



Crawford Reservoir

FISH SURVEY AND MANAGEMENT INFORMATION

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General Information: Crawford Reservoir is a popular fishery that provides angling opportunity for yellow perch, channel catfish, northern pike, rainbow trout, black crappie, and largemouth bass. This reservoir, located in Crawford State Park, covers 414 surface acres at full capacity and is open year round to angling. Visit the State Parks website for information on regulations, camping, and recreation:

<http://parks.state.co.us/Parks/Crawford>

Location: 2 miles south of the town of Crawford on Hwy 92.

Primary Management: Warmwater Mixed Species Lake Category 602

Amenities

- Boat Ramps (2)
- Campgrounds (2)
- Showers
- Visitors Center
- Restrooms
- Parking Areas
- Picnic Shelters

WARNING !!!

Prevent the Spread of Zebra Mussels and other Aquatic Nuisance Species

- Clean, drain, and dry your boat after each use.
- Crawford State Park requires mandatory boat inspections before launching. Please check with the park for more information

Previous Stocking

2019

Rainbow Trout (10"): 9,100
Largemouth Bass (2"): 30,088
Largemouth Bass (6"): 150
Largemouth Bass (20"): 70
Channel Catfish (7"): 1,500

2018

Rainbow Trout (10"): 12,184
Largemouth Bass (2"): 30,000
Channel Catfish (7"): 4,250

2017

Rainbow Trout (10"): 12,184
Largemouth Bass (2"): 20,000
Largemouth Bass (16"): 70
Channel Catfish (9"): 2,000

Regulations

- NEW: Limit for largemouth bass is 1 fish over 18" in length.
- No bag or possession limit on northern pike
- No bag and possession limit on yellow perch.
- From fence on top of Crawford Reservoir dam downstream to N boundary fence, fishing in spillway, stilling basin and outlet canal prohibited.

Sportfishing Notes

Black Crappie

- Good spots include the East shore primarily around the Clear Fork boat ramp cove or anywhere with brush
- Good baits include small tube jigs and worms

Channel Catfish

- Good spots include the north side of peninsula cove and near the dam
- Good baits include night crawlers and cut-bait

Largemouth Bass

- Good spots include the rocky areas near the dam and flooded brush and vegetation in the spring and summer.
- Good baits include crankbaits, spinnerbaits, and texas rigged soft plastics.

Yellow Perch

- Good spots are located in shallow bays with vegetation
- Small tube jigs tipped with a small piece of night crawler are best for yellow perch



