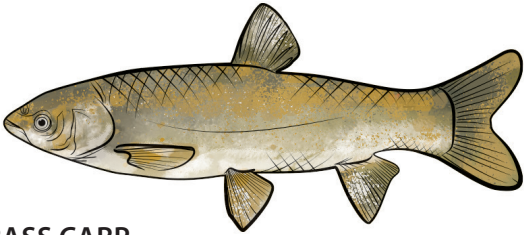




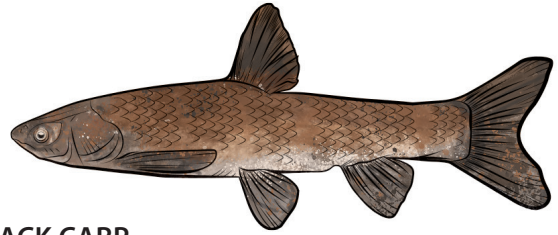
Let's Dive In:

Meet the Carp Invaders and Their Lookalikes

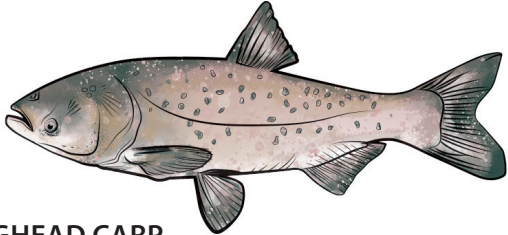




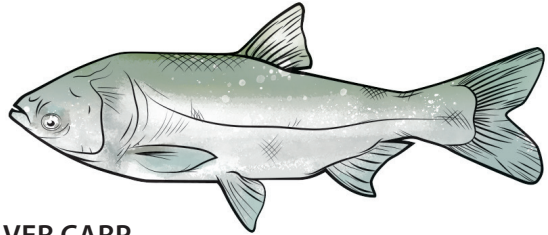
GRASS CARP



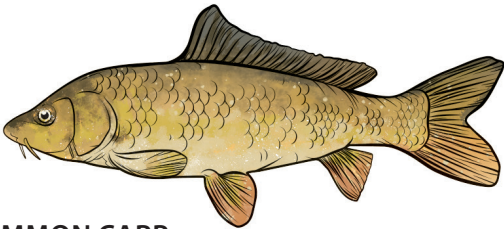
BLACK CARP



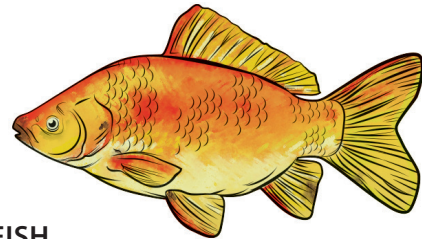
BIGHEAD CARP



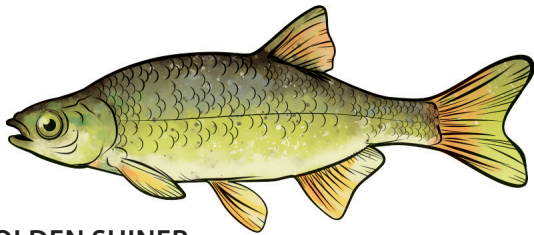
SILVER CARP



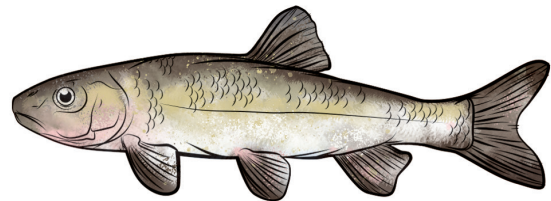
COMMON CARP



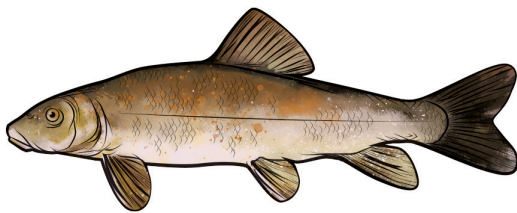
GOLDFISH



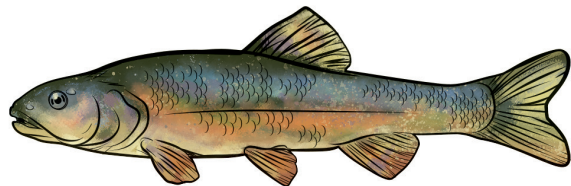
GOLDEN SHINER



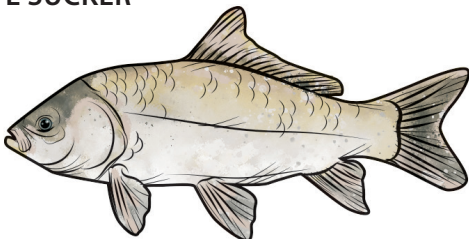
FALLFISH



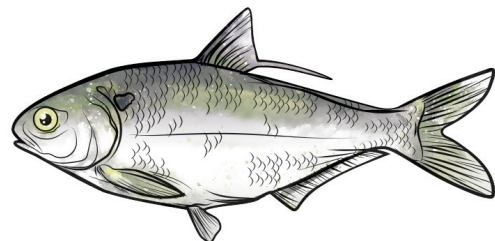
WHITE SUCKER



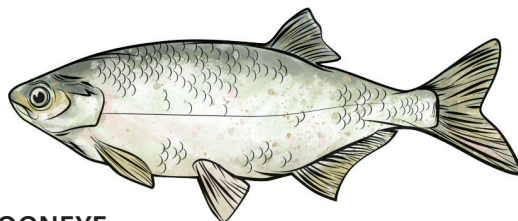
CREEK CHUB



BIGMOUTH BUFFALO



GIZZARD SHAD



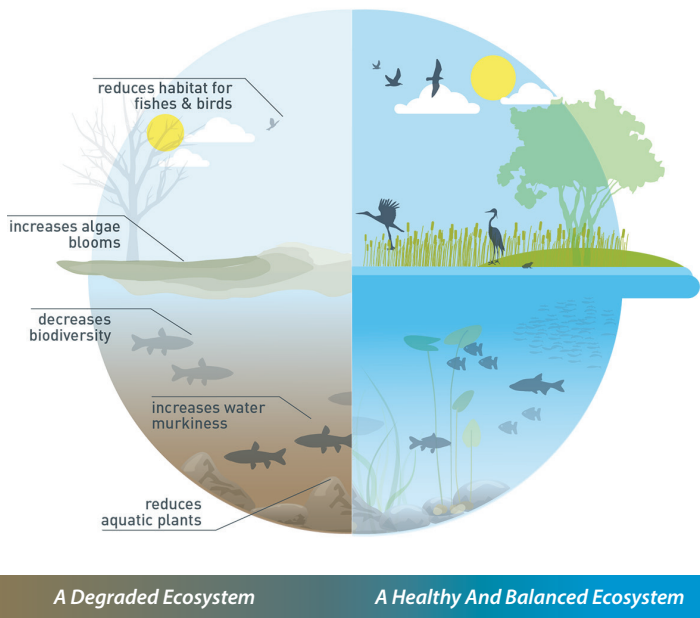
MOONEYE

Hello Divers!

Do you know what aquatic invasive species are? Aquatic invasive species (AIS) are animals and plants that are found in the water but are from somewhere else and that can harm other animals, the environment or people. AIS are often better at finding food and habitat compared to native species, making AIS fierce competitors as they take what our native fishes need to survive and thrive.

In this colouring book we highlight four invasive fishes that threaten the Great Lakes: Grass Carp, Bighead Carp, Silver Carp and Black Carp, along with other fishes that look somewhat like them. These four carps were brought to the United States (U.S.) to control pests

on fish farms and were able to escape their way towards the Great Lakes! Of the four carps, Grass Carp are the closest to invading the Canadian Great Lakes. If we don't stop them, these fishes could take over the Great Lakes and leave little food or space for native fishes like Walleye, Largemouth Bass and Yellow Perch. We need everyone's help to keep them from getting into Canadian waters.



This picture shows the effects Grass Carp would have on our ecosystems. The right side represents a healthy and balanced ecosystem – there are many different fishes, birds, amphibians and plants, and the water quality is good and clear.

On the left side, Grass Carp have invaded and the ecosystem has suffered – there are fewer fishes and other animals and plants, there is less habitat for fishes and birds, and the water isn't healthy.

While you're out near or on the water, enjoying fishing, boating or paddling, make sure you watch out for these invaders! In the meantime, Fisheries and Oceans Canada will keep working hard to protect the Great Lakes ecosystem on behalf of all Canadians and their families. If you liked this colouring book or have questions, you can contact us through Fisheries and Oceans Canada's social media. Thanks in advance for helping us out!

