# 2017 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) but some areas are managed by Nebraska Department of Roads and others by local City Governments. For more information concerning I-80 Lakes consult our Fishing Across Nebraska publication and the 2018 Fishing Guide.

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 2017. For historical survey information investigate <a href="Historical Survey Summaries">Historical Survey Summaries</a> on NGPC's website. For more explanation of what constitutes a fisheries survey read the <a href="Survey Survey S

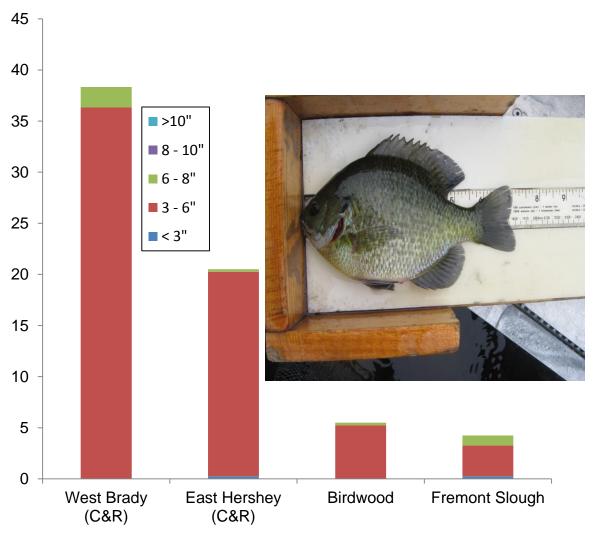
Please don't litter as there is no designated litter control method in place at many of these I-80 Lakes. Investigate <a href="WMA Regulations">WMA Regulations</a> (Chapter 4) as camping has been prohibited and more stringently limited at many of these locations. Investigate the <a href="2018">2018</a> <a href="2018">Boating Guide</a> for boating restrictions.



**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 a good target for bank anglers. Statewide regulations for bluegill apply to most I-80 Lakes but West Brady and East Hershey remain Catch and Release Only (C&R) for all species.

According to 2017 survey data, West Brady and East Hershey have large bluegill populations that consist primarily of small individuals. Birdwood should be included in this category as well even though the amount of bluegill surveyed was not comparable. An angler could catch many bluegill at these lakes but would be hard pressed to catch any over six inches. Fremont Slough may offer the best opportunity for 6"+ bluegill of the lakes surveyed during 2017. Access <u>Historical I-80 Lake Information</u> to review survey data from other lakes.

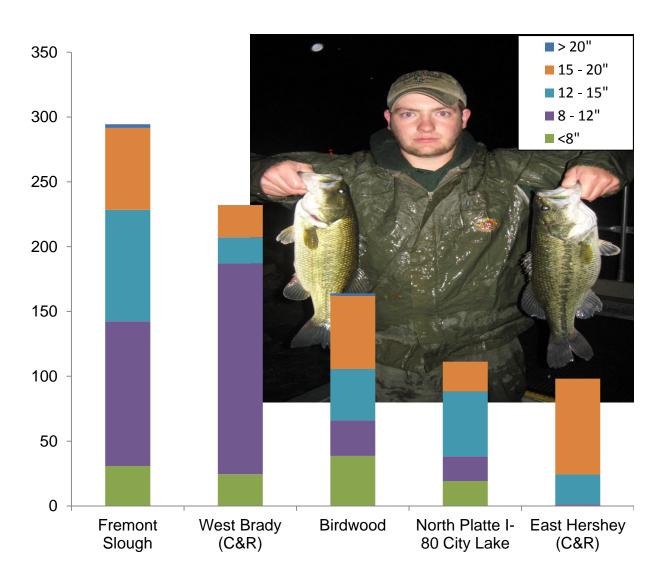
#### **Bluegill per Net by Length Class**



**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 (C&R) only for all species.

Fremont Slough had the highest density population of 2017's surveyed I-80 Lakes. All five I-80 Lakes produced bass over 15". Fremont Slough may offer the best population for anglers to catch both quantity and quality largemouth bass while West Brady will offer quantity over quality. Birdwood should offer quantity and quality too while North Platte I-80 City Lake will too but to a lesser extent. East Hershey should be good for large largemouth only. Access <a href="Historical Sampling Surveys">Historical Sampling Surveys</a> to view other largemouth bass survey reports.