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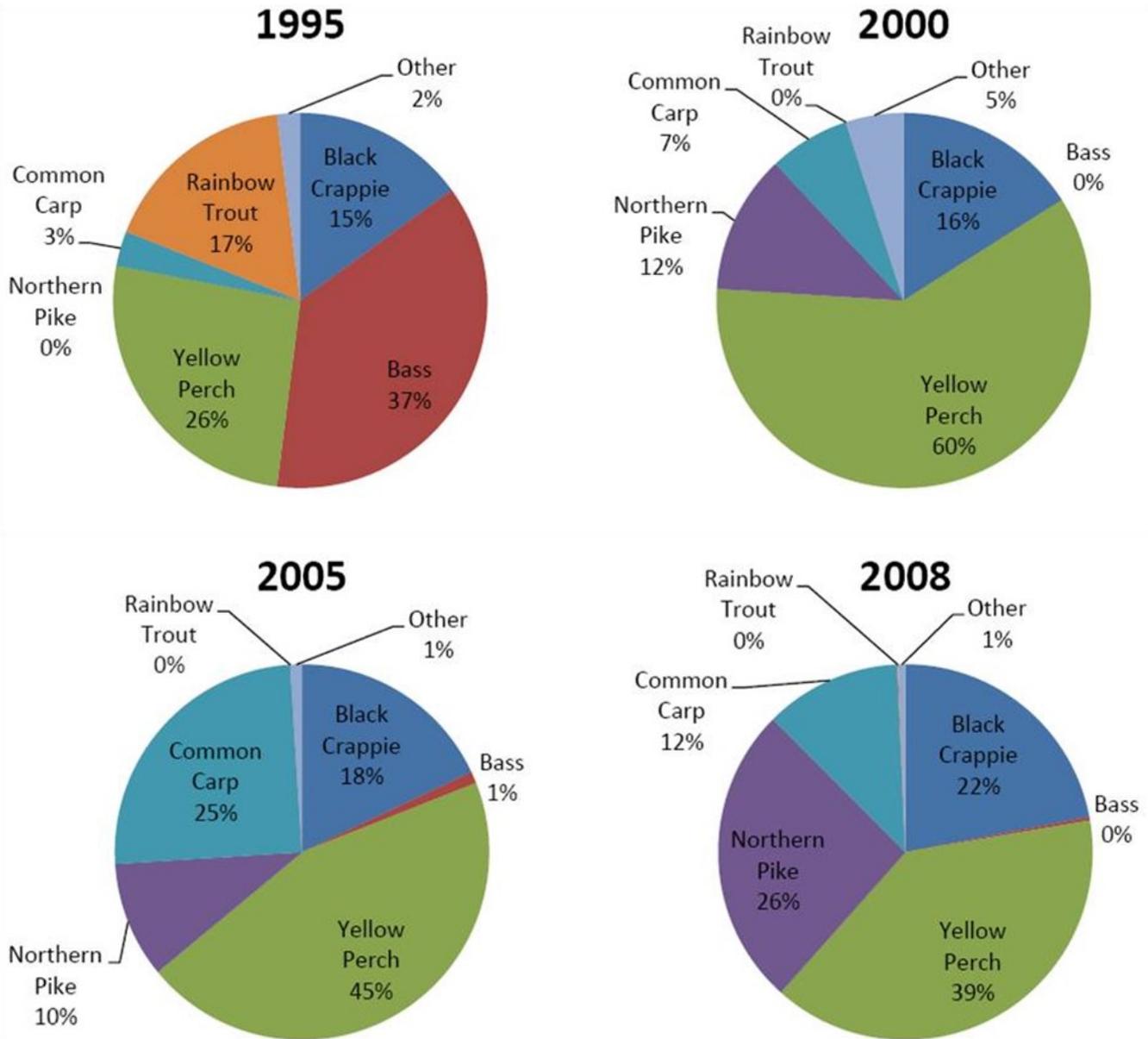


Figure 1. Species composition of fish sampled in Crawford Reservoir 1995-2008. Before 1995, the reservoir was managed for quality perch and largemouth bass fishing and rainbow trout opportunity. Two illegal introduction in the mid to late 1990's, common carp and northern pike, had drastic impacts on the fish community. By 2005, northern pike and common carp represented large proportions of the fish present in the fishery. By the late 2000s, largemouth bass and rainbow trout became very rare in Crawford Reservoir due to pike predation, and in 2012, stocking of rainbow trout was eliminated. By 2013 the numbers of perch and crappie had also declined due to northern pike predation.



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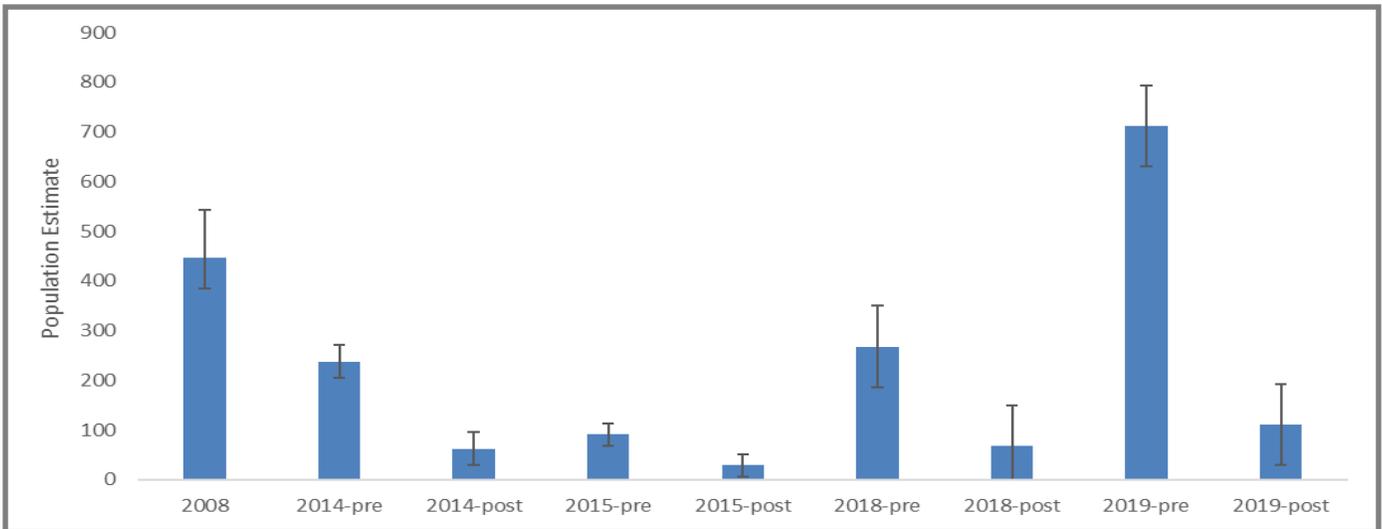


