete boat ramp.

Vehicle traffic is limited to the east and south shorelines. The current <u>Boating</u> <u>Regulation</u> allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



Aquatic Invasive Species (AIS)

Distribution of zebra and quagga mussels is getting closer and closer to SW Nebraska. The most recent finding was at Lewis and Clark Reservoir in NE Nebraska during 2015. This <u>map</u> portrays the spread of these invasive mussels and is updated often.





According to Nebraska State Law, it is illegal for watercraft to enter a Nebraska waterbody or leave a launch area while containing water. This includes all containers, compartments, and equipment that are permanently attached to the watercraft.

AND

All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

Protect Your Waters—Remember to CLEAN, DRAIN, and DRY!



Attention motorboat owners operating in Nebraska:

Starting in 2016, boaters whose motorized watercraft are registered in any state other than Nebraska must purchase and display a \$15 Aquatic Invasive Species (AIS) Stamp each year they launch their boat in Nebraska. The stamp will help fund AIS education and inspection programs.





- Boat inspections for AIS prior to launch in Nebraska are NOT mandatory at this time.
- · Personal watercraft registered outside of Nebraska must have this stamp.
- · Non-motorized craft registered in any state are exempt from the stamp.
- Stamps are not required for boats registered in Nebraska. A \$5 AIS fee is included on the residents' three-year boat registrations.
- Residents who register their boats in other states must have this stamp before launching in Nebraska.

This stamp is available online at OutdoorNebraska.org or at Nebraska Game and Parks permitting offices.

Learn more about invasive species at neinvasives.com.