 @FishOceansCAN

  @FisheriesOceansCanada

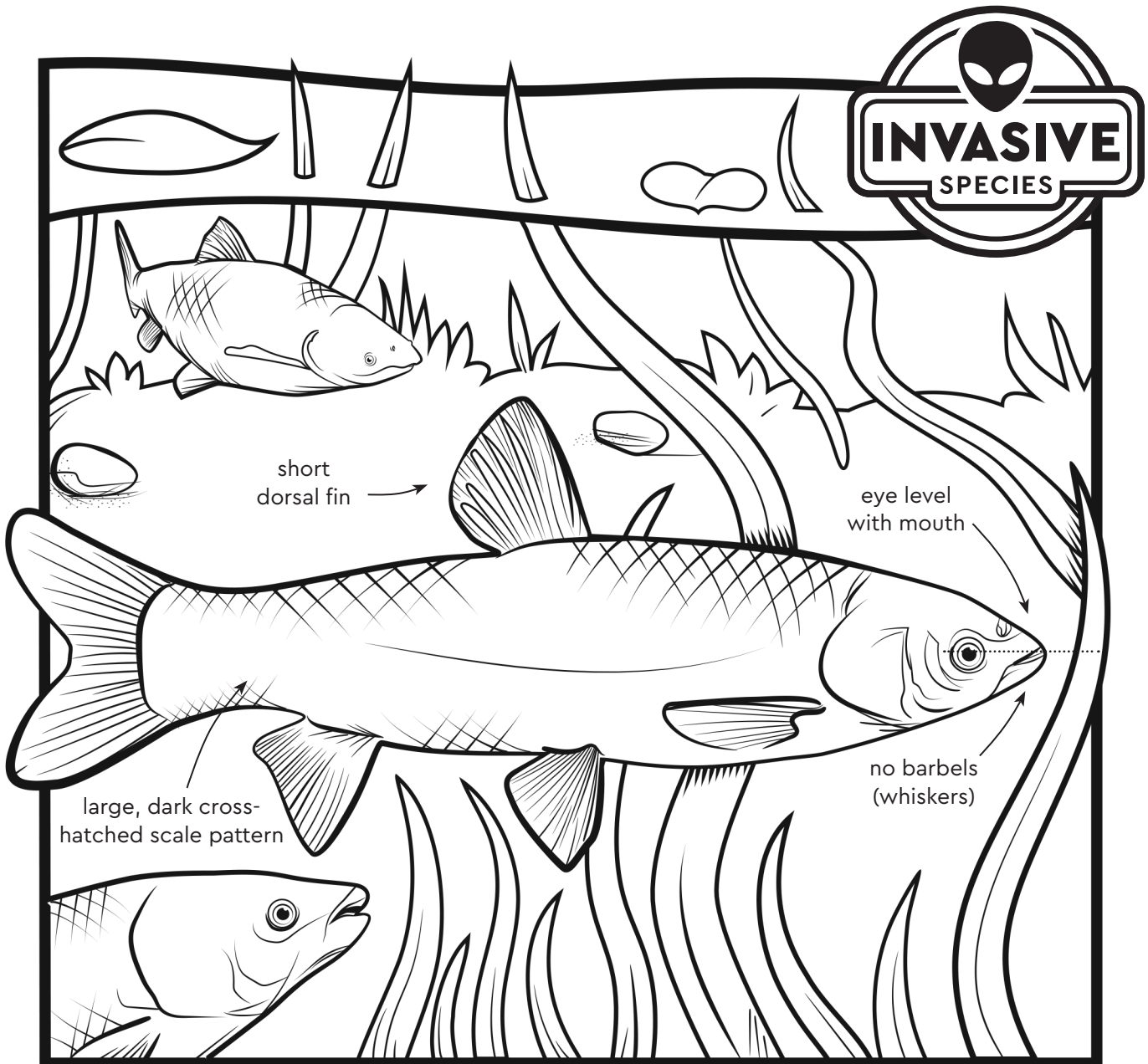
 @FisheriesOceansCan



GRASS CARP

Grass Carp are at Canada's door step! They eat up to 40% of their body weight in aquatic plants every day – that's like you eating 40 pizzas or 180 burgers every day! This can harm native fishes because they need aquatic plants to reproduce, for nursery and cover habitat. Since Grass Carp eat so much, they also make a lot of waste which can cause harmful algae blooms and lower water quality. Help us keep watch to stop this fish from entering Canada's waters and taking over!