Figure 2. To reduce the predation pressure the limit was lifted on northern pike in 2008 resulting in a decline from around 450 to 250 adult northern pike between 2008 and 2014. To supplement this effort, northern pike were netted from the lake in 2014, 2015, 2018 and 2019. Resulting in a substantial decline in the number of pike in the fishery. No netting was conducted in 2016 and 2017 to evaluate how fast the pike population would rebound in order to determine how often netting is necessary in the future. The large jump in pike numbers in 2019 was likely due to a high-water year in 2017 that resulted in strong spawning success and a large age-class.

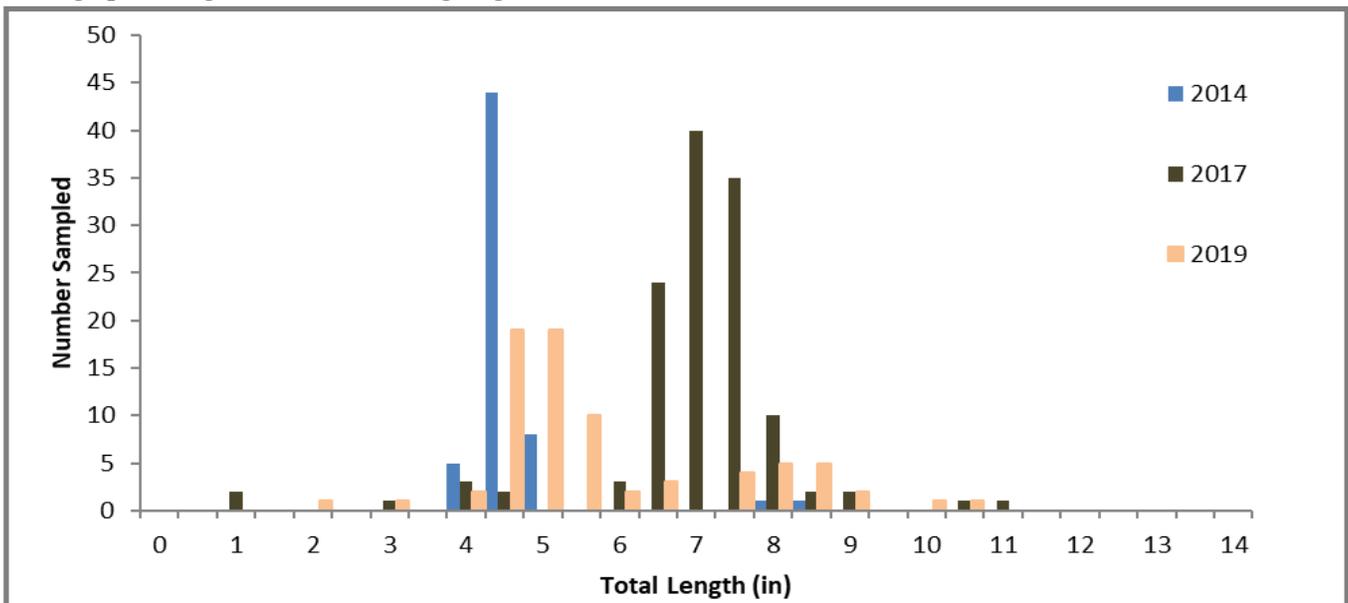


Figure 3. Length of all black crappie captured in the 2014, 2017 and 2019 electrofishing surveys from Crawford Reservoir. Following the initial 2014 northern pike removal, there were very few black crappie sampled and the majority were less than 5 inches long. By 2017 the number of