Asian Carps

Threatening Ontario's native fishes

Asian carps were brought from Asia to North America in the 1960s and 70s. Since then they have migrated north through U.S. waterways towards the Great Lakes. Preventing Asian carps from spreading into the Great Lakes is the best way to prevent harm to Ontario's native fish species.

Asian carps (Silver carp, Bighead carp, Grass carp, Black carp):

- Are successful invaders that have replaced native species in areas of the Mississippi River and its tributaries
- Make up more than 50 per cent of the fish by weight in some parts of the Illinois River
- Can grow more than 25 centimetres in their first year
- Typically weigh two to four kilograms, but can weigh up to 40 kilograms and reach more than a metre in length
- Can eat up to 20 per cent of their body weight in plankton each day
- Reproduce rapidly.

US Fish & Wildlife Service officer with Bighead carp from Illinois River. Photo: USFWS

OMNR conservation officer seizes Bighead carp at Canada/U.S. border. Photo: OMNR

Asian carps threaten our native fishes and are a safety hazard

Asian carps prefer cool to moderate water temperatures, like those found near the shores of the Great Lakes. If Asian carps become established in Ontario waters, they could potentially eat the food supply that our native fish depend on and crowd them out of their habitat. The decline of native fish species could damage sport and commercial fishing in Ontario, which brings millions of dollars a year into the province's economy.

The term "Asian carps" includes four species: Bighead, Silver, Grass and Black carp. Bighead carp and Silver carp are the species that have spread the most aggressively and can be considered one of the greatest threats to the Great Lakes.

Silver carp jumping at Peoria Dam in Illinois. Photo: GLFC

Silver carp are a hazard for boaters. The vibration of boat propellers can make Silver carp jump up to three metres out of the water. Boaters and water-skiers in areas of the Mississippi and Illinois rivers have been seriously injured by jumping fish.

What Ontario is doing

Ontario is working to keep new aquatic invaders like Asian carps out of the Great Lakes. We have made it illegal in Ontario to possess live Bighead, Silver, Grass or Black carp as well as other invasive fish species. People have been caught, convicted and received large fines for trying to import truckloads of live Asian carps into Ontario to sell at fish markets.

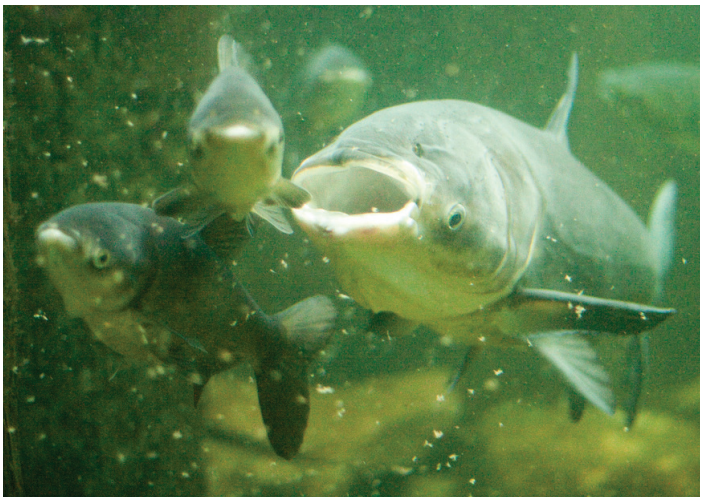
Enforcement of invasive species laws is the responsibility of conservation officers who work in cooperation with other agencies, such as the federal government, to stop the illegal movement of invasive species.

Ontario has partnered with the Ontario Federation of Anglers and Hunters since 1992 on programs to fight invasive species, including education, outreach and training; province-wide monitoring; and early detection.

Ontario has been working with our partners to test our state of readiness and develop an Asian Carp Response Plan. The plan will serve as a guide to taking action should a sighting of an Asian carp in the wild be confirmed.

How anglers can help:

