

NW District Irrigation Reservoirs 2012 Fall Survey Summary



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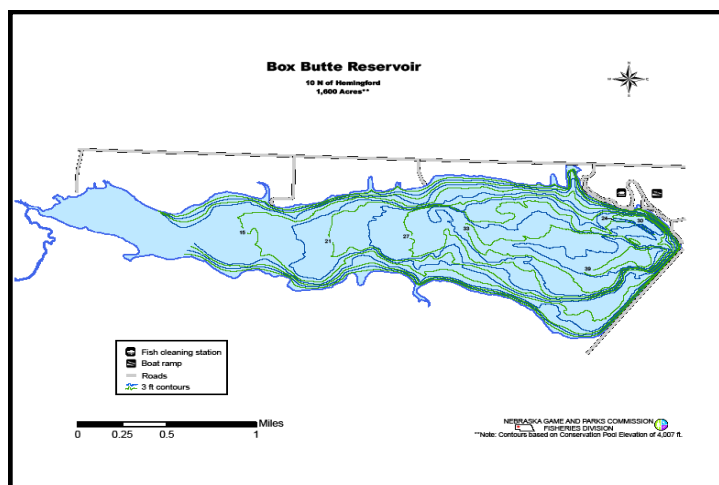
Several reservoirs located in the panhandle of Nebraska were built and managed for the primary purpose of water storage for irrigation. Water levels in these reservoirs can change drastically throughout a year and may make access difficult or impossible. The Bureau of Reclamation manages water in Box Butte Reservoir, Lake Minatare, Lake Winters Creek, and Big Lake Alice. Whitney Reservoir is managed by the Whitney Irrigation District. Oliver Reservoir was constructed by the Kimball Irrigation District, but has been turned over to Nebraska Game and Parks Commission to maintain as a state recreation area and managed for recreational activities. A map of lake locations can be found at www.outdoornebraska.ne.gov/gisapps/fishing.asp. Fishing opportunities exist in most irrigation reservoirs.

Box Butte Reservoir is located approximately 9 miles north of Hemingford on the western edge of the sandhills in the Nebraska panhandle. The reservoir was constructed in the early 1940's and impounds the Niobrara River which originates about 60 miles upstream. Box Butte Reservoir was designed for irrigation, flood control, and recreation. The lake levels can fluctuate drastically throughout the irrigation season.

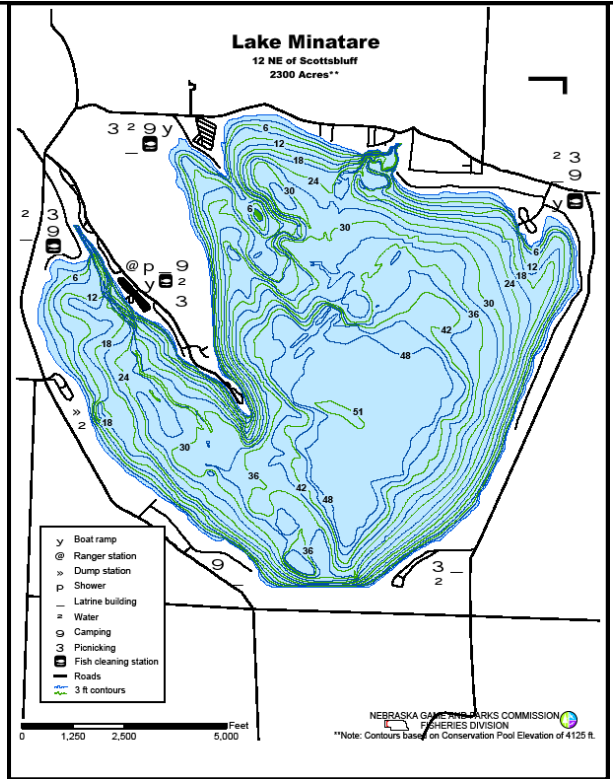


Box Butte Reservoir SRA is owned by the Bureau of Reclamation and encompasses 2,212 acres while the reservoir itself impounds approximately 1,600 of those acres. A State Recreation Area (SRA) encompasses the eastern end of the reservoir and a Wildlife Management Area can be found at the western end of the reservoir. These areas are all managed by the Nebraska Game and Parks Commission. The SRA offers electrical and primitive camping, water, boat ramp (located on the north side), fish cleaning station, swimming, picnic tables and shelters, and primitive restrooms.

Game fish species present in Box Butte Reservoir include: walleye, northern pike, channel catfish, blue catfish, yellow perch, bluegill, black crappie, rock bass, largemouth bass, smallmouth bass, and pumpkinseed sunfish. It is an excellent open water fishery for all game fish species as well as a top ice fishing destination for pike, bluegill, and yellow perch. Box Butte is also known for its water clarity, making it desirable for bow fishing, underwater powered spear gunning, and surface spear action. Box Butte Reservoir currently holds 16 state records in the above categories. The state hook-and-line record for white sucker was broken in 2012 at Box Butte Reservoir at 6 pounds 1 ounce.