crappie had increased, and more fish were present from 6 to 11 inches in length. This response was likely due to reduced predation by northern pike following the removal efforts, and results in a more balanced fishery. Unfortunately the drought of 2018 resulted in extremely low water levels, causing increased predation on prey species, reducing the number of crappie over 6 inches.



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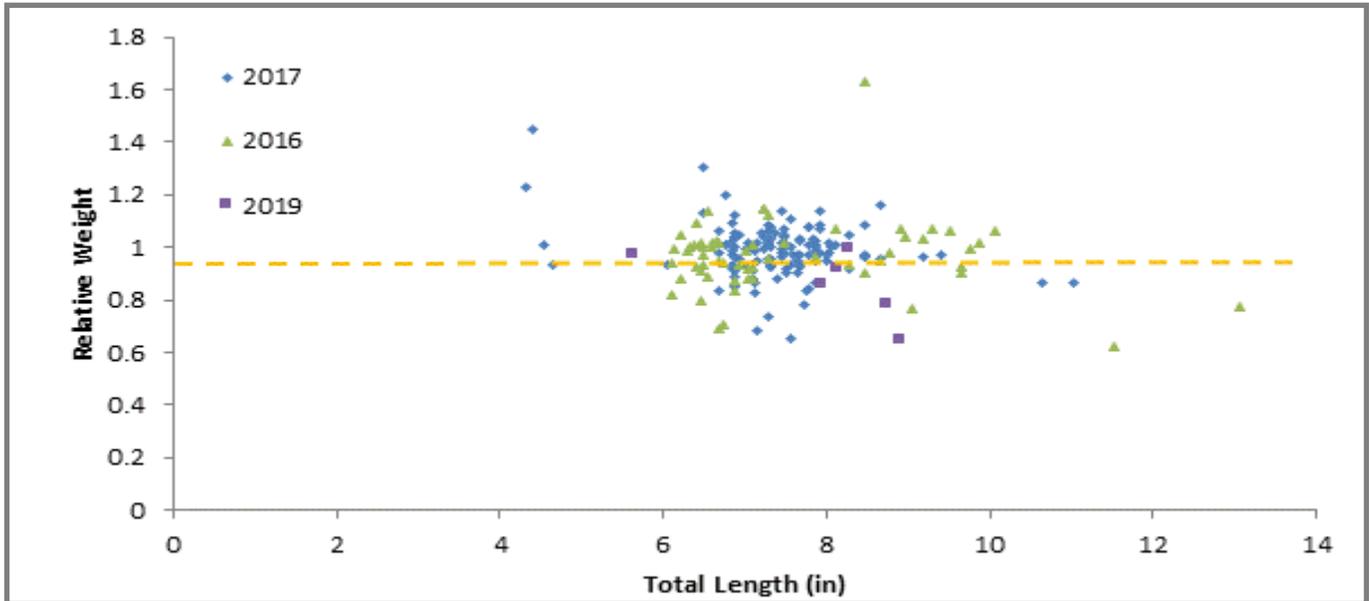


Figure 4. Relative weights of black crappie sampled from Crawford Reservoir during boat electrofishing surveys. A relative weight of 0.93 (dashed yellow line) represents a crappie in average, healthy condition. The black crappie in Crawford Reservoir have had average body condition for the past several years. Larger crappie have below average body condition, likely due to a lack of small forage fish in the reservoir. This limits the maximum size of crappie that Crawford Reservoir is capable of growing.

