

Report From Agency

REPORT TO LEGISLATURE

NR 25 Wis. Adm. Code
Relating to cisco harvest in Lake Superior and affecting small business.

Board Order No. FH-13-16
Clearinghouse Rule No. 16-061

Basis and Purpose of the Proposed Rule

Cisco are a key species in the Lake Superior ecosystem and are harvested in Wisconsin waters for commercial, angling, and subsistence purposes by state licensees and members of the Red Cliff and Bad River Bands of Lake Superior Chippewa Indians. This rule is needed to manage the long-term sustainability of the cisco population. Currently the commercial harvest season is open year-round and there is no size limit or harvest quota in place for cisco. The angling season is open year round in Lake Superior with a 10-fish daily bag limit per person and no size limit. Only a few hundred cisco are harvested by anglers each year.

Cisco have been harvested commercially in Wisconsin waters of Lake Superior for decades. After a population decline in the 1960's, a commercial fishery slowly grew over the next 30 years. Average annual state-licensed and tribal commercial harvest between 2000 and 2007 was approximately 360,000 pounds of cisco. However, since 2008 the commercial harvest of cisco increased dramatically because commercial fish processors began accepting whole fish and the market demand for cisco eggs, sold as caviar in Europe, skyrocketed. Average annual combined state and tribal harvest from 2008 through 2015 was approximately 1.4 million pounds. For state-licensed commercial fishers alone, the average annual catch was 878,343 pounds of cisco.

Average Annual Harvest (Round Weight; State-licensed and tribal commercial harvest combined):

- 2000 – 2007: 359,341 lbs.
- 2008 – 2015: 1,376,520 lbs.

Actual Annual Harvest (Round Weight; State-licensed and tribal commercial harvest combined):

- 2014: 1,107,923 lbs.
- 2015: 1,552,169 lbs.

Based on the U.S. Geological Survey (USGS) annual bottom trawl survey, cisco numbers have declined in Lake Superior since 1990 (Figure 1). Similar declines have also been seen from repeated hydroacoustics sampling in Wisconsin waters since 2006 (Figure 2). By using data from both catching and counting fish in trawl surveys and using sonar technology to detect the presence and abundance of fish in hydroacoustics surveys, the department can determine a reliable assessment of the cisco population. These cisco population declines are due to sporadic recruitment of cisco (recruitment means reaching a certain size or reproductive stage), and there has not been a strong, above average year class or group of cisco since 2003 (Figure 3). The current commercial catch primarily consists of fish from the 1998, 2003, and 2009 year classes. In 2014 surveys, 81% of the aged harvested fish were from these three year classes. However, the 1998 and 2003 year classes are contributing less to the fishery (62% of the commercial catch in 2011 and only 38% in 2014). The 2014 year class does appear to be equivalent to the 2009 year class, which should allow for sustained harvest. However, the sporadic nature of cisco recruitment and the potential for commercial markets to increase - as was seen in 2008 - necessitate the need for the establishment of a total allowable harvest limit. In addition, the importance of cisco to the ecosystem and to the commercial industry requires the ability to frequently review management and harvest to avoid changes that may cause further declines.

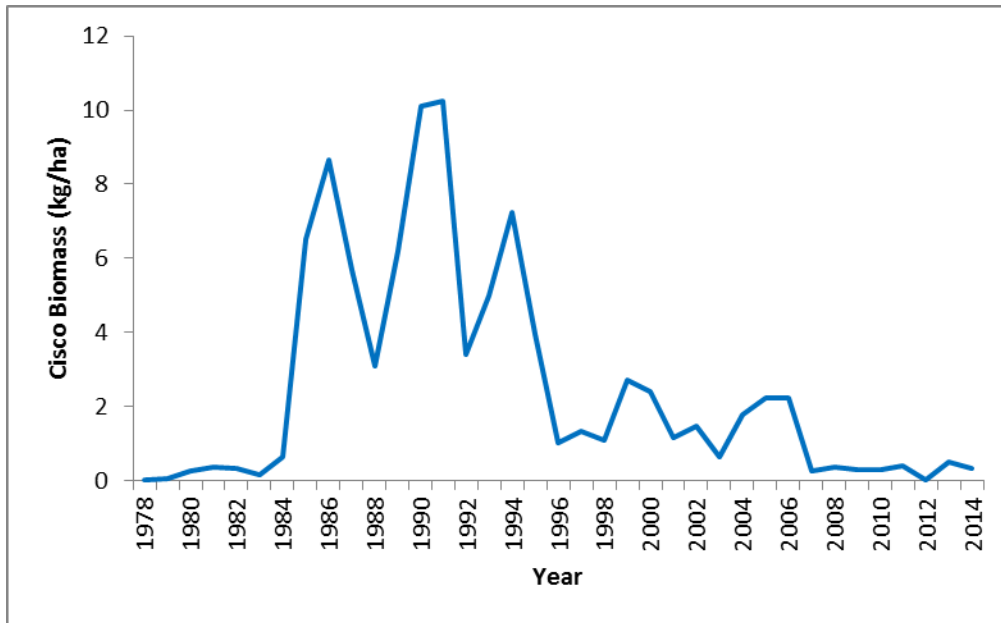


Figure 1. U.S. Geological Survey spring bottom trawl estimated mean lake-wide biomass for age-1 and older cisco in Lake Superior (Source: 2015 USGS Compiled reports to the Great Lakes Fishery Commission of the Annual Bottom Trawl and Acoustics Surveys, 2015).