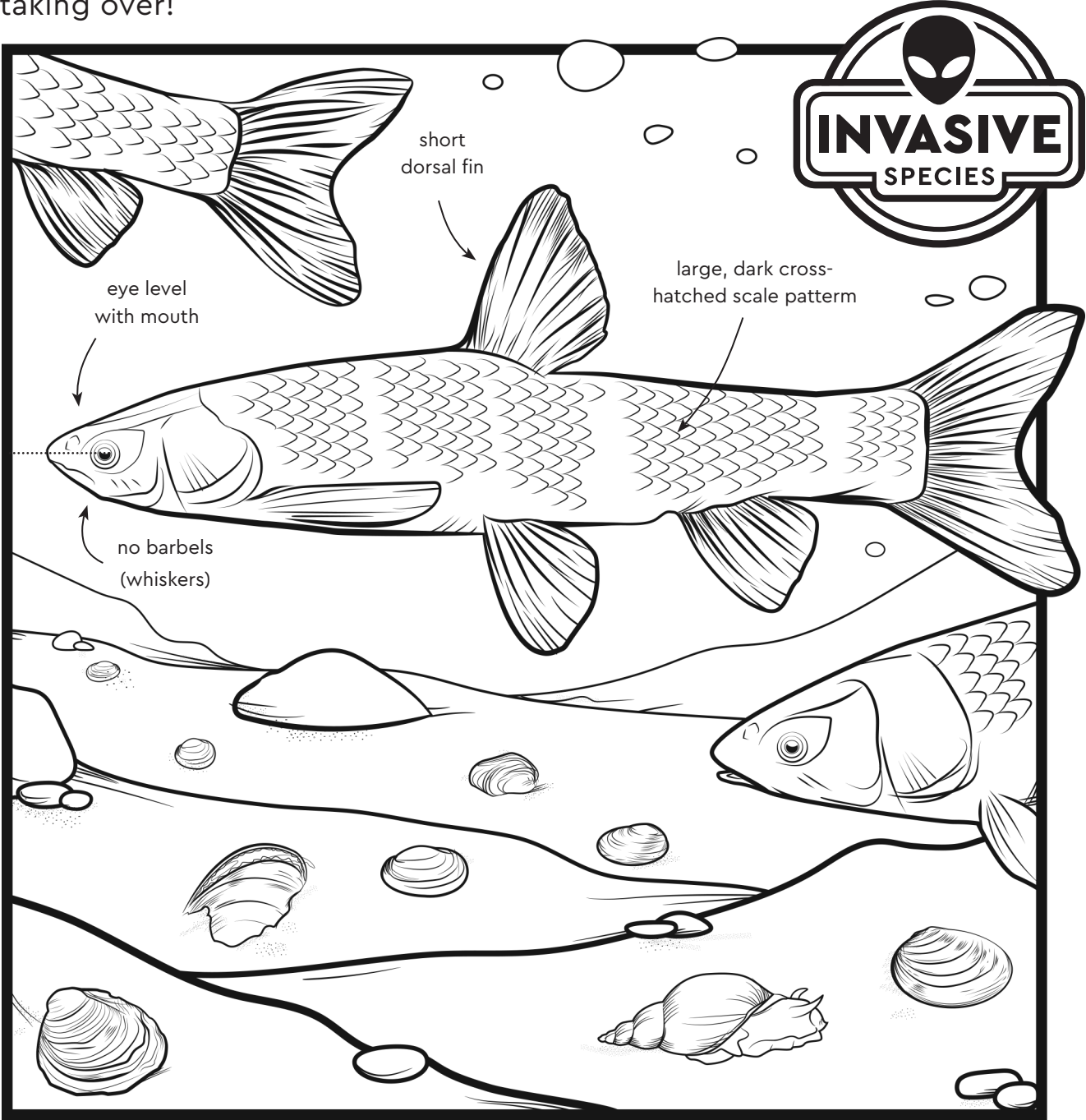
Grass Carp are often confused with Common Carp but unlike Common Carp, Grass Carp have a short **dorsal fin** and no **barbels/whiskers**.