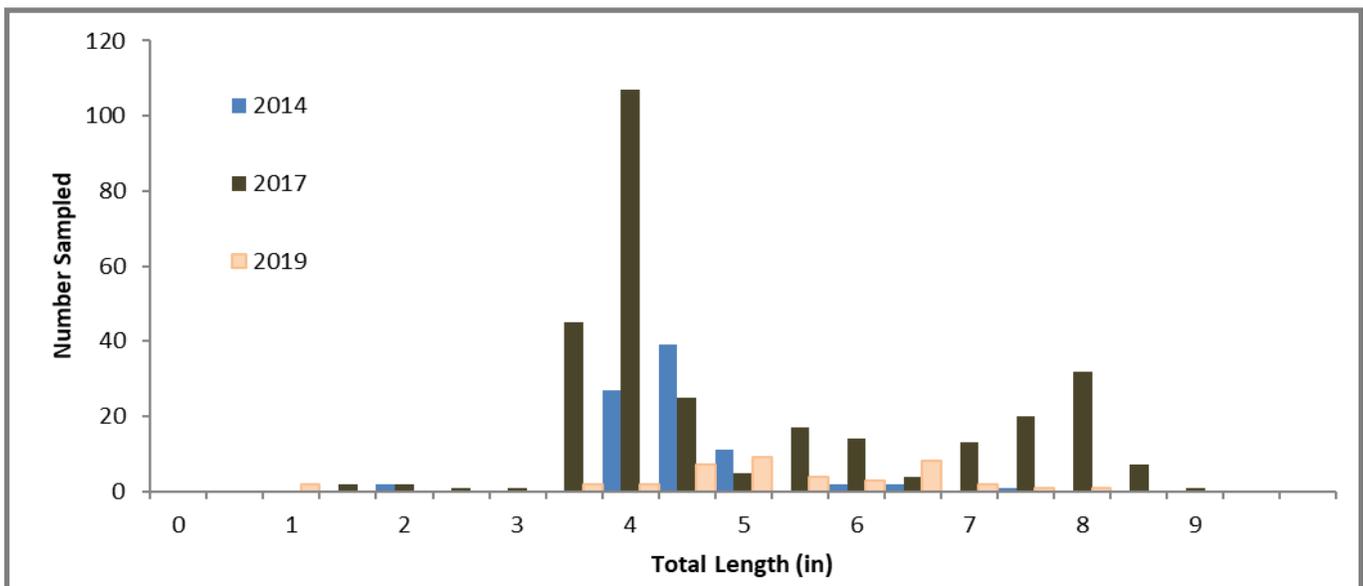


Figure 5. Length of all yellow perch captured in the 2014, 2017 and 2019 electrofishing surveys from Crawford Reservoir. Following the initial 2014 northern pike removal, there were very few yellow perch sampled and the majority were less than 5 inches long. By 2017 the number of perch had increased, and more fish were present from 7 to 9 inches in length. The 2018 drought also resulted in decreases in the number of perch sampled over 6 inches. Ice fishing reports from the winter of 2019-2020 have indicated large numbers of perch from 7-9 inches, So the population appears to be rebounding