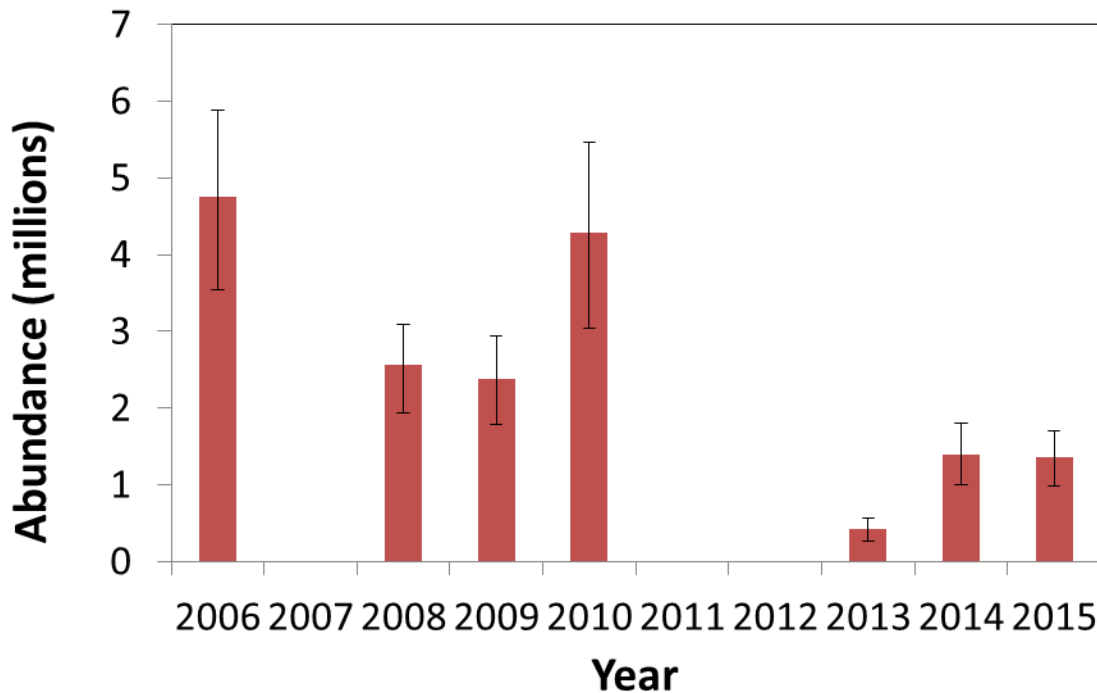


Figure 2. Estimated biomass of adult (> 10 inches) female cisco in Wisconsin waters in the area between Bark Point and Sand Island from hydroacoustics estimates conducted by the USGS and WDNR boats.

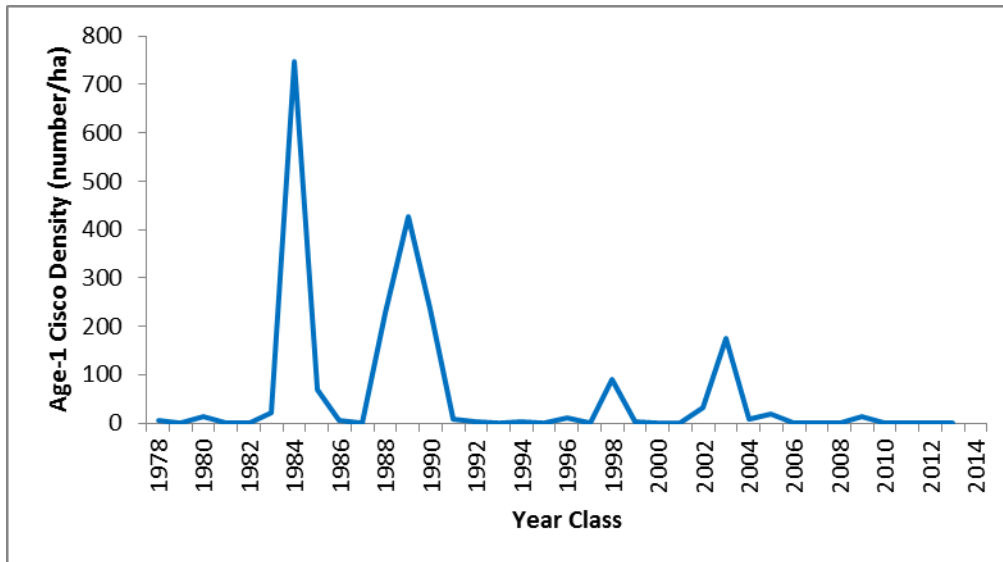


Figure 3. U.S. Geological Survey spring bottom trawl estimated nearshore mean lake-wide cisco densities for age-1 in Lake Superior. (Source: 2015 USGS Compiled reports to the Great Lakes Fishery Commission of the Annual Bottom Trawl and Acoustics Surveys, 2015)

