



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 Ramp
- 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

2009

Rainbow Trout: 12,184
Channel Catfish: 4,250

2008

Rainbow Trout: 6,999
Channel Catfish: 4,998
Largemouth Bass 5,041

2007

Rainbow Trout: 14,160
Largemouth Bass 6,000

Regulations

- Min. size for bass is 15 inches long
- No bag and possession limit on yellow perch.
- From fence on top of Crawford Res dam downstream to N boundary fence, fishing in spillway, stilling basin and outlet canal prohibited.
- Only 1 northern pike longer than 34 inches can be taken per day.

Sportfishing Notes

Rainbow Trout

- Ice fishing is best. Good spots include the peninsula cove
- Good baits include jigs, spoons, and wax worms

Yellow Perch

- Good spots include the west shore and around the dam
- Good baits include small jigs and waxwoms

Channel Catfish

- Good spots include the north side of peninsula cove and near the dam
- Good baits include night crawlers, stinkbaits, and dead minnows

Northern Pike

- Good spots include the peninsula cove, Iron Creek inlet, and Clear Creek inlet
- Good baits include streamers, rabbit strip leeches, spinnerbaits, and spoons



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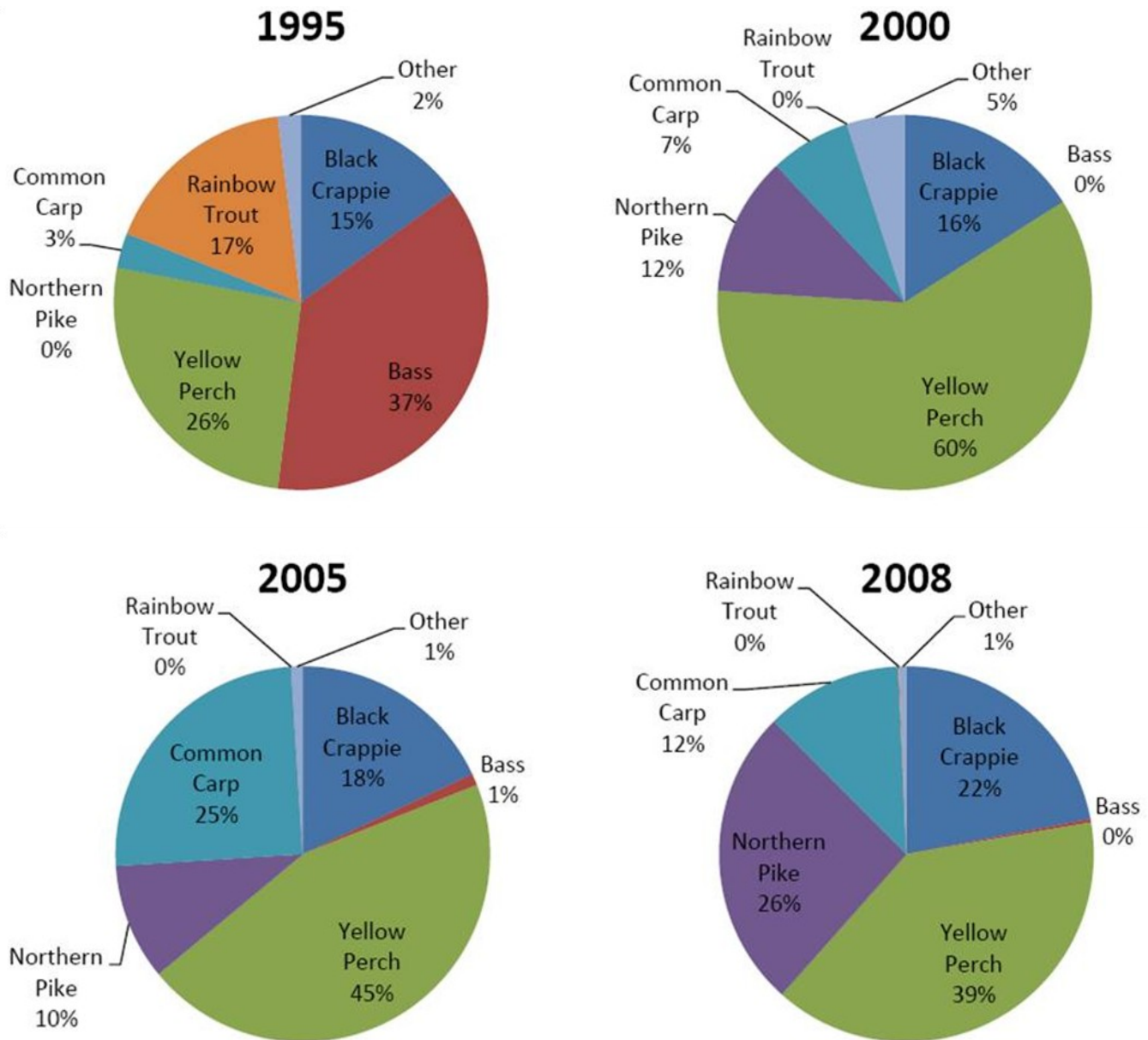