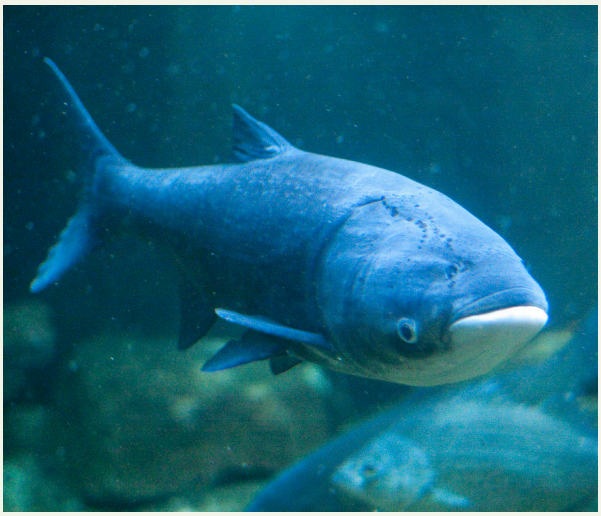
- **DON'T DUMP YOUR BAIT!** Always put unwanted baitfish in the garbage and empty bait bucket water on dry land. It is illegal to dump the contents of any bait container into the water or within 30 metres of any lake, pond, river or stream.
- Make sure you check your bait. As an angler, you are responsible for making sure you only possess species that may legally be used as bait – even if the bait came from a bait dealer. See www.mnr.gov.on.ca/en/Business/LetsFish/2ColumnSubPage/198684.html.
- Learn to identify Asian carps. Don't confuse young Asian carps with common Ontario species.



Bighead carp filter feeding on plankton.
Photo: Kate Gardiner

How everyone can help:

- Don't release any live fish into Ontario lakes or rivers.
- Don't import live fish into Ontario.
- If you have any information about the illegal importing, distribution or sale of live Asian carps, report it immediately to the MNR TIPS line at 1-877-TIPS-MNR (847-7667) toll-free any time, or contact your local ministry office during regular business hours.
  You can also call Crime Stoppers anonymously at 1-800-222-TIPS (8477).
- If you've seen an Asian carp or other invasive species in the wild please contact the toll free Invading Species Hotline at 1-800-563-7711.



Bighead carp. Photo: Kate Gardiner

Bighead and Silver carp have large toothless mouths.
Photo: OMNR

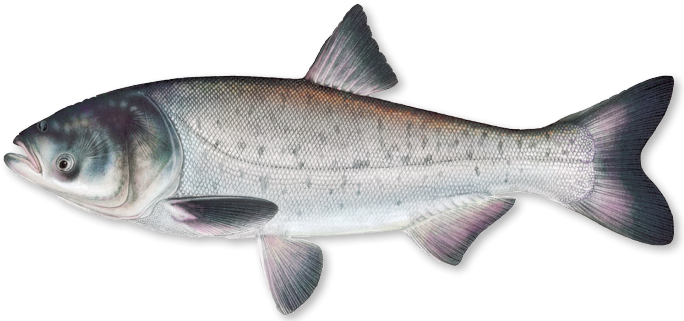
Grass carp. Photo: Mike Correa, TRCA

For more information:

ontario.ca/invasivespecies
www.invadingspecies.com
www.glfc.org/fishmgmt/carp.php
www.dfo-mpo.gc.ca/science/coe-cde/ceara/index-eng.htm

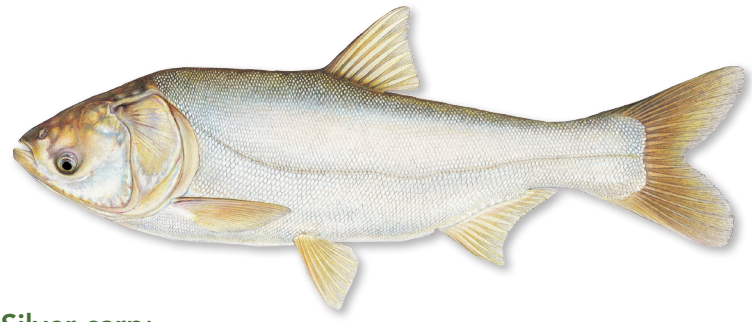
Learn to identify Asian carps

Bighead and Silver carp represent the most severe threat to Ontario waters.



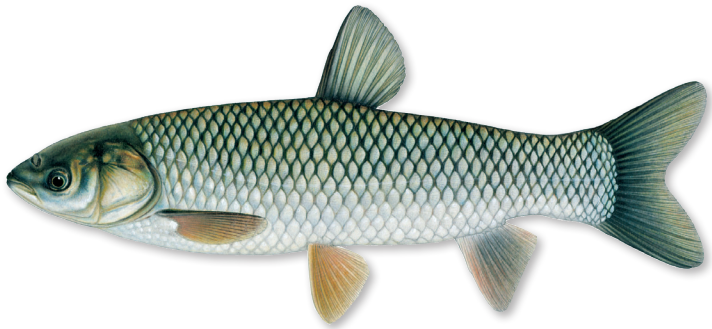
Bighead carp:

- Typically two to four kilograms; up to 40 kilograms in weight and more than a metre in length
- Very large head and toothless mouth
- Adult fish are dark grey with dark mottling
- Eyes sit below the mouth



Silver carp:

- Smaller than Bighead carp
- Light silver in colour with a white belly
- Eyes sit below the mouth.