BLACK CARP

Black Carp eat zooplankton (very tiny animals), mussels and snails. Black Carp have teeth in their throats that are used to crush shells, giving them the ability to wipe out native mussels and harm native fishes, turtles, birds and other animals since they are so good at finding food and habitat. Black Carp can grow to be as big as a human adult, measuring 6 feet in length and 200 pounds!

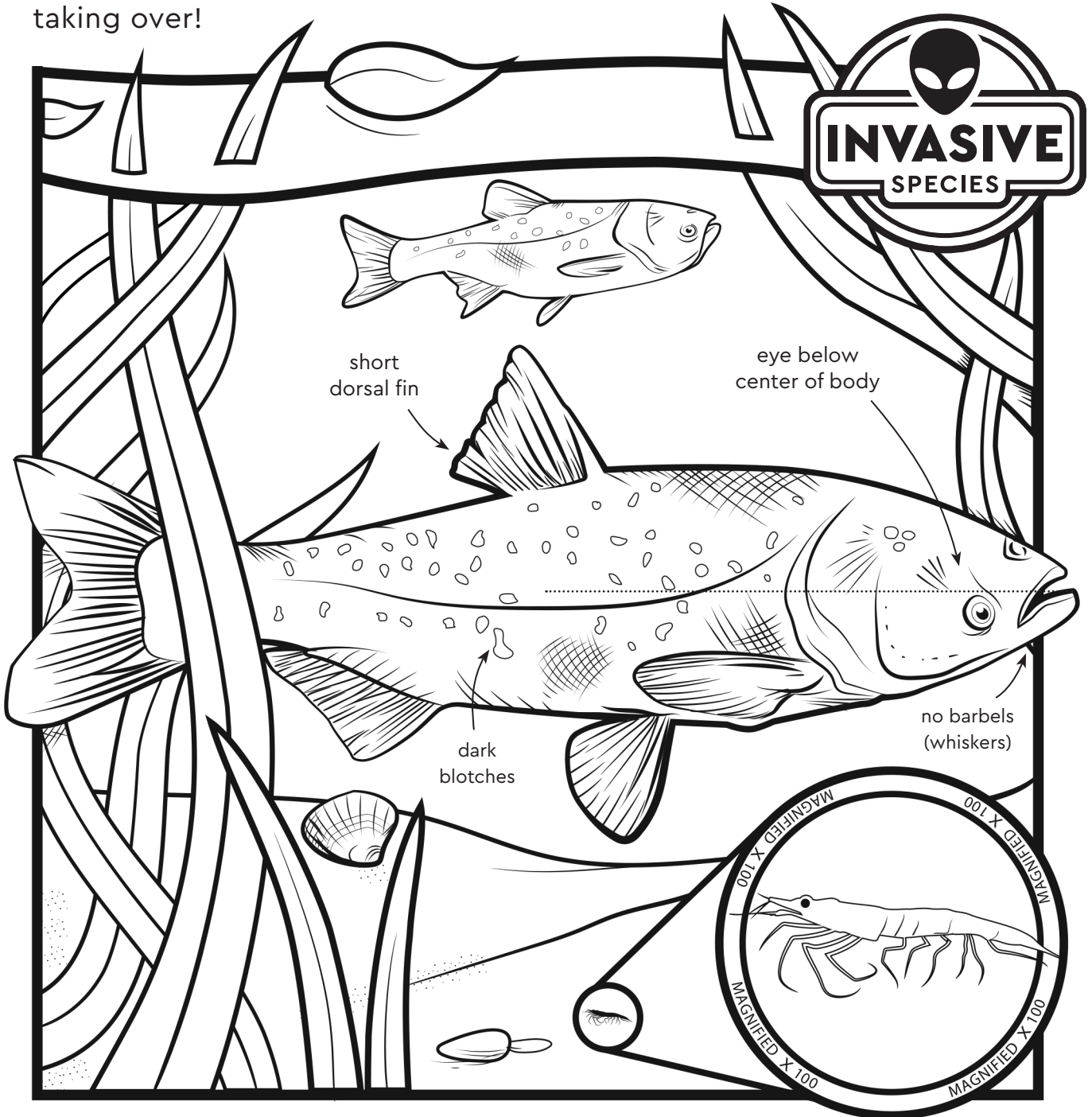
Help us keep watch to stop this fish from entering Canada's waters and taking over!



