## 2013 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 <a href="http://outdoornebraska.ne.gov/nebland/articles/fishing/I-80.pdf">http://outdoornebraska.ne.gov/nebland/articles/fishing/I-80.pdf</a> and the 2013-14 fishing guide at <a href="http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf">http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf</a>.

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 graphs depict survey data that has been collected during 2010-2013.

### \*Notes

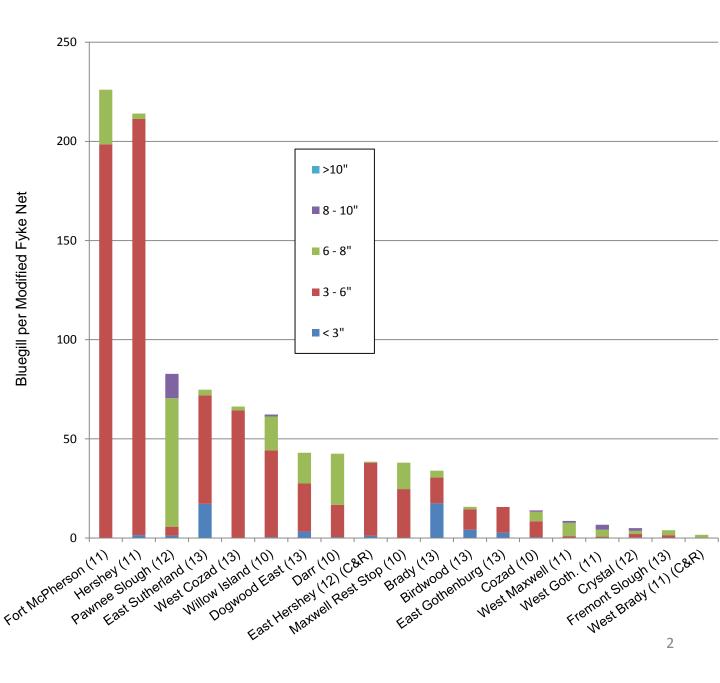
Underwater spearfishing is NOT allowed at most NGPC managed I-80 Lakes. Underwater Spearfishing for NONGAME species ONLY is legal at East Dogwood, Cozad, West Cozad, Willow Island and East Gothenburg Lakes in Dawson County during legal seasons. Check your fishing guide for more details.

The 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 areas.



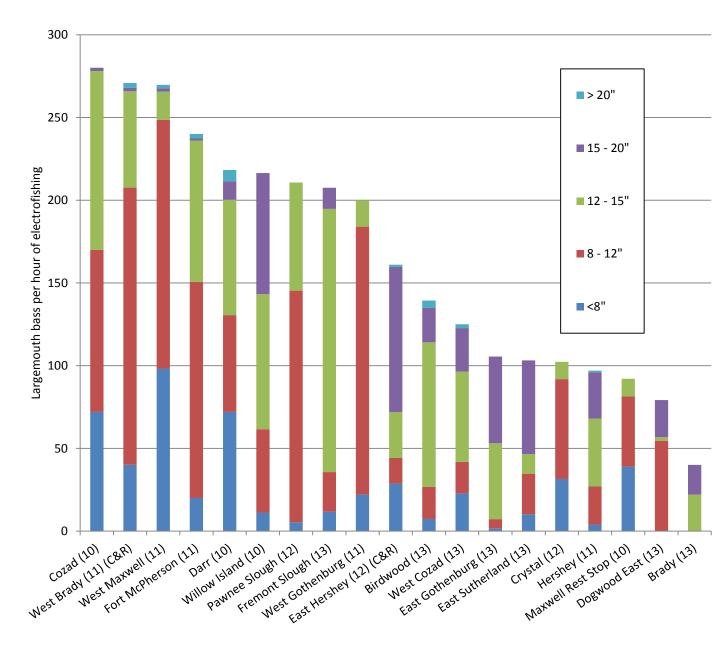
**Bluegill** are prevalent in all I-80 Lakes and serve as the primary prey item for predatory species. For their size, bluegill are "scrappy" fighters on light tackle. Their tendency to inhabit near shoreline habitats make them good targets for flyfishermen and bank anglers. Statewide regulations apply to most I-80 Lakes but West Brady and East Hershey remain catch and release only for all species.

Fort McPherson, Hershey, East Sutherland and West Cozad I-80 Lakes have bluegill populations that consist primarily of small individuals. An angler could catch many bluegill at these lakes but would be hard pressed to catch any over six inches. Lakes such as Pawnee Slough, and Willow Island(note Page 5) may be good choices for those anglers looking for both quality and quantity. Lakes that show even lower values may be the best option for anglers looking for size but not quantity.



**Largemouth bass** are the main predatory species in most I-80 Lakes. Their aggressive characteristics allow anglers to have success using a myriad of live and artificial baits that mimic baitfish or crayfish. 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.