Lake Minatare State Recreation Area is located 6 miles east and 8 miles north of Scottsbluff, NE in the North Platte River Valley. The area encompasses 2,873 acres, including a 2,147-acre reservoir when full. The reservoir was built in 1915 by the U.S. Bureau of Reclamation primarily for irrigation purposes. In 1986, jurisdiction of the area was granted to the U.S. Fish and Wildlife Service as part of the North Platte Wildlife Refuge. The lake and land adjacent to the reservoir is managed by the Nebraska Game and Parks Commission through a lease agreement for recreational activities while the Pathfinder Irrigation District controls water levels for irrigation.



Fishing is available at Lake Minatare for a variety of fish species which include walleye, white bass, wiper, channel catfish, blue catfish, smallmouth bass, largemouth bass, and yellow perch.

Big Lake Alice and Lake Winters Creek are both part of the North Platte Wildlife Refuge located above Lake Minatare and supplied by water from the Lake Minatare supply canal. Big Lake Alice is drained low enough each year thus very few fish survive the winter months. Therefore Big Lake Alice is utilized as a rearing lake for shad, walleye, and perch to be sent down the supply canal and into Lake Minatare.

As part of the North Platte Wildlife Refuge, Lake Winters Creek has a few special fishing regulations. The lake is only open during daylight hours and anglers are restricted to non-gas motors. Anglers may find a variety of species at Lake Winters Creek including yellow perch, black crappie, bluegill, walleye, largemouth bass, northern pike, and smallmouth bass. To provide a refuge for migrating waterfowl, Lake Minatare, Lake Winters Creek, and Big Lake Alice are closed to public use from October 15th through January 14th each year.

Oliver reservoir (Kimball Reservoir) is located 8 miles west of Kimball, Nebraska off highway 30. It is a 270 acre reservoir located on a 917 acre state recreation area. Oliver Reservoir was once a unique fishery providing both cool and coldwater fishing opportunities. The combination of drought and over appropriation of groundwater use has contributed to the loss of cool water inflows to the lake. Anglers can still expect to find walleye, white crappie, bluegill, largemouth bass, yellow perch, channel catfish and an occasional tiger musky.



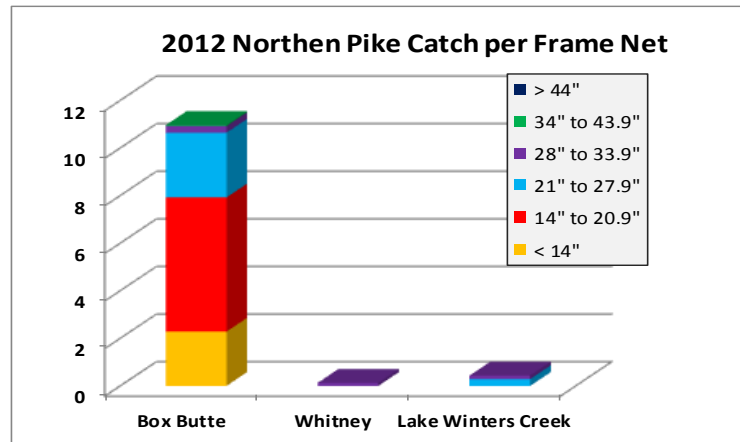
Today the lake is approximately 50 acres with a maximum depth of 8 foot. Fisheries management activities will discontinue at Oliver Reservoir unless the lake levels improve to a level that will once again sustain a healthy fishery.

Whitney Reservoir is a 900 acre lake located about 1 mile West of Whitney, Nebraska owned and operated by the Whitney Irrigation District. A Wildlife Management Area located on the NE corner of the lake provides angler access with a boat ramp and pit toilet. The lake has a drastic summer drawdown making access nearly impossible by late summer. Game fish species present in Whitney Reservoir include: yellow perch, bluegill, black crappie, white crappie, northern pike, largemouth bass, channel catfish, white bass, and walleye.



Northern Pike

Northern pike are found in Box Butte, Whitney, and Lake Winters Creek. An occasional pike can be caught in Lake Minatare, however pike abundance is not significant enough to contribute to the overall fishery.