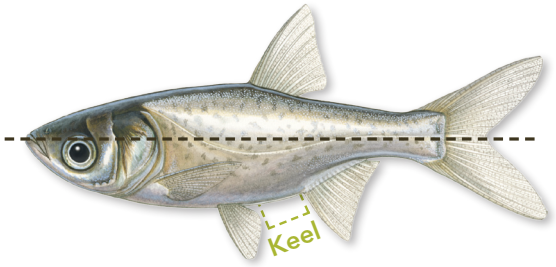
Grass carp:

- Large scales that appear crosshatched
- Eyes sit even with the mouth.

Adult Asian carp illustrations – Joe Tomelleri

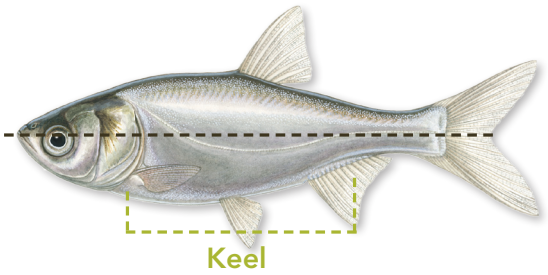
Don't confuse young Asian carps with these common Ontario minnows

JUVENILE ASIAN CARPS



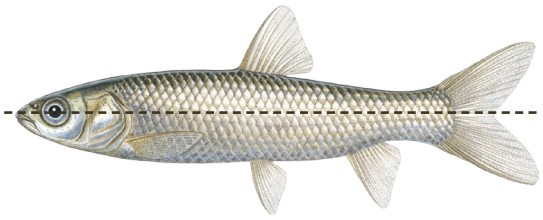
Juvenile Bighead carp

Colour/Markings: Silvery, with dark mottling, especially on back
Mouth: Up-turned
Length: 5 to 10 centimetres
Keel (ridge on the underbelly): Prominent, extending from anal fin to pelvic fins (mid-body), no scales
Scales: Very small
Eyes: Below line extending from tail to snout (see dotted line above).



Juvenile Silver carp

Colour/Markings: Silvery, without dark mottling or coloration on back
Mouth: Upturned
Length: 5 to 10 centimetres
Keel (ridge on the underbelly): Prominent, extending from anal fin to gills, no scales
Scales: Very small
Eyes: Below line extending from tail to snout (see dotted line above).

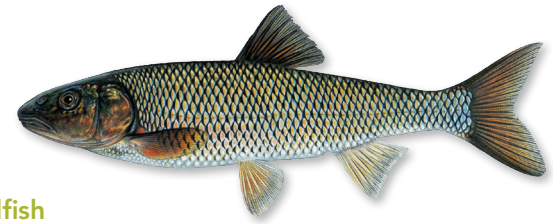


Juvenile Grass carp

Colour/Markings: Pale grey to gold colour, scales show prominent dark edge, giving a cross-hatched appearance
Mouth: Terminal to slightly downturned
Length: 5 to 10 centimetres
Keel (ridge on the underbelly): Absent
Scales: Intermediate to large
Eyes: On line extending from tail to snout.

Juvenile Asian carp illustrations © Emily S. Damstra
Common minnow illustrations – Joe Tomelleri

COMMON MINNOWS



Fallfish

Colour/Markings: Back is dark olive-green, black or brown, sides are silvery, belly is silvery white
Length: 20 centimetres is common bait size
Keel (ridge on the underbelly): Absent
Scales: Intermediate to large with a dark crescent in front of each scale
Eyes: On line extending from tail to snout

Emerald shiner

Colour/Markings: Silver with green iridescence
Length: 7.5 to 10 centimetres is common bait size
Keel (ridge on underbelly): Absent
Scales: Intermediate to large
Eyes: On line extending from tail to snout

Spottail shiner

Colour/Markings: Silvery sides with greenish-blue back, prominent dark spot on tail
Length: 7.5 to 10 centimetres is common bait size
Keel (ridge on underbelly): Absent
Scales: Intermediate to large
Eyes: On line extending from tail to snout

Golden shiner

Colour/Markings: Gold or brassy, deep-bodied with a lateral line running along the sides and dipping down in the middle of the body; silvery/black lateral stripe in juveniles
Length: 7.5 to 18 centimetres is common bait size
Keel (ridge on underbelly): Present, extending from anal fin to pelvic fins (mid-body), no scales; ridge is less distinct than alewife and Asian carps
Scales: Intermediate to large
Eyes: On line extending from tail to snout