BIGHEAD CARP

Bighead Carp are uncontrollable eaters since they lack a true stomach, causing them to eat almost non-stop. They feed on zooplankton (very tiny animals) and would eat all the food our native fishes need to survive. Bighead Carp can grow to be 5 feet long and more than 80 pounds! Bighead Carp have eyes that are low on their heads, which makes them look like they are upside down.

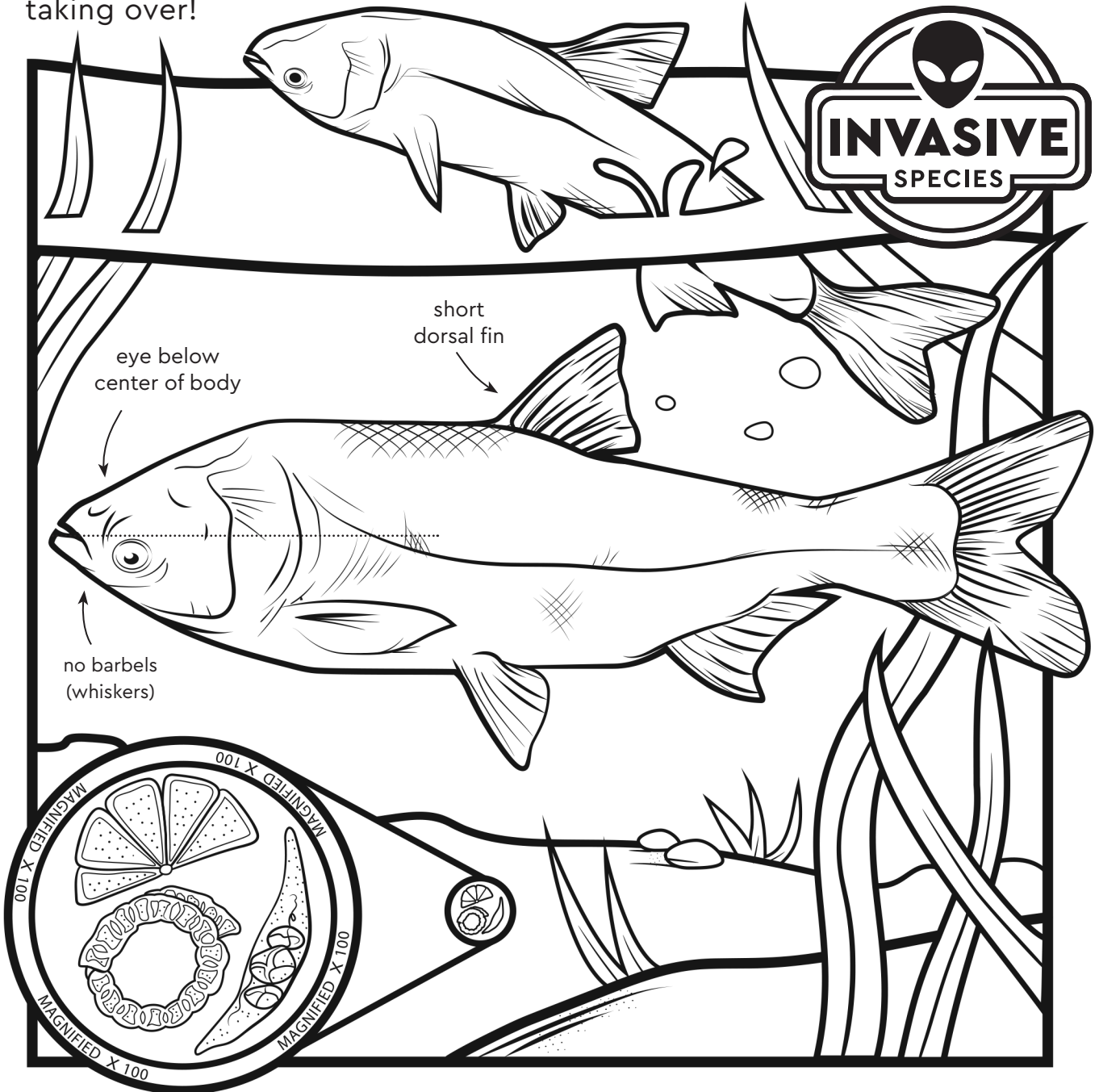
Help us keep watch to stop this fish from entering Canada's waters and taking over!