Figure 1. Species composition of fish sampled in Crawford Reservoir 1995-2008. Before 1995, the reservoir was managed for quality perch and largemouth bass fishing and rainbow trout opportunity. Two illegal introduction in the mid to late 1990's, common carp and northern pike, had drastic impacts on the fish community. Largemouth bass are very rare in the reservoir today and rainbows are only available for short periods of time after stocking, mostly though the ice. Northern pike have developed into a popular spring and fall fishery for trophy sized fish. The number of crappie and perch has remained steady but the quality of the panfish has declined considerably. Channel catfish, which were not a target of this sampling, remain a popular fishery, especially during the summer.



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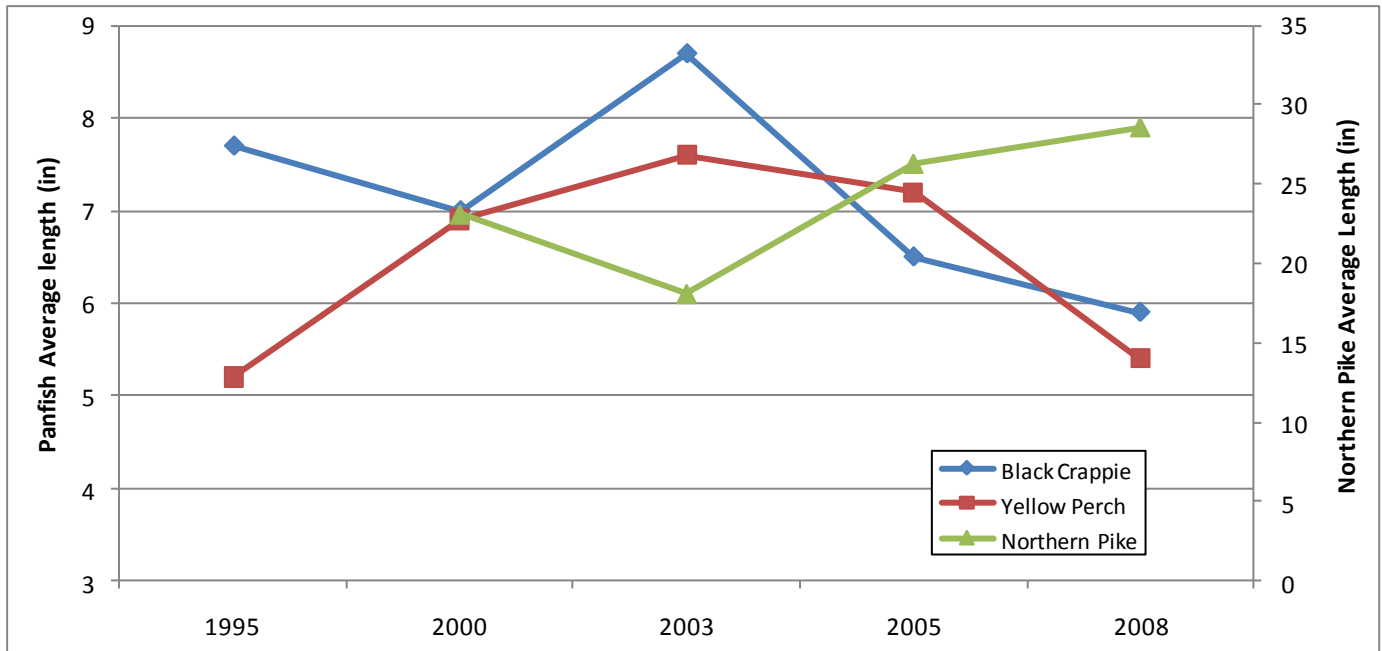


Figure 2. Average length in inches of perch, crappie, and northern pike sampled in Crawford Reservoir 1995-2008. When northern pike first appeared in the reservoir, their average size was small as they reproduced well in a new environment. In 2003 there were lots of small pike in the reservoir and panfish size increased. Once the pike population matured and took advantage of stocked rainbow trout, their growth quickly increased to produce trophy sized fish.