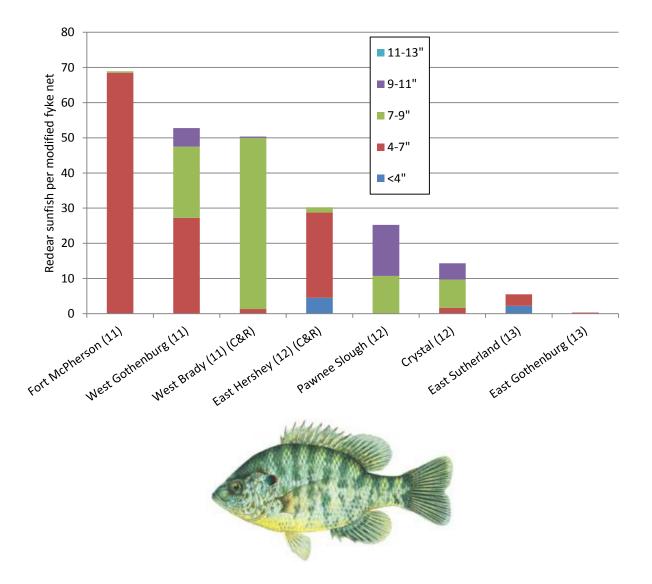
Fort McPherson, Cozad, West Brady and West Maxwell I-80 Lakes would be good choices for anglers interested in catching large quantities of largemouth bass but not large sizes. Lakes that may offer a larger proportion greater than 15 inches and quantity of bass include East Hershey (C&R) and Willow Island (note Page 5). Lakes such as Hershey and East Sutherland may offer a large proportion over 15 inches but not overall quantity.



**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. 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.

West Gothenburg, West Brady (C&R), Pawnee Slough and Crystal are the best lakes to target redear sunfish greater than seven inches.

To sustain the redear sunfish population a stocking request is in place for West Gothenburg during 2014.



## Angler Access Projects

During 2012, plans were made for access improvements at seven I-80 Lakes. These proposed lakes include Hershey, Birdwood, Fremont Slough, West Maxwell, West Brady, Brady and West Gothenburg. Angler access pads and piers are being designed to provide level and undeterred access for bank anglers. Other facets of the overall project include tree removal, fenceline construction and parking expansion. In conjunction with bank access improvements, Motorboat Access funds will be used to improve boat ramps at many of the sites. Progression of this project is currently delayed. Hopefully construction progress will be made during 2014.





## Willow Island I-80 Lake Fish Kills

During 2011, 12 and 13 Willow Island I-80 Lake experienced low dissolved oxygen levels resulting in fish kills. These occurrences typically happened during mid summer during or following a period of cloudy days. A simplified explanation involves the lack of sunshine prohibiting photosynthesis (oxygen production) from compensating for dissolved oxygen used during nighttime hours resulting in low dissolved oxygen levels and fish kills during early morning hours. The most prominent species killed has been gizzard shad but during 2013 other species including bluegill and largemouth bass were killed in relatively low numbers. Fisheries are ever changing and in this case we know dynamics have changed since 2010. Willow Island is on schedule to be surveyed during 2014 and the extent of these fish kills may be more apparent.

**Crappie** offer another fishery in several I-80 Lakes but exist in low densities. Some of these lakes include Hershey, Fremont Slough, Brady 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 density quantities. Catchable yellow perch exist in Fremont Slough and Pawnee Slough I-80 Lakes. Research through the University of Kearney is helping to determine possibilities for yellow perch fisheries in the I-80 Lakes. The statewide daily bag limit for panfish (all species in conjunction) is 15.

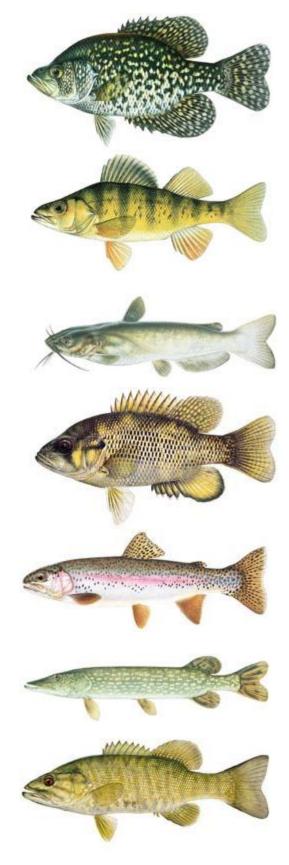
**Channel catfish** offer another angling opportunity in many I-80 Lakes. They are raised to 10" before being stocked to limit predation by largemouth bass and are stocked every other year in many I-80 Lakes to maintain fishable populations. The statewide daily bag limit is five channel catfish.