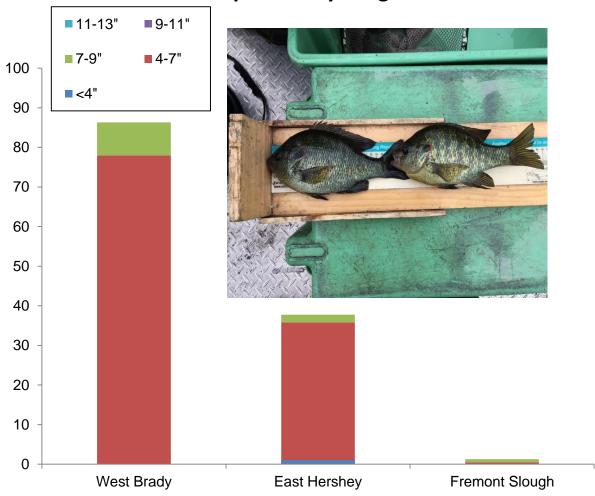
# **Largemouth per Hour by Length Class**



**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 <a href="NGPC's Fish">NGPC's Fish</a> <a href="MGEC's Fish">Identification</a> website. Statewide regulations for redear sunfish apply to most I-80 Lakes but West Brady and East Hershey remain catch and release (C&R) only for all species.

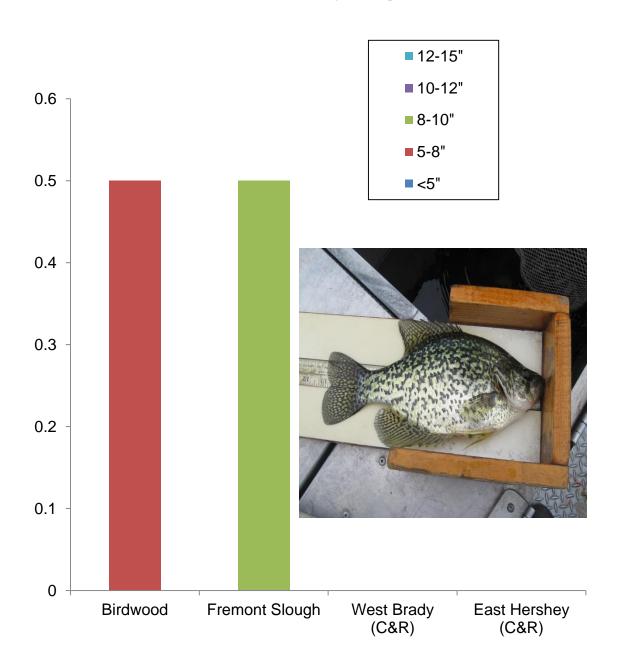
The 2017 surveys at West Brady and East Hershey indicate unchanged populations of small redear sunfish. Very few were captured at Fremont Slough. Access the historical I-80 Lake information at Historical Sampling Surveys to investigate other redear sunfish fisheries.

### Redear sunfish per Net by Length Class



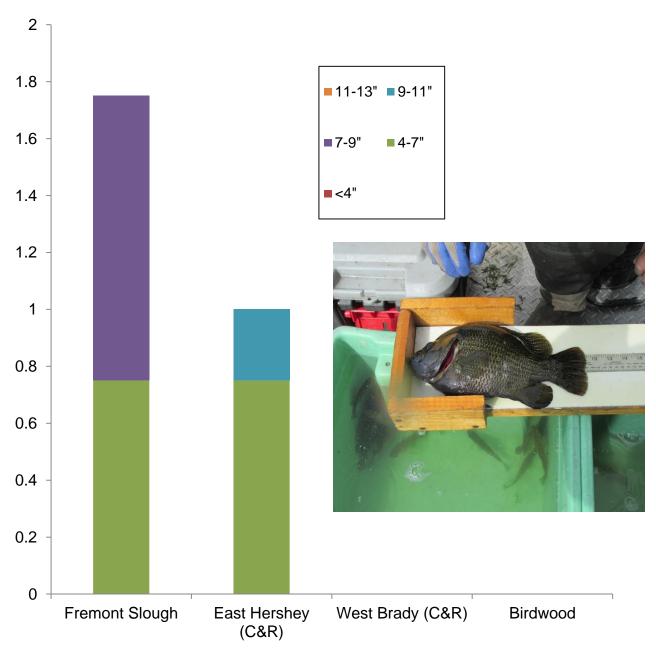
**Crappie** are present in many I-80 Lakes but densities are typically low. During 2017, crappie were sampled in low densities at Birdwood and Fremont Slough. Zero crappie were captured at West Brady and East Hershey.