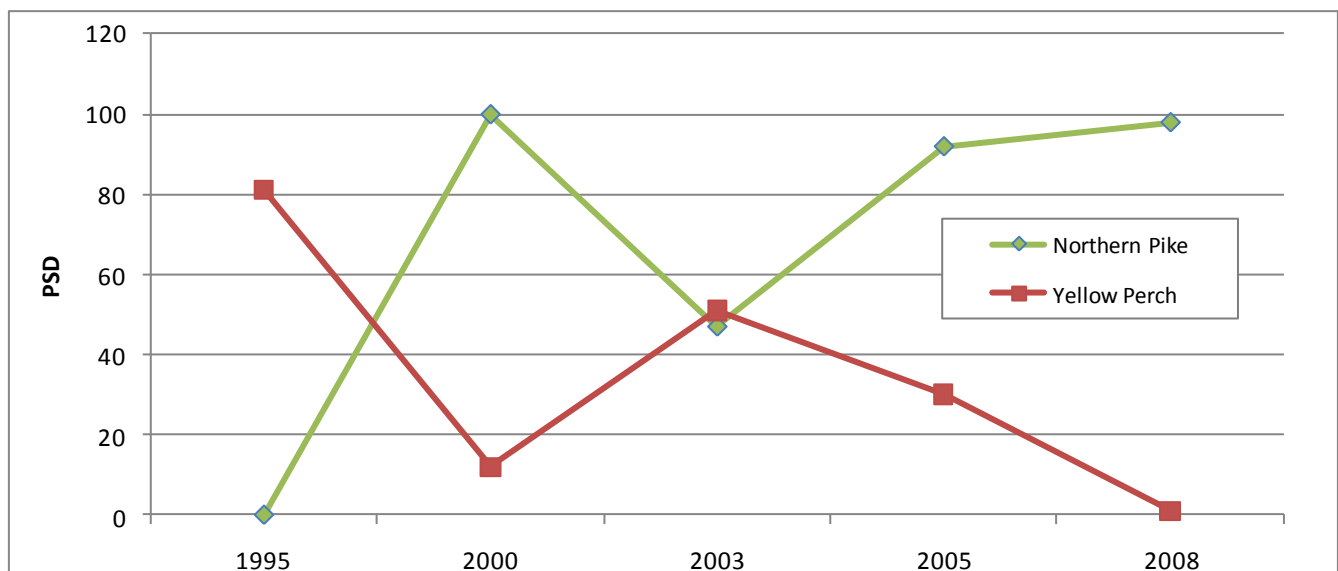


Figure 3. This figures shows the proportional stock density (PSD), or percent of the fish sampled that were over stock size (14 in. for pike and 5 in. for perch). This demonstrates the inverse relationship between pike size and perch size in Crawford.