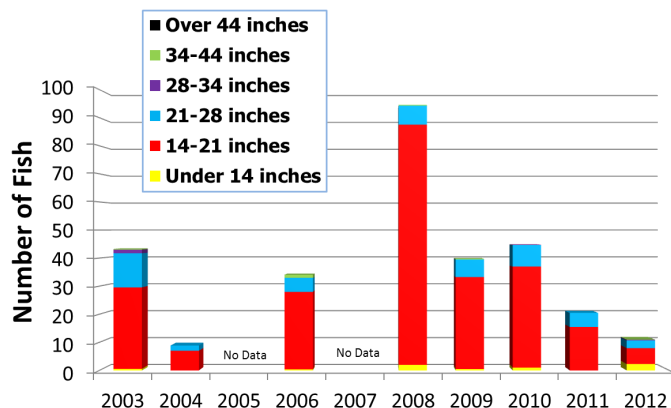


Northern pike sampling at Box Butte Reservoir is conducted in mid to late March or when the ice comes off, whichever comes first. The sampling gear consists of frame nets that are set perpendicular to the shoreline to intercept pike as they move into vegetated areas to spawn. Northern pike sampling at Whitney and Lake Winters Creek are conducted in conjunction with panfish surveys since northern pike is not a primary species in either lake.

In 2008, fisheries management placed a special regulation for northern pike at Box Butte. The regulation was a protected slot of 28-34 inches and an increased bag limit of 10 fish (only one can be over 34 inches). This new regulation is experimental and was done to increase size structure of pike in the lake and produce a better quality pike fishery. Whitney Reservoir and Lake Winters Creek have a daily bag limit of 3 pike of any size with a possession limit of 10.

Box Butte Reservoir continues to be the top northern pike destination in the panhandle with a catch rate of 11 fish per frame net. The protected slot limit and relaxed bag on Box Butte appears to be reducing the northern pike abundance. However, with a warm spring and early spawn, it is possible that the pike sample is underestimating the total abundance in 2012.

Box Butte Reservoir Northern Pike Catch Per Net



Northern Pike (Continued)

Northern pike anglers looking for large fish should not be discouraged by the low catch rates in Whitney Reservoir or Lake Winters Creek. Since the reported catch rates are from panfish surveys it is likely that the total abundance in both lakes is greater than reported. Also the average size northern pike sampled in 2012 was 31.9 inches in Whitney, 26.4 inches in Lake Winters Creek, and only 21.6 inches in Box Butte. Box Butte northern pike size structure is improving with 28 % of the pike sampled in 2012 were over 21 inches compared to 17% in 2010. Also, 3% of the total pike survey in 2012 were in or above the 28 inch slot limit including a 42.5 inch northern pike pictured here.

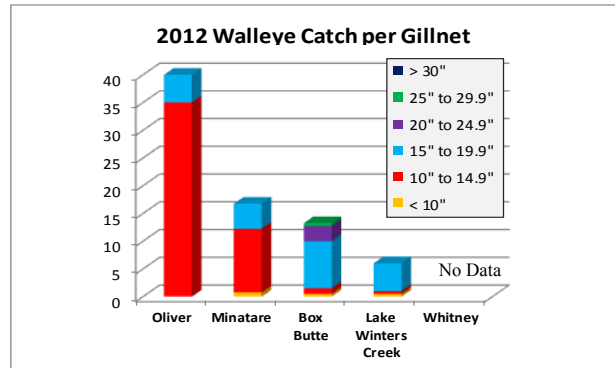


42.5 inch pike sampled in Box Butte Reservoir in 2012

Walleye

Walleye are found in Oliver Reservoir, Lake Minatare, Box Butte Reservoir, Whitney Reservoir, and Lake Winters Creek.

Oliver Reservoir had the highest catch rate during 2012 fall gillnet surveys with 40 fish per net. The majority of fish surveyed at Oliver were well below legal size with an average length of 13.8 inches and only 10% at harvestable size.



Box Butte Reservoir had the best size distribution with 89% of fish surveyed over 15 inches and 28% of the catch at 20 inches or longer.

Whitney Reservoir was not surveyed for walleye in 2012 due to extreme low water.

Lake Minatare had an excellent walleye season in 2012 with the early spring and fair weather all summer long. Lake Minatare will likely remain the top lake for walleye fishing in the panhandle this year. Most harvestable fish will be age-3 and just over 15 inches. The average size walleye sampled in Minatare in 2012 was 13.9 inches.



30.5 inch walleye caught at Box Butte in 2012

Walleye (Continued)

Walleye are stocked annually in Lake Minatare, Oliver Reservoir, and Whitney Reservoir. Box Butte Reservoir has a natural recruiting walleye population and does not require supplemental stocking.