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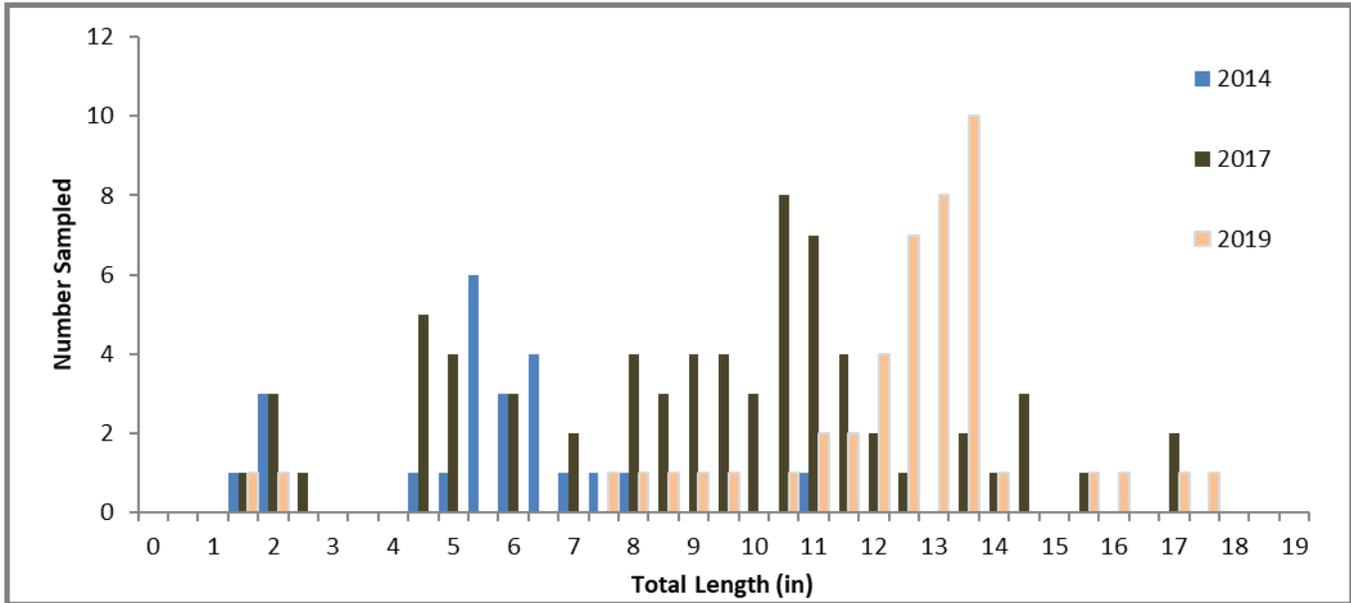


Figure 6. Lengths of largemouth bass sampled in 2014, 2017 and 2019 from Crawford Reservoir. Following the pike removal efforts, far greater numbers of largemouth bass are living to adult sizes, and a good age-class of 11-14 inch fish was sampled in 2019. Unfortunately, no bass were sampled between 4 and 7 inches in 2019, likely due to the drought conditions of 2018.