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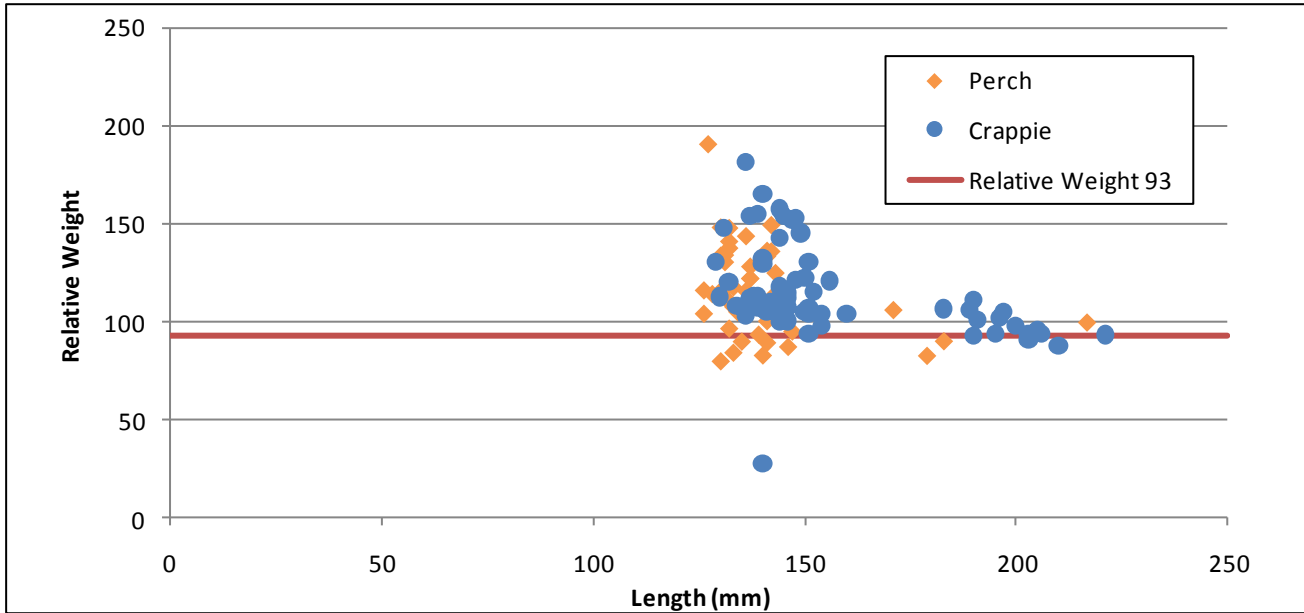


Figure 4. Relative weights of perch and black crappie sampled in Crawford in 2007. The body conditions of panfish in Crawford are average to above average and there is no indication of resource limitations or overpopulation.