**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.

**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 2013. For more details and previous year's stockings visit <u>http://outdoornebraska.ne.gov/fishing/guides/fishguide/FGstocking.asp</u>.

	Channel catfish	Redear sunfish	Rainbow trout	Northern pike	Largemouth bass	Bluegill	Yellow perch
East Sutherland					2,200-1.3&3.1"		
West Hershey							
Hershey				530-12.1"	4,363-1.3&3.1"		
East Hershey							
Birdwood			7,777-9-17"				
North Platte I-80 City Lake					105-8-14"	8,210- 1.5"	
Fremont Slough							4,900-3.7"
Pawnee Slough							
West Maxwell	210-10.5"						
Crystal	180-10"						
Fort McPherson							
West Brady							
Brady					2,120-1.3&3.3"		
West Gothenburg	450-10.5"						
East Gothenburg							
Willow Island					2,700-3.3"		
West Cozad							
Cozad							
Dogwood East							





Several of the I-80 Lakes in the Southwest District 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. This is 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, 2013 brushing projects have occurred at Cozad, West Cozad, Darr, East Gothenburg and North Platte I-80 City Lake.

### \*NOTE

The following five pages will include lake by lake descriptions for five I-80 Lakes spanning from Sutherland to North Platte, NE. These lakes are open for public fishing and are all Wildlife Management Areas (WMAs). They do not have amenities such as restrooms, trash cans etc. Details will include route directions, GPS coordinates, existing fishery and boating regulations. For more information about boating regulations please consult the 2014 boating guide at <u>http://digital.outdoornebraska.gov/i/231000</u>.

**East Sutherland –** From the center of the Hershey Interchange,  $\frac{1}{4}$  S on Hershey Dickens Rd, 3W on Oregon Trail Rd,  $\frac{1}{2}$  N on Lamont Rd and NE across interstate overpass – Latitude:  $41^{0}08'29.30"$ N Longitude:  $101^{0}03'25.13"$ W (boat ramp)

**East Sutherland I-80 Lake** is 27 surface acres and has a maximum depth of 13 feet. The west end of the lake is shallow and has abundant vegetation while the east end is lined with concrete rip rap. Recent survey data indicates a largemouth bass population lower in density than in other I-80 Lakes but consisting of a larger percent greater than 15". Rock bass approaching 11" were sampled in 2013. Bluegill and redear sunfish are abundant and are small in size. Northern pike inhabit this lake in low densities from historic stockings. Channel catfish are typically stocked every other year and survive in large numbers. Cedar tree brush piles were placed in 12 feet of water in the northeast portion of this lake in 2012 and four cottonwood trees were hinge cut to provide shallow water habitat. Vehicular traffic is limited to the west and northwest shorelines. The boat ramp surface is rock and 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.



**West Hershey-** Access to this lake requires acquiring permission to cross private property. The lake is located ½ mile west of Hershey Interchange on the north side of Interstate 80. – Latitude: 41°08'19.69"N Longitude: 101°00'52.60"W (mid lake)

**West Hershey I-80 Lake** is 6 surface acres and has an approximate maximum depth of approximately 10'. This fishery was last surveyed during 2004. Species present at that time included, largemouth bass, bluegill, yellow perch and goldfish. This data indicated that largemouth bass density was low (87 per hour) but included a large proportion over 15". The bluegill data indicated a population dominated by small (3-6") individuals. Channel catfish have been stocked periodically in the past. The latest stocking occurred during 2007 when 530-10" channel catfish were stocked. Vehicular traffic around the lake is extremely limited and off road capability is required as accessing this WMA requires crossing private land. The current boating regulation allows vessels that are nonpowered or use electric motors only.



**Hershey** (aka Big Hershey) – located southeast of the Hershey Interchange – 1/10 mile south on Hershey Dickens Rd and  $\frac{1}{4}$  mile east on Oregon Trail Rd. Latitude:  $41^{\circ}08'04.67$ "N Longitude:  $100^{\circ}59'52.89$ "W (boat ramp)

