

Introduction to Grass Carp



Invasive
Species
Centre

Introduction

Grass Carp



Black Carp



Bighead Carp



Silver Carp



Grass Carp (*Ctenopharyngodon idella*)

Description:

- Oblong-shaped body covered in large overlapping scales
- Eyes located in the center of the head
- Scales are outlined by pigment giving a cross-hatched effect
- Coloration varies from blackish to olive-brown with silvery-white on the sides and belly

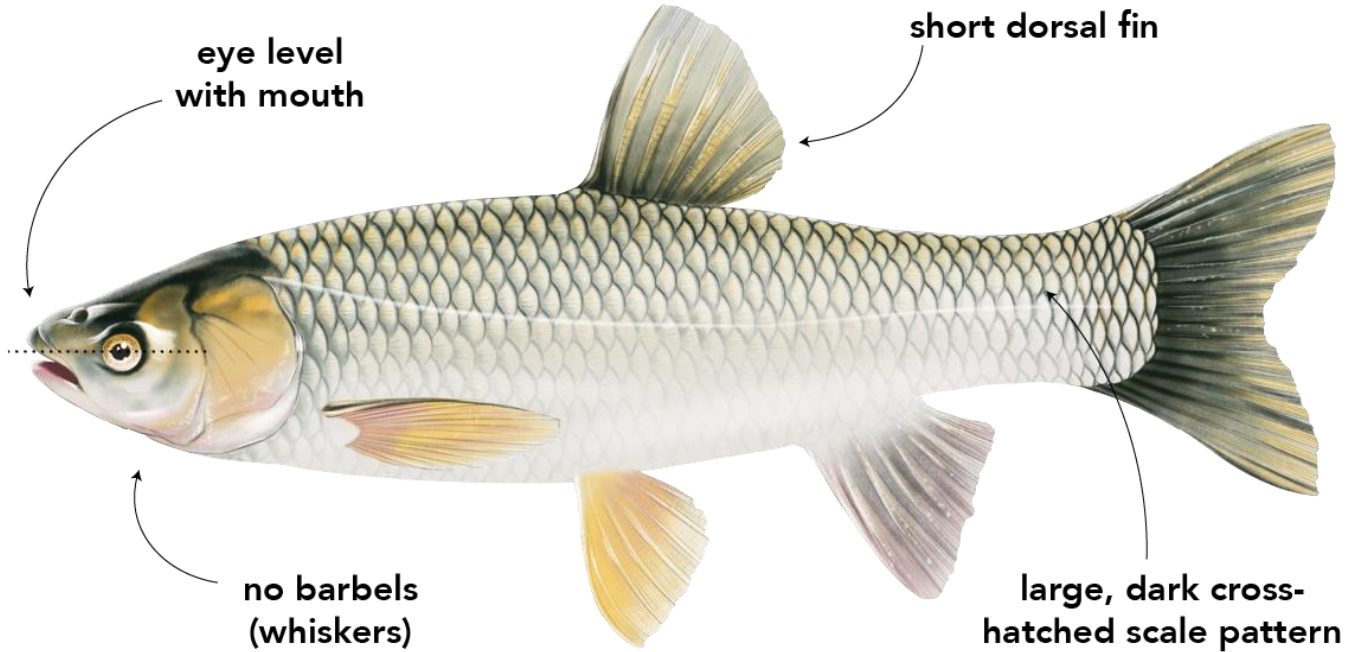
Size:

- Matures in 2 years
- 80+ lbs.
- 1.5 meters long!

Diet: Primarily consumes aquatic plants



Grass Carp



Why Should We Care?

- Grass Carp threaten Canada's ecological, recreational and economic environments.
- Grass Carp prefer **cold or moderate water temperatures**, like that of the Great Lakes.
- Reproduce very quickly and grow more than 25cm during their first year.
- Grass Carp grow large quickly, meaning they can outgrow the mouth size of native predators. This makes it unlikely that a population of Grass Carp in the Great Lakes would be controlled.



Ecological Impacts

- Grass Carp can consume up to 40% of their body weight in food each day! That's like a person eating 40 large pizzas, 430 cups of lettuce, or 180 burgers.
- They can alter habitat, reduce food and resource availability, and act as carriers for diseases or parasites that could spread to native fishes.
- Threaten wetland habitats and the native species that rely on them.
- High impacts estimated for over 30 native freshwater fish species and at least 18 native wetland bird species.



Economic Impacts

Impacted Industries May include:

Commercial Fishing:

- Reduction in commercial native fish catches.
- Increase in operational costs by having to expand harvesting locations.