### **Crappie per Net by Length Class**



Rock bass are quite rare but have filled a niche in several I-80 Lakes. Utilizing the concrete rip rap placed along shorelines and the clear water of several I-80 Lakes, rock bass offer an additional angling opportunity. Master Angler potential exists and has been observed. Although some of the best rock bass fisheries are at Hershey and East Sutherland a few were sampled at Fremont Slough and East Hershey. The largest observed was 10" at East Hershey. When compared to bluegill, this species has low density populations in I-80 Lakes. For more identification information visit NGPC's Fish Identification website.

# Rock bass per Net by Length Class



**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.



Rainbow trout are stocked into Birdwood I-80 Lake each year to provide a unique winter fishery. Trout are stocked during October and December each year. A total of 8,000 are stocked 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 twelve.



**Smallmouth bass** exist in low densities in many I-80 Lakes including Hershey, Brady and North Platte City I-80 Lake. They are infrequently stocked into Brady and Fort McPherson I-80 Lakes.



**Northern pike** were stocked frequently into I-80 Lakes especially prior to 2002. Some residual populations subsist at East Sutherland and East Hershey.



**Other species** inhabit I-80 Lakes due to historical stockings, illegal stockings and flood events. These species include (but not limited to) flathead catfish, goldfish, gizzard shad, alewife, yellow perch, hybrid sunfish, green sunfish, hybrid crappie, brook silverside, white sucker, common carp, grass carp and western mosquitofish. Many species within one I-80 Lake decreases the fisheries potential for growth but it does expand the opportunity for anglers to diversify their target species.

# **Stockings**

The table below illustrates the locations, species, number and average length of fish that were stocked during 2017. For more details and previous year's stockings visit the NGPC Fish Stockings website.

	Channel catfish	Rainbow trout	Yellow perch	Largemouth bass	Smallmouth bass	Redear sunfish
East Sutherland						
West Hershey						
Hershey						
East Hershey						
Birdwood		4,000-9.5"				
North Platte I-80 City Lake				1,700-3-8"		
Fremont Slough			280,000- eggs			
Pawnee Slough						
West Maxwell						
Crystal	150-10"					
Maxwell Rest Stop						
Fort McPherson	1,500-10"					
West Brady	125-10"					
Brady	625-10"			100-12"	25-10"	
West Gothenburg	375-10"					10-10"
East Gothenburg	375-10"					
Willow Island						
West Cozad						
Cozad	450-10"					
Dogwood East	175-10"					

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

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

# Fish Attractors



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. On January 10, 2017, seventeen cedar trees were placed on the ice at Birdwood. These piles were positioned at the below coordinates.

N 41°07.028' / W 100°50.180' – 3 trees N 41°07.044' / W 100°50.272' – 3 trees N 41°06.990' / W 100°50.250' – 7 trees N 41°06.977' / W 100°50.158' – 4 trees **West Brady WMA**– From the center of the Brady Interchange – travel just less than 1 mile North on Banner Rd, turn left on E Island Rd and travel just over 2 miles west and across an interstate overpass and turn north into the WMA entrance – West Brady is on the south side of the interstate

Latitude: 41°00'58.67"N Longitude: 100°25'02.88"W (boat ramp)

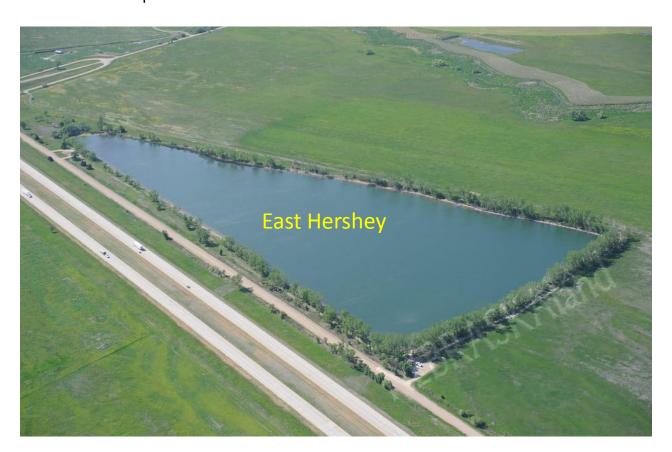
West Brady I-80 Lake (C&R) is 5 surface acres, is typically quite clear and has an approximate maximum depth of 12 feet. Since 2011 this fishery has been catch and release only for all species. Abundance of bluegill and redear sunfish has increased dramatically with very few sizable specimens seen in the 2017 survey. During 2015, a significant fish kill event occurred. Largemouth bass were restocked and their population is rebounding. This lake was one that received angler access enhancements including two angler platforms (one is ADA approved) and a concrete boat ramp. Cedar tree brush piles were placed during 2010 in the NE section of the lake. Vehicle traffic is restricted to the boat ramp area on the South shoreline. The current boating regulation allows nonpowered and electric motor powered vessels only.