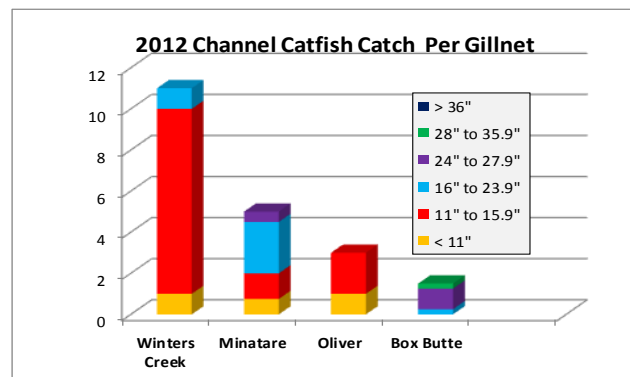
In 2012, walleye fingerlings were also stocked in Big Lake Alice to act as a rearing pond to supplement the walleye fishery in Lake Minatare. Big Lake Alice is mostly void of game fish every year due to the drastic draw down in the fall and into the winter. The stocked walleye have little competition for limited resources and grow larger and faster than walleye stocked in Minatare. During the fall draw down, water from Big Lake Alice is drained through the Minatare supply canal and into Lake Minatare.

Oliver Reservoir may not receive any additional fish stocking unless water levels significantly increase.

Channel Catfish

The channel catfish gill-net catch in 2012 was highest in Lake Winters Creek with 11 fish per net. However, Lake Minatare and Box Butte are the best options for an angler looking for quality catfish.

Box Butte and Lake Minatare have also been stocked with blue catfish. Anglers are required to know the difference between blue and channel catfish since blue catfish are managed as a trophy fishery with a bag limit of 1, and channel catfish have a bag limit of 5.



Blue or Channel?

1. Blue catfish have a long straight anal fin while a channel catfish's anal fin is rounded.
2. Small channel catfish will have spots across its body while blue catfish will not.

Catfish are stocked annually in irrigation reservoirs typically at 10 inches. Due to the low water conditions in Whitney in 2012 the majority of the catfish that were to be stocked in Whitney were brought to Box Butte. Box Butte usually receives 1600 catfish (1 per acre) and Whitney usually receives 4500 (5 per acre).

2012 Channel Catfish Stocking			
Lake	# Stocked	Size Stocked	Rate (# / Acre)
Box Butte	3305	11 inch	2.0
Minatare	4069	9 inch	1.9
Whitney	638	11 inch	0.7
Lake Winters Creek	2300	11 inch	9.8
Oliver	1000	9 inch	3.7

Black Bass

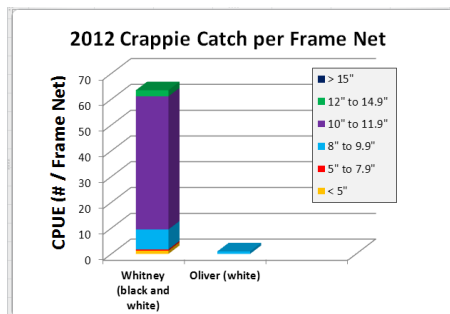
Bass were not surveyed in 2012 in any of the irrigation reservoirs. Fluctuating water levels make bass surveys difficult to perform as water levels are usually high, flooding terrestrial vegetation and timber during the spring and early summer when bass surveys are typically conducted. Largemouth bass can be found in all irrigation reservoirs while smallmouth are only found in Box Butte Reservoir and Lake Minatare.

White Bass and Wipers

White bass can be found in Whitney Reservoir and Lake Minatare. Wipers are only found in Lake Minatare. The inlet canal at Lake Minatare is a popular destination for white bass and wipers while the lake is filling. White bass and wipers were sampled in low abundance in 2012 in Lake Minatare with a catch rate of 1.25 and 1.0 fish per net respectively. Although the average size wiper surveyed was only 10 inches anglers do very well on wipers over 18 inches. Wipers get stocked annually in Minatare at a rate of 3 fingerling per acre.

Panfish

Whitney Reservoir has both black and white crappie and is the top irrigation reservoir for crappie with a frame net catch of 64 fish per net in 2012. The average size crappie surveyed in Whitney was 10.2 inches with 85% of the population over 10 inches. Oliver crappie numbers have dropped significantly in 2012 to only 1 fish per net compared to 13.8 per frame net in 2011. Box Butte and Minatare have quality crappie fisheries but were not surveyed in 2012.



Nice crappie collected during spring survey on Whitney Reservoir 2012.

The top irrigation reservoir for bluegill is Box Butte Reservoir. Although no panfish surveys were conducted in 2012, creel survey and angler reports suggest continued quality fishing for bluegill.

Lake Minatare is the top irrigation reservoir for yellow perch. Angler reports during 2012 were very good throughout the summer and into the fall for perch over 10 inches. Box Butte yellow perch population has also rebounded over the past couple years likely as a response to the higher water and reduced abundance of northern pike. Anglers can expect to see quality perch fishing in the coming future.

For additional information about fisheries management at Lake Minatare, Whitney Reservoir, Lake Winters Creek, or Box Butte Reservoir please contact the following personnel by phone or email addresses listed below.

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