Recreational Fishing:

- Reductions in populations of popular angling species such as Smallmouth Bass, Walleye, Yellow Perch, Northern Pike, Muskie and more!
- Anglers contribute a large amount of money to the economy via fishing licenses, purchasing of fishing equipment and gear, and through tourism

Waterfowl Hunting:

- Decreased hunting opportunities due to the loss of wetlands that many popular hunting species depend on for food and habitat.





Social Impacts

Beaches & Lakefronts:

- The presence of Grass Carp is known to decrease water quality and increase the presence of toxic algae.

Could discourage recreational opportunities such as swimming, kayaking, canoeing, paddle boarding, boating, etc.



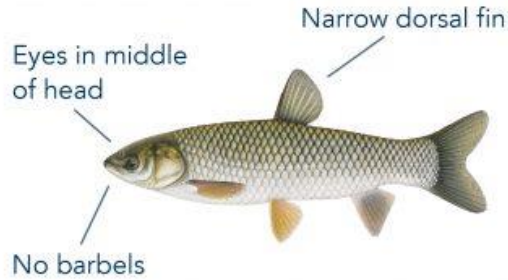
Wildlife Viewing:

- Reductions in water quality and an increase in algae pose a health risk to Great Lakes users while participating in wildlife viewing activities.
- Decreased participation in wildlife viewing activities, like birdwatching due to a reduction in native species that depend on wetland habitats.

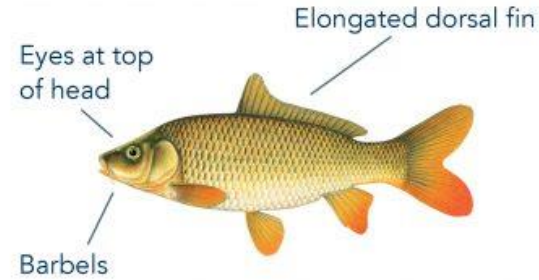


Confused with Carp – Common Carp

Confused with Carp



Grass Carp



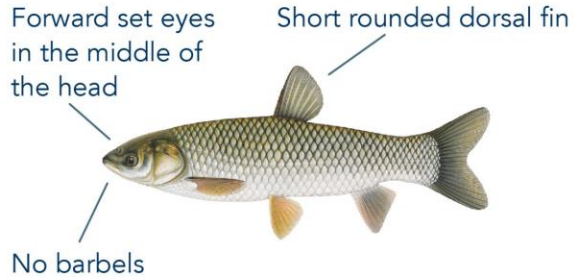
Common Carp



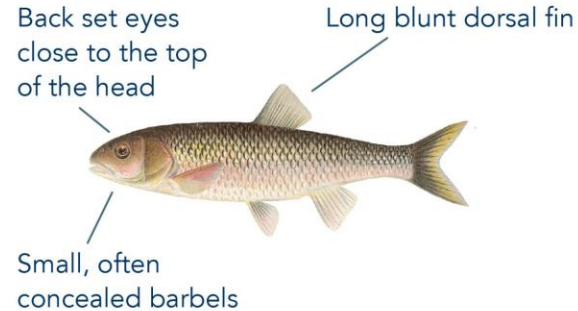
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Confused with Carp - Fallfish

Confused with Carp



Grass Carp



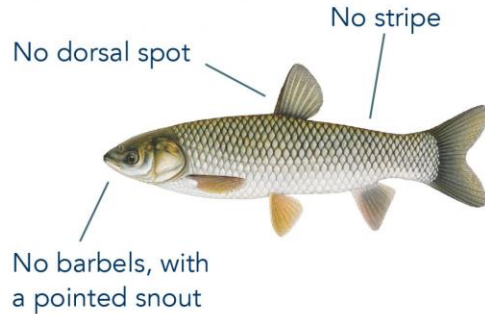
Fallfish



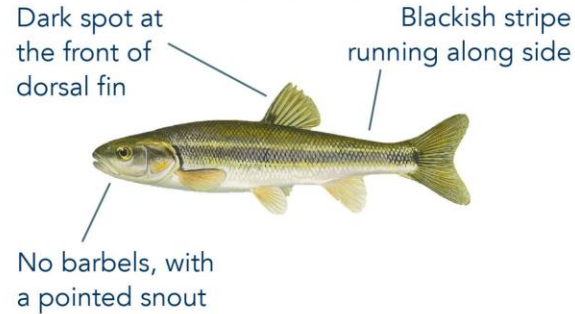
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Confused with Carp – Creek Chub