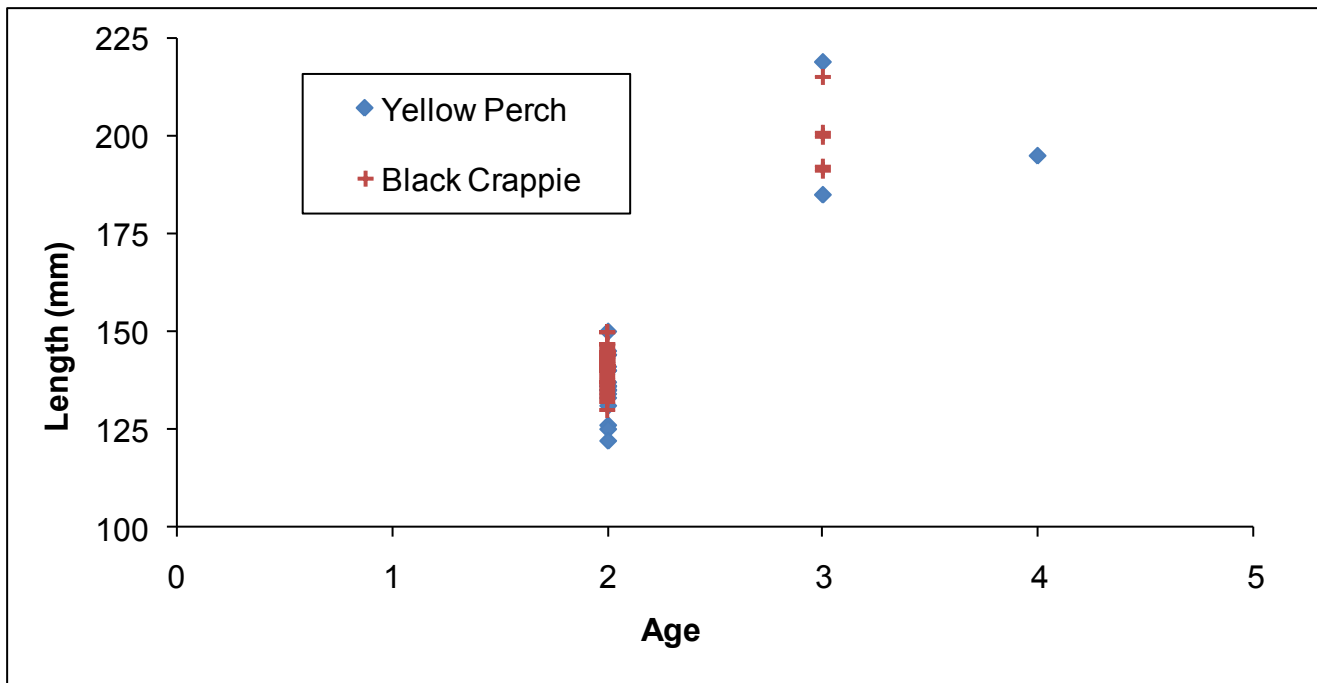


Figure 5. Length at age data for perch and crappie sampled in Crawford in 2007. Of the 488 perch captured, only 5 fish were longer than 7 inches and one fish was older than age 3. Of the 273 black crappie captured, only 4 fish were longer than 8 inches, and no fish were older than age 3.



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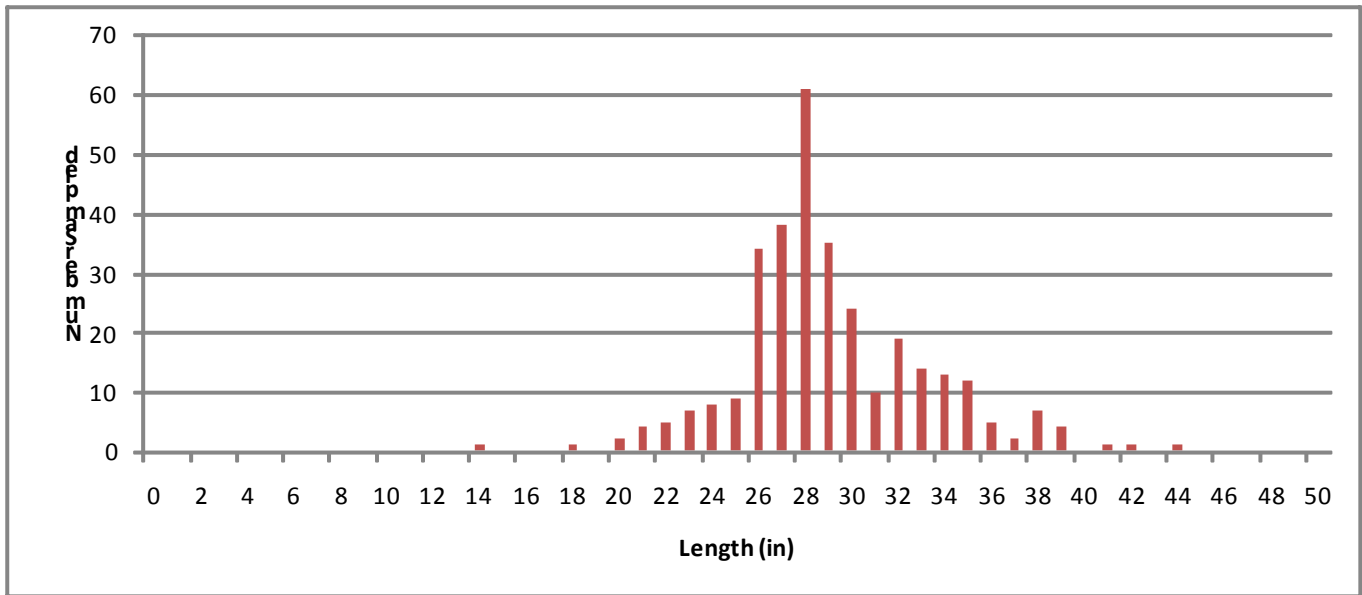


Figure 6. Length frequency histogram of northern pike sampled in Crawford Reservoir in 2008. A mark recapture population estimate was completed by capturing spawning fish after ice out, tagging them, and releasing them. Fish were recaptured later in the spring with gill and trap nets. In May of 2008 there was an estimated 447 (95% C.I. 384-543) pike in Crawford Reservoir. The largest fish handled that year was a 43 inch 24.5 lbs. female that was tagged and released.



Figure 7. The north pike population in the 2003 (left picture) was dominated by large numbers of small pike. By 2008 (right picture) the population had experienced fast growth and took advantage of the abundant forage of perch, crappie, and especially stocked trout catchables and bass fingerlings to grow quite large.