**East Hershey WMA–** From North Platte Interchange  $-\frac{1}{2}$  mile south on Hwy 83, 7 3/4 miles west on W Walker Rd and 1  $\frac{1}{2}$  N on Lamont Rd across overpass. OR from Hershey Interchange  $-\frac{1}{4}$  mile north on Hershey Dickens Rd and 5  $\frac{1}{2}$  mile west on South River Rd. Latitude:  $41^{0}07'33.16"$ N Longitude:  $100^{0}54'09.63"$ W

**East Hershey I-80 Lake** (C&R) is 20 surface acres, has a maximum depth of approximately 12 feet, is shallow and vegetated on the west end and has broken concrete rip rap along the eastern shorelines. A special fishing regulation is currently in place for this lake. Catch and release of ALL species is required.

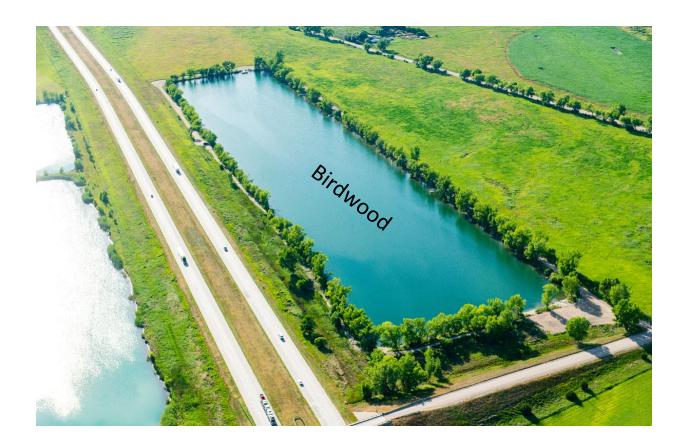
Largemouth bass angling is popular at this lake due to its' large proportion of fish greater than 15". According to the 2017 survey data, 15-20" is the most numerous size class but the smaller classes have greatly decreased in density. This fishery also offers large rock bass for anglers to pursue. The panfish population is comprised of bluegill and redear sunfish with redear being the predominate species. Bluegill and redear sunfish have size structures dominated by small fish (3-6"). Channel catfish have been stocked on an every other year basis at a rate of 50 per acre during the last decade and offer larger sizes than many I-80 Lakes. Northern pike were stocked in this lake prior to 2000 and a small number still exist. Vehicle traffic is confined to the parking areas along the south shoreline on the west and east ends. The boat ramp surface is rock and is currently unstable. Four wheel drive is recommended for trailering boats. The current boating regulation allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



**Birdwood WMA–** From North Platte Interchange, ½ mile south on Hwy 83, 3 ¾ miles west on Walker Rd and ¾ miles north on Homestead Rd across overpass and lake is on the west side of the road.

Latitude: 41°06'58.69"N Longitude: 100°49'49.39"W.

Birdwood I-80 Lake is 20 surface acres and has a maximum depth of approximately 20 feet. This lake receives the highest angling pressure of the I-80 Lakes in Lincoln and Dawson Counties. This lake is stocked twice annually with rainbow trout. This stocking program's purpose is to introduce new anglers to fishing as these trout are typically easy to catch. Largemouth bass are fairly abundant and their population has a reasonable proportion over 15". The panfish population is dominated by small bluegill but an occasional "keeper" may be caught. Other panfish species do exist in this lake but in very low densities. Channel catfish are stocked every other year at a rate of 25 per acre. Birdwood received angler access improvements including a concrete boat ramp, angler platforms and a handicap accessible pier. Vehicle traffic around this lake is fairly good but the southeast and east portions of shorelines are closed off to vehicle traffic. The current boating regulation 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)— This lake is located in the SE quadrant of the west North Platte Interchange (Exit 177)

Latitude: 41°06'27.18"N Longitude: 100°45'31.75"W.