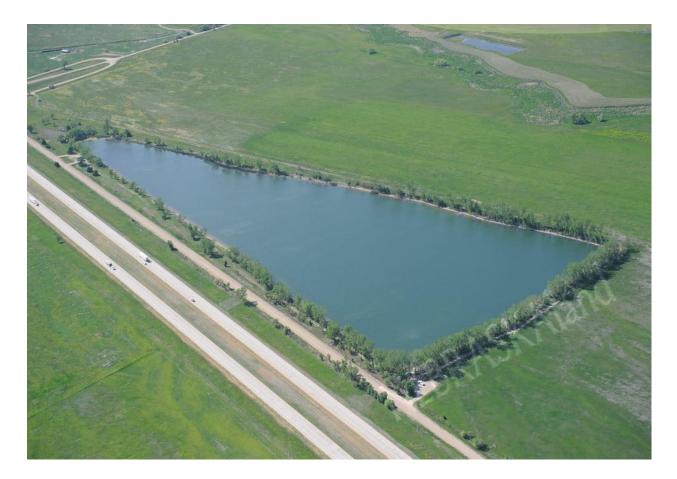
**Hershey I-80 Lake** is 53 surface acres, is typically quite clear and has an approximate maximum depth of 22 feet. The west and east ends are shallow and have heavy aquatic vegetation. Over the last 30 years this lake has produced many verified Master Angler fish including many species. The largemouth bass population has a large proportion of fish greater than 15" and the bluegill population is dominated by small (3-6") fish. Historically northern pike were stocked in this lake. During 2012 and 2013 12" northern pike were stocked to control the abundant panfish populations and provide anglers another opportunity. Largemouth bass fingerlings were also stocked during 2012 and 2013 in an attempt to bolster their numbers and help control panfish populations. Rock bass and crappie offer anglers great opportunities at this lake as well. Vehicle traffic is prohibited north of the boat ramp area and around the northwest portion of the lake. The current boating regulation allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



**East Hershey –** 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** 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". This fishery also offers large rock bass for anglers to pursue. The panfish population is dominated by bluegill and redear sunfish. Their size structure is 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. 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 currently is 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 –** 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 and was the site for NGPC's sponsored Family Fishing Nights during 2012 and 2013. 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. Crappie do exist in this lake but in very low densities. Channel catfish are stocked every other year at a rate of 50 per acre. Vehicle traffic around this lake is fairly good but the southeast portion of the road is rough and vehicle travel is not recommended in this area. The boat ramp's surface is gravel and 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.





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!



# Zebra and Quagga Mussels

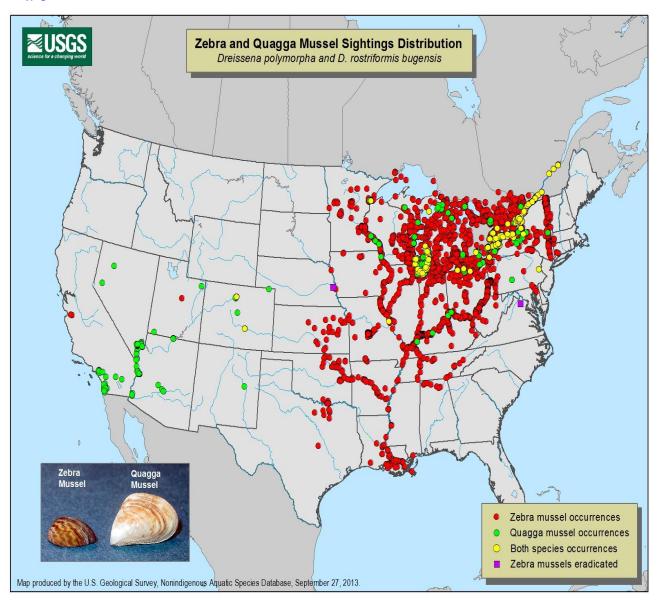
Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes and continue to **Clean, Drain and Dry** their equipment and boats prior to launching at a new waterbody. While no mussels have been identified at any of the I-80 Lakes, zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in neighboring states. Monitoring was completed at several Nebraska reservoirs including Hershey I-80 Lake during 2011, 2012 and 2013. No evidence of zebra or quagga mussels was found. For more information concerning invasive species or to report a finding of invasive mussels access <a href="http://neinvasives.com/report-a-sighting/">http://neinvasives.com/report-a-sighting/</a>.

Anglers and boaters using Nebraska waters this season need to be aware of **new regulations** dealing with aquatic invasive species. Signs similar to that on the previous page are posted at many boat ramps. Starting January 1, 2013 the following regulations went into effect to help prevent the spread of unwanted species.

- Any watercraft that has been on a Nebraska waterbody must drain the lake water from their compartments, equipment or containers before leaving the launch area. It is illegal to dump baitfish into a Nebraska waterbody.
- Livewells need to be drained prior to leaving a launch area: plan ahead and bring a cooler for harvested fish.
- All aquatic vegetation from that waterbody attached to the watercraft and/or trailer must be removed before leaving the launch area.



Distribution of zebra and quagga mussels is getting closer and closer to SW Nebraska. The most recent finding was at Lake Waconda near Glen Elder Kansas during the summer of 2013. This map is updated often and can be accessed at <a href="http://nas.er.usgs.gov/taxgroup/mollusks/zebramussel/maps/current\_zm\_quag\_map.ipg">http://nas.er.usgs.gov/taxgroup/mollusks/zebramussel/maps/current\_zm\_quag\_map.ipg</a>.



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

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