Between 1990 and 2005, Wisconsin’s cisco harvest (combined state and tribal) comprised roughly one third of the total Lake Superior cisco harvest across all jurisdictions. More recently, Wisconsin’s cisco harvest has risen to approximately two-thirds of the total Lake Superior harvest. Nearly 95% of the harvest in Wisconsin occurs during the cisco spawning season of October through December. Additionally, the majority (approximately 90%) of the harvest occurs in the areas sampled in 2015 with hydroacoustics to develop biomass estimates. The Apostle Island area provides appropriate spawning habitat for numerous fish species and has higher densities of cisco during the spawning season than other areas of Lake Superior. The department is concerned that an increase in harvest on this spawning population of cisco could have ramifications on the lake-wide cisco population and is evaluating overall management options. Members of the Great Lakes Fishery Commission Lake Superior Committee, neighboring states, and sport fishing groups have also expressed concern about the impact of current unregulated cisco harvest in Wisconsin waters.

Currently in Lake Superior, lake trout are the only commercially harvested species that have a harvest limit/quota in place. Because the total and percentage of lake-wide harvest of cisco has increased in recent years, it is necessary to implement rule elements that distribute harvest fairly among stakeholders within Wisconsin and with other states. Alternatively, cisco are vulnerable to overfishing if no harvest restriction is implemented, which could result in population declines for cisco and other popular fish species and negative consequences for small commercial fishing and charter businesses.

Summary of Public Comments

Department staff met with state licensed commercial fishermen over the course of spring and summer 2016 to discuss the rule proposal (March 11, May 25, and June 21). In addition, department staff met with local legislative representatives on April 27 to provide an overview of the proposal and to answer questions and solicit feedback. One or more of these legislators also attended at least one of the meetings with commercial fishermen. The department also held two public meetings (June 22 and June 23) in Bayfield and Ashland to further gather public input.

As a result of the above mentioned interactions, the department modified its original proposal two times to reach a reasonable compromise with commercial fishermen while still retaining a biologically justifiable management framework for long-term sustainability of the Lake Superior cisco population.

The department held a public hearing on November 14, 2016 in Bayfield and collected comments through November 21, 2016.

A total of six people attended the hearing; three registered in opposition, two in support, and one did not indicate support or opposition. One person provided testimony and one person provided written comments.

Hearing testimony, written comments, and the department's responses are summarized below.

Comment: Oppose. Feels the rule is not necessary as there is an abundance of fish. Notes that Native Americans are not part of this rule, market price is half of last year, and weather has been a factor. Also concerned that they were not notified that the emergency rule was in effect this year.

Response: This rule is intended to maintain a long-term sustainable fishery for cisco and the proposal provides a harvest that is greater than in the recent past. Market prices are determined by the economics of supply and demand. The weather is out of anyone's control. Fisheries staff met with commercial fishermen three times from March 2016 through the summer. During these sessions the original proposal was modified two times to better meet concerns of commercial fishermen. Several of meetings were also attended by local legislators. At all meetings the October 1 date to initiate the emergency rule was discussed. In addition, the rule proposal was presented at the Natural Resources Board meeting in Ashland in August. In attendance and providing testimony in support of the rule was a commercial license holder. While we made no personal contact with individual fisherman, we feel they were well informed.

Comment: Support. Feels it is suitable for the DNR to error on the side of the general health, welfare and viability of the species. Also notes that local and regional businesses and restaurants will benefit significantly over the longer run. Feels the proposal is sensible and reasonable.

Response: We agree. In meetings with licensed commercial fisherman over the spring and summer of 2016, our original proposal was modified two times to provide a reasonable compromise yet still a biologically justifiable mechanism to ensure the long-term sustainability of this important species.

Modifications Following Hearings and Response to Legislative Council Rules Clearinghouse Report

The Legislative Council Rules Clearinghouse made suggestions related to form and placement in administrative code and style. The department made all of the suggested changes.

Changes to Rule Analysis and Fiscal Estimate

These are the original rule analysis and fiscal estimate and anticipated economic impact of implementing the rule.

Final Regulatory Flexibility Analysis

The people affected by these rules are state-licensed commercial fishers

The rule's harvest limits are expected to allow fishers to harvest at or near the current average annual catch amount. Therefore, the rule may have little to no economic impact on commercial fishing businesses. However, this rule is important to have in place because it will allow the department to reduce or increase the harvest limit based in response to biological assessment data and recommended harvest parameters.

Additional reporting will be required of state-licensed commercial fishers from October to December, but no expenditures are expected as a result of these phone-in reports.

It is not expected that the rule will result in expenditures for state fishers.

Response to Small Business Regulatory Review Board Report

The Small Business Regulatory Review Board did not prepare a report on this rule proposal.