North Platte I-80 City Lake is 27 surface acres and has a maximum depth of approximately 12 feet. This fishery was renovated during August 2012 and has been restocked with largemouth bass, bluegill, black crappie and channel catfish. Yellow perch, black crappie, white crappie, walleye, smallmouth bass and rock bass have been identified in the waterbody as well since the renovation. This fishery was only partially surveyed during 2017 to evaluate the abundance of largemouth bass as 2016's largemouth bass survey revealed lower than expected densities. The 2017 survey revealed 111 largemouth bass per hour of electrofishing with approximately 17% less than 8", 17% 8-12", 45% 12-15", and 21% 15-20". To aide in the longevity of this recently renovated fishery two special regulations are in place. These include, No Live Baitfish and a minimum harvest length of 21" for largemouth bass. More information concerning these regulations is available in the 2018 Fishing Guide.

Vehicle traffic is limited to the west and south shorelines and an ADA approved angler access pier is located along the SE shoreline. The current boating regulation allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed. A concrete boat ramp is available.



**Fremont Slough WMA** – From North Platte Interchange, 1½ mile south on Hwy 83, 4 ¾ miles east on State Farm Rd, ½ mile North over canal and under interstate overpass on Shack Rd and continue east ¼ mile and lake is on the north side of the road. Latitude: 41°05'44.98"N Longitude: 100°39'49.64"W.

Fremont Slough I-80 Lake is 30 surface acres and has a maximum depth of approximately 14 feet. Water elevation is relatively stable at this lake compared to other I-80 Lakes whose water levels decline during the summer. Largemouth bass are abundant and their population has a reasonable proportion over 15" with some reaching 21". The panfish population is diverse. Very few bluegill were sampled during 2017 but redear sunfish (existence previously unknown) were captured up to 7.5". Crappie were sampled in low volumes with the largest near 10" while yellow perch were observed up to 7.5". Channel catfish were sampled up to 23" and are stocked every other year at a rate of 25 per acre.

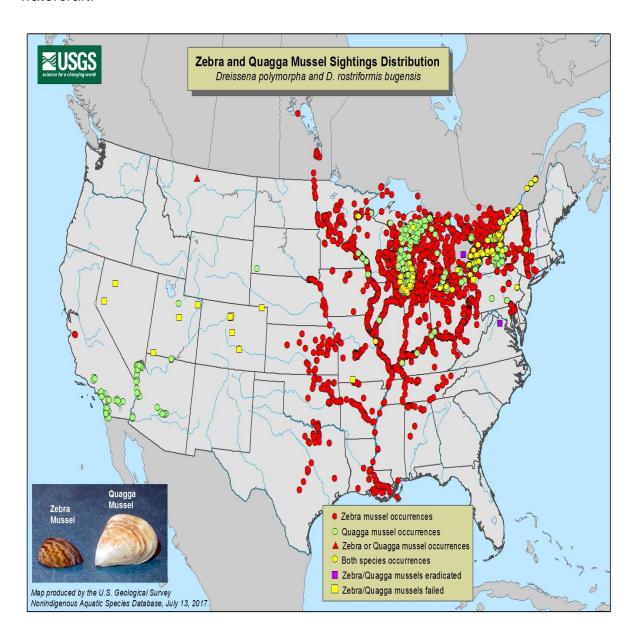
Fremont Slough has received angler access improvements including a concrete boat ramp and angler platforms (one is ADA approved). Vehicle traffic around this lake is limited to portions of the south shoreline. The current boating regulation allows vessels powered by internal combustion engines but prohibits 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 in Nebraska was at Lewis and Clark Reservoir during 2015. This <u>map</u> portrays the spread of these invasive mussels and is updated often.

In 2016, Nebraska boaters became required to possess a <u>Aquatic Invasive Species</u> (<u>AIS) Stamp</u>. Residents acquire the stamp when registering their watercraft. Nonresidents have to purchase a physical sticker that must be displayed on their watercraft.





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 <u>CLEAN</u>, <u>DRAIN</u>, and <u>DRY!</u>