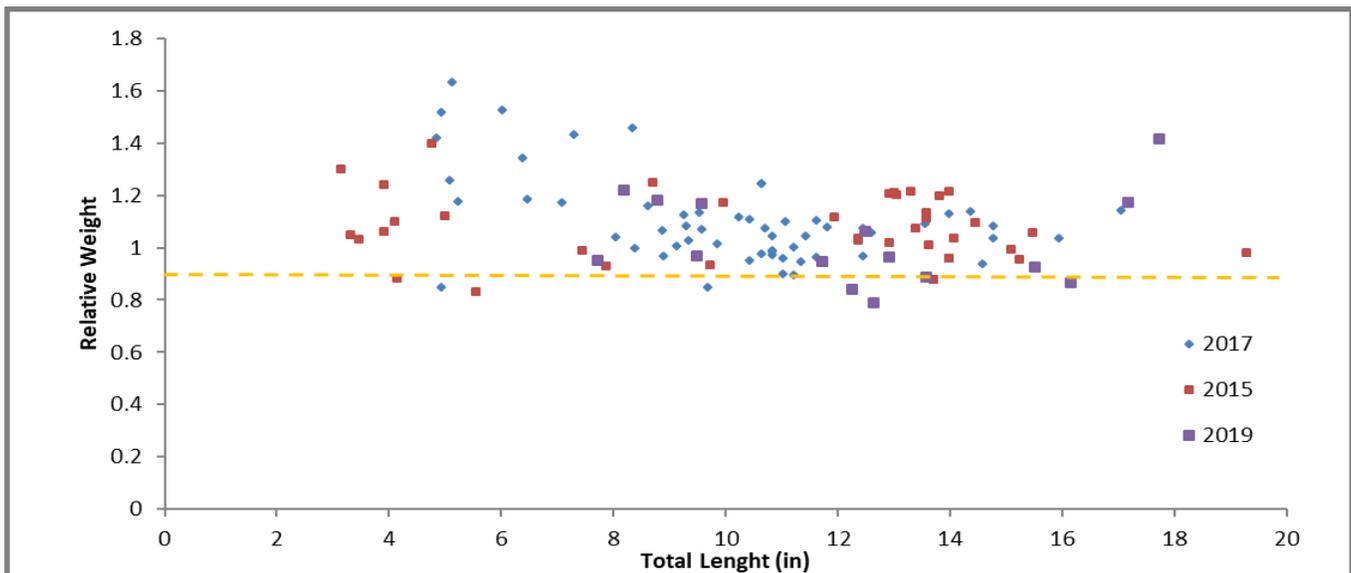


Figure 7. Relative weights of largemouth bass sampled in 2015, 2017 and 2019. A relative weight of 0.93 (dashed yellow line) represents a largemouth bass in average, healthy condition. For the last several years, largemouth bass body condition has been well above average, indicating that the largemouth bass are healthy and should grow well to larger sizes. The harvest regulations were changed for largemouth bass starting in 2016 to allow harvest of only one largemouth bass over 18 inches. This regulation change will protect largemouth bass as they grow to larger sizes to create a trophy sport fishing component to the fishery. Now that the pike population is under control, largemouth bass fishing should continue to improve.



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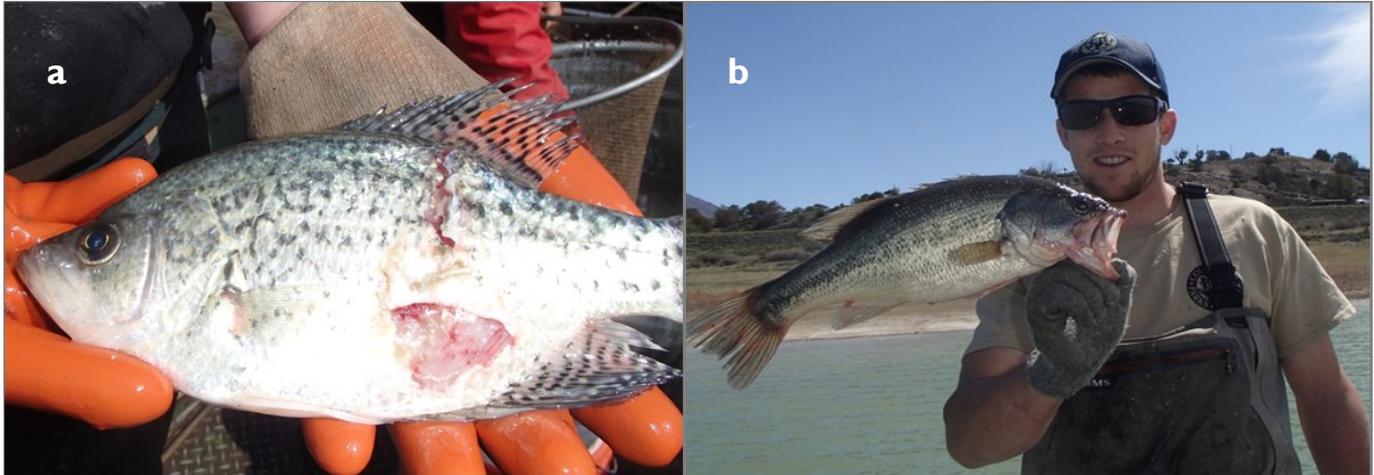


Figure 8. Panel a: Black crappie sampled in 2014 with large wound from a northern pike attack. Panel b: Largemouth bass sampled from Crawford Reser-

Management Summary

The reduction in northern pike numbers over the last few years in Crawford Reservoir has allowed a more balanced fishery to develop. Angling opportunities should be good in 2020, despite the setbacks incurred by the 2018 drought, and continue to improve for the next few years for black crappie, yellow perch, largemouth bass, rainbow trout and channel catfish. The one fish over 18 inch regulation for largemouth bass should be effective at improving the quality of the largemouth bass fishery providing a trophy component to the fishery at Crawford Reservoir that is more sustainable and balanced than the fishery was in the past. By offering angling opportunities for a diverse assemblage of fish allows for broader angling opportunities than were historically available at Crawford Reservoir. Northern pike removal efforts have been effective at reducing the northern pike numbers, and has resulted in restoring balance to the fishery. These removals will not be conducted are planned to be conducted on a bi-annual basis to keep the population in check. . Rainbow trout stocking along with largemouth bass and channel catfish stocking will be continued over the next few years and the effectiveness will be evaluated via annual surveys. There are tagged northern pike still present in the reservoir, and tagged fish caught by anglers should be reported by calling the phone number on the tag.

