

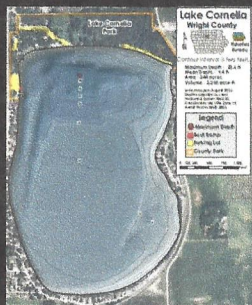
Techniques to improve the recreational quality of Lake Cornelia

Iowa Department of Natural Resources

DNR Mission: To conserve and enhance our natural resources in cooperation with individuals and organizations to improve the quality of life in Iowa and ensure a legacy for future generations

Lake Cornelia

- One of only 14 natural lakes with water depths > 10 feet in Iowa
- Small watershed to lake ratio
- Common Carp not abundant
- Rich history; some 190 homes, with ~75 being round residences
- Active Improvement Association
- Wright County Conservation Board



RIGHT PLACE. RIGHT TIME.
WRIGHT COUNTY

Like all natural lakes in Iowa, Lake Cornelia has problems too!

- Plagued by fish community problems for decades



The Past—Bullheads



The Present—Yellow Bass
-Non-native to natural lakes
-First discovered in 2006
-Extremely high density
-Limits opportunities for native fish communities

- Yellow Bass limit growth of more desirable fish species



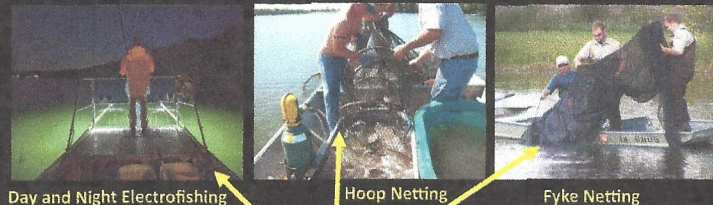
Competition of available food resources—"stunting" of native fishes



- Periodic summer fish die-offs due to density issues



- Poor fishery affects angler and children and grandchildren of lake shore owners that want to try fishing



What are they doing out there?

- Capture and mark as many fish as possible from all major fish species
- Over multiple sampling events, ratio of marked to unmarked fish provides population estimate

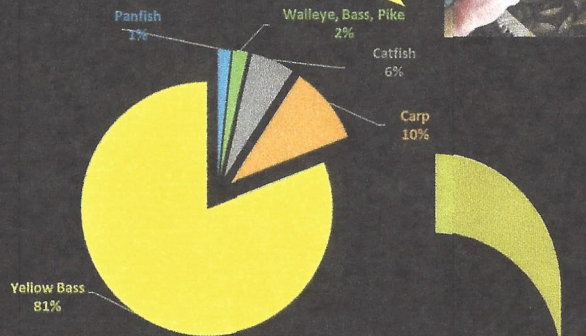


Figure 1. Poundage of major fish species in Lake Cornelia

- Why?: Provide benchmarks to evaluate project objectives
- DNR Objective: Evaluate Yellow Bass reduction techniques and enhanced predator stocking to improve the fishery and angling opportunities at Lake Cornelia



The DNR has a responsibility to Iowans to manage Lake Cornelia to be the best possible lake it can be

There are two practical options to improve the fishery

1). Complete Renovation Option—a good option, but....

-Excellent technique to "start fishery over"



- Complete loss of all fish in lake—allows managers to stock desirable fish species
- Growth rates extremely fast, but fishery will take 2-3 years to develop
- large and small bodied fishes will line the shore

-Recreational hurdles to overcome

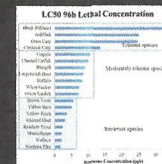


Loss of Common Carp results in improved water clarity, often leading to an initial surge in submersed aquatic vegetation, which can impair recreational boating

2). Partial Renovation Option—a great option, but....

- Can target species with low tolerance to rotenone (a fish toxicant)

Yellow Bass, Yellow Perch, Walleyes, Northern Pike will have high mortality
Expect some loss of Black Crappie, Bluegill, Largemouth Bass, Channel Catfish
Little to no loss of Bullhead or Common Carp



- Fishery will quickly rebound with surviving resident population
- Aggressive stocking of Walleye, Northern Pike, etc. following application
- Common Carp will not be affected, limiting aquatic vegetation response
- Fish will die and "stack up" near shore
- Late fall application will limit dead fish stacking and potential unpleasant smell
- Some dead fish will resurface after ice-out, but will likely be gone by late spring



Who do we contact?

- Our mission is to enhance the natural resources and quality of life at Lake Cornelia, but we want to hear from you too!



Jonathan Meerbeek, Fisheries Research Biologist
jonathan.meerbeek@dnr.iowa.gov
712-336-1840; cell 712-330-1872

Scott Grummer, Fisheries Management Biologist; scott.grummer@dnr.iowa.gov
641-357-3517; cell: 641-425-5467



Public meeting to discuss yellow bass removal efforts at Lake Cornelia

CLARION – The Iowa Department of Natural Resources (DNR) is hosting a come-and-go open house style public meeting from 6-8 p.m., March 22, in the enclosed shelter house at Lake Cornelia Park, 1768 O'Brien Avenue, to discuss non-native yellow bass management options for Lake Cornelia in Wright County.

Lake Cornelia, a popular destination for angling and other outdoor recreation, is one of 14 natural lakes in Iowa with maximum depths greater than 10 feet. The lake suffers from an overabundance of yellow bass that cause growth and reproduction issues for the remaining sportfish.

Iowa DNR staff will share the results from extensive research studies of yellow bass populations in Lake Cornelia, discuss potential removal options, and accept comments from the public. Those unable to attend the public meeting may send comments via email to fisheries@dnr.iowa.gov or U.S. mail to Scott Grummer, Iowa Department of Natural Resources, 1203 N Shore Dr., Clear Lake, Iowa, 50428.

Any person attending the public meeting and has special requirements such as those related to mobility or hearing impairments should contact the DNR or ADA Coordinator at 515-725-8200, Relay Iowa TTY Service 800-735-7942, or Webmaster@dnr.iowa.gov, and advise of specific needs.

Media Contacts: Jonathan Meerbeek, DNR Fisheries Research Biologist at 712-330-1872 or Scott Grummer, DNR Fisheries Management Biologist at 641-425-5467.