Confused with Carp



Grass Carp



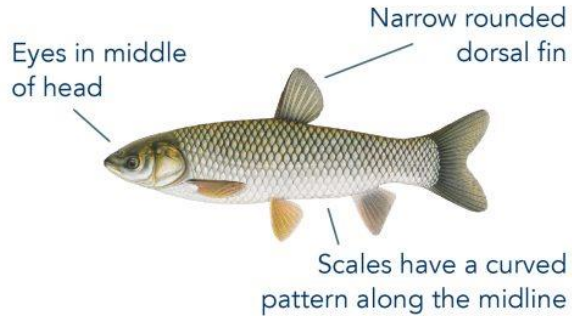
Creek Chub



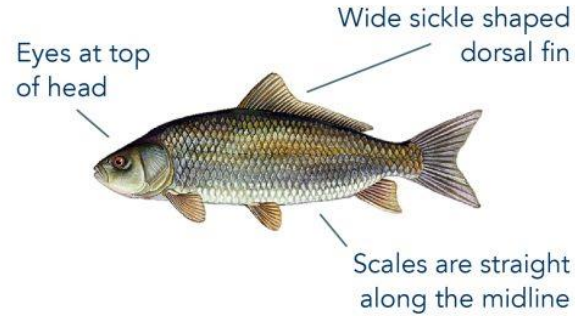
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Confused with Carp – Bigmouth Buffalo

Confused with Carp




Grass Carp



Bigmouth Buffalo



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The Threat of
Grass Carp

What you can do to Help

Identify!



- Learn how to identify Grass Carp
- Learn how to differentiate Grass Carp apart from their common look-a-like species

Report!



- Report all Grass Carp sightings and captures to the Invasive Species Hotline at 1-800-563-7711, or online via EDDMapS.org
- Follow the steps found in the Grass Carp Identification and Reporting Guide

Prevent Spread!



- Never trade, sell, buy, transport or release Grass Carp. In Canada, it is illegal!
- Never dump live bait within 30 meters of any body of water!

INVASIVE GRASS CARP OR A LOOK-ALIKE?

Grass Carp is an invasive fish that has been found in the Great Lakes in small numbers, but are not established in Canada. If you think you have caught a Grass Carp, follow these steps:

1. Report it to the Invading Species Hotline: 1-800-563-7711, or email info@invadingspecies.com, or report via EDDMapS.org/Ontario;
2. Work through this ID sheet;
3. If your fish matches ALL of the features of Grass Carp, go to step 4. Otherwise, if the fish cannot be lawfully kept, release it immediately to the waters where it was caught, in a manner that causes the least harm to the fish. OR, if the fish can be lawfully kept, you can either practice catch and release or keep it;
4. Take photographs of the fish from multiple angles with adequate lighting and note your geographic location (e.g. latitude and longitude);
5. If you were unable to reach someone directly in step #1, avoid unintentionally killing native fishes by being certain

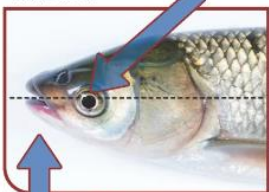


Photo Credit: Jiahui Li, University of Florida, ©2017 Tropical Aquaculture Laboratory

of your identification before killing a suspected Grass Carp. Ensure you are abiding by all of the laws highlighted in the Ontario Recreational Fishing Regulations Summary; and

6. **IMPORTANT:** Do NOT release the Grass Carp alive. Kill the fish without damaging the head or eyes. Gut the fish and keep it in a cooler, with its head above the ice. Fisheries and Oceans Canada will collect it! They learn a lot about the fish by conducting analyses on the head and eyes, such as whether or not the fish is fertile or sterile and where it came from.

A Grass Carp's eyes sit in line with its mouth



Grass Carp have a **JAWED** mouth and do **NOT** have a **SUCKER** mouth



Grass Carp have **LARGE SCALES** with dark borders, giving a cross-hatched appearance



INVASIVE Grass Carp with **SHORT** dorsal fin and **LARGE SCALES**



INVASIVE Grass Carp with **JAWED** mouth and **NO BARBELS** (whiskers). Eyes are low and sit in line with mouth



INVASIVE Grass Carp with **SLENDER** head and body



Common Carp with **LONG** dorsal fin and **LARGE SCALES**



Common Carp with **SUCKER** mouth and **BARBELS** (whiskers). Eyes sit relatively high on the head



Common Carp with **DEEP** body



Fallfish with **SHORT** dorsal fin and **MODERATE SCALES**. Eyes sit relatively high on head



Sucker species (e.g. White Sucker, pictured) with **SUCKER** mouth and **NO BARBELS** (whiskers). Eyes sit high on the head



Smallmouth Buffalo with **DEEP** body