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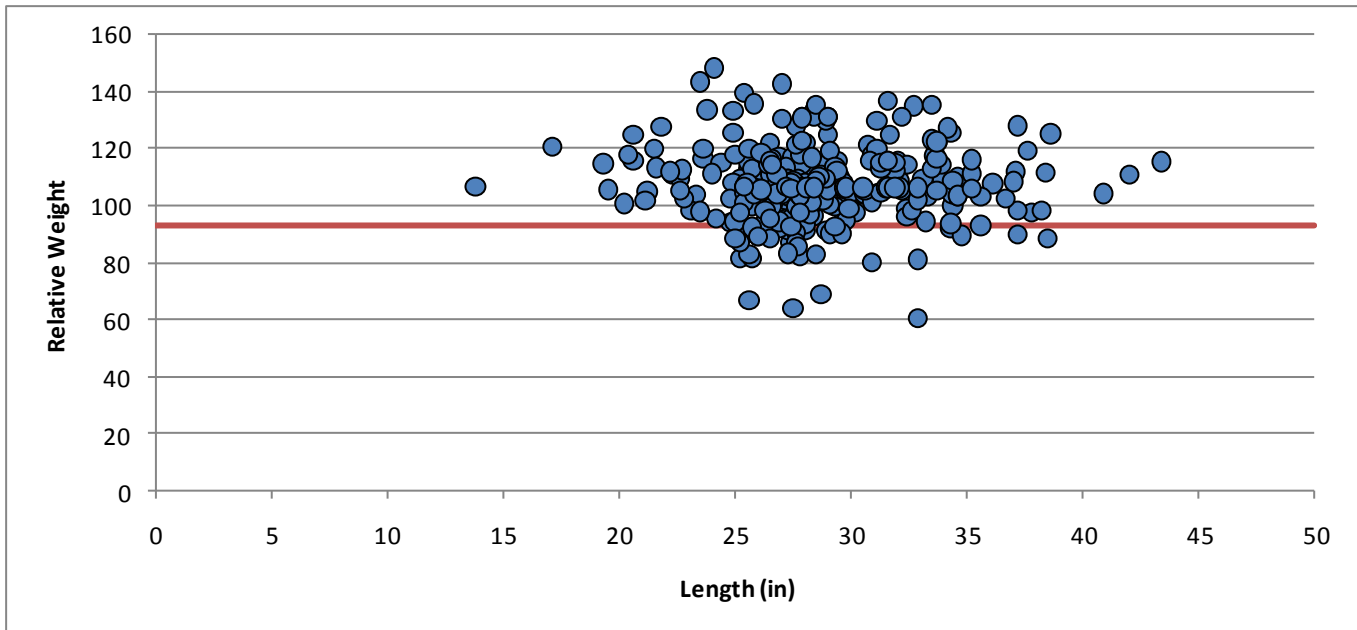


Figure 8. Relative weight plot for northern pike in Crawford in 2008. The red line indicates a relative weight of 93% which is the average body condition for pike across its entire range. Pike in Crawford are very heavy for their size and this excessive body condition is a result of artificial supplementation of a high quality food source, rainbow trout. Without continued rainbow stocking, pike body condition would decline quickly. Pike are further benefited by the large annual water level fluctuations that reduce the lake volume by almost two thirds each fall. This concentration of predators and their prey into a small area with little or no cover increases foraging efficiency for the large fish.

Management Summary

Crawford Reservoir provides good angling opportunity for northern pike, small perch and crappie, good summer catfishing, and seasonal rainbow trout fishing. The existing lake management plan that focuses management on quality perch and largemouth bass is not valid under current reservoir conditions and new management strategies are needed. The introduction and expansion of the carp population is problematic and there are too many large pike to have a viable bass fishery or quality perch fishery. Bass are stocked in the fall at 5 inches and very few recruit past the following spring due to predation. The lake has the potential to produce quality perch and bass, but not with the current fish community and habitat conditions. To increase panfish quality, more medium sized predators (like bass, walleye, or saugeye) are needed and fewer large pike. Habitat improvement in the low water basin would also benefit the bass and panfish population. Continuing to supplement pike with catchable rainbow stocking is not justifiable economically and will be discontinued without acceptable return to creel. A new lake management plan is being developed to address these new challenges and to evaluate new management scenarios including the introduction of new fish species like saugeye or walleye, changing existing fishing regulations, and the removal of carp and/or pike.