SILVER CARP

Silver Carp, like Bighead Carp, are uncontrollable eaters since they also lack a true stomach. They mostly eat phytoplankton (very tiny plants). When startled by the noise from boat engines, Silver Carp can jump up to 10 feet out of the water and will hit anything in their way – boaters or swimmers could be struck and hurt by these jumping Silver Carp! Just like Bighead Carp, Silver Carp also have eyes low on their heads, so they also look like they are upside down.

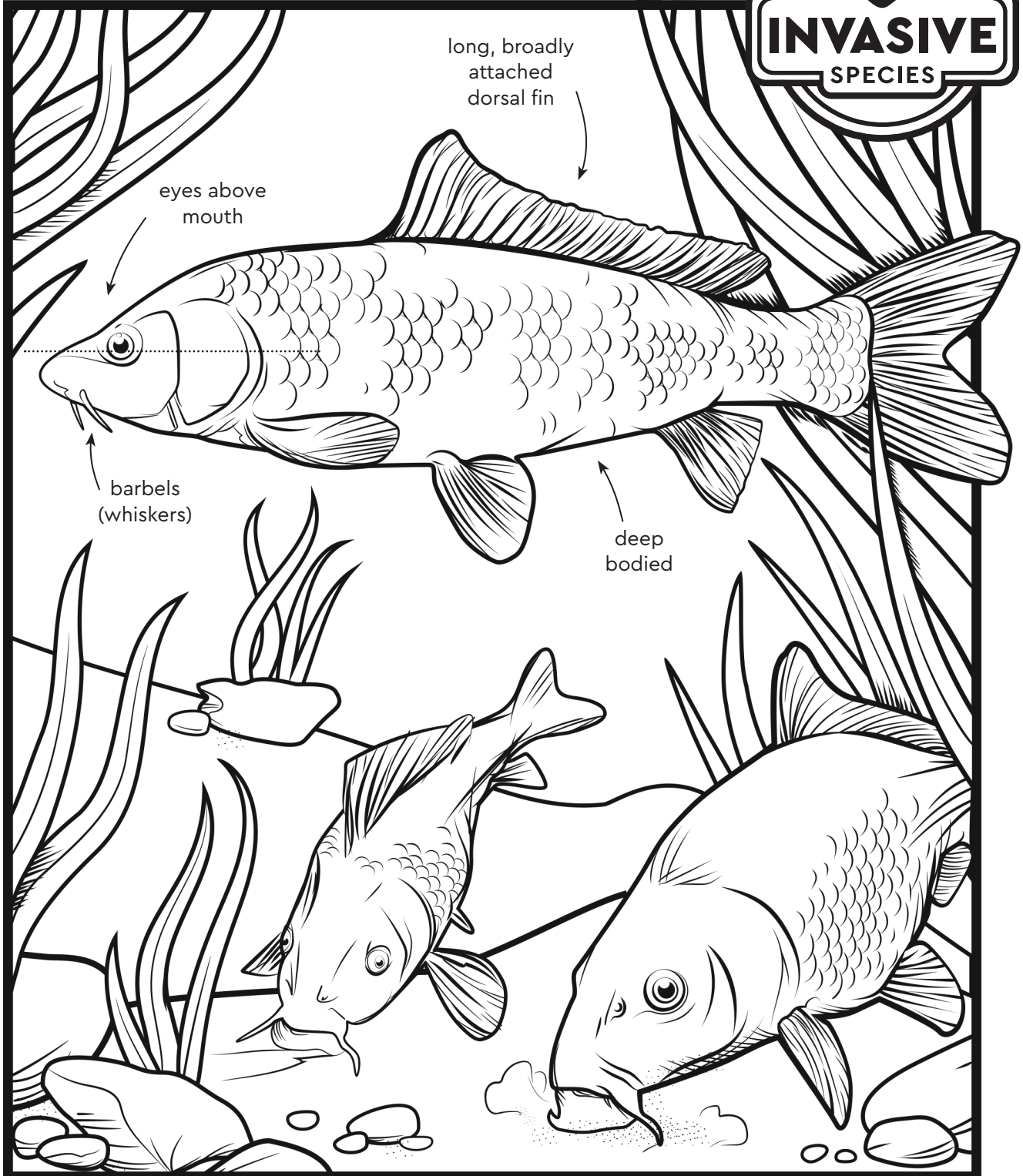
Help us keep watch to stop this fish from entering Canada's waters and taking over!



COMMON CARP

Common Carp are an invasive species but have been present in parts of the Great Lakes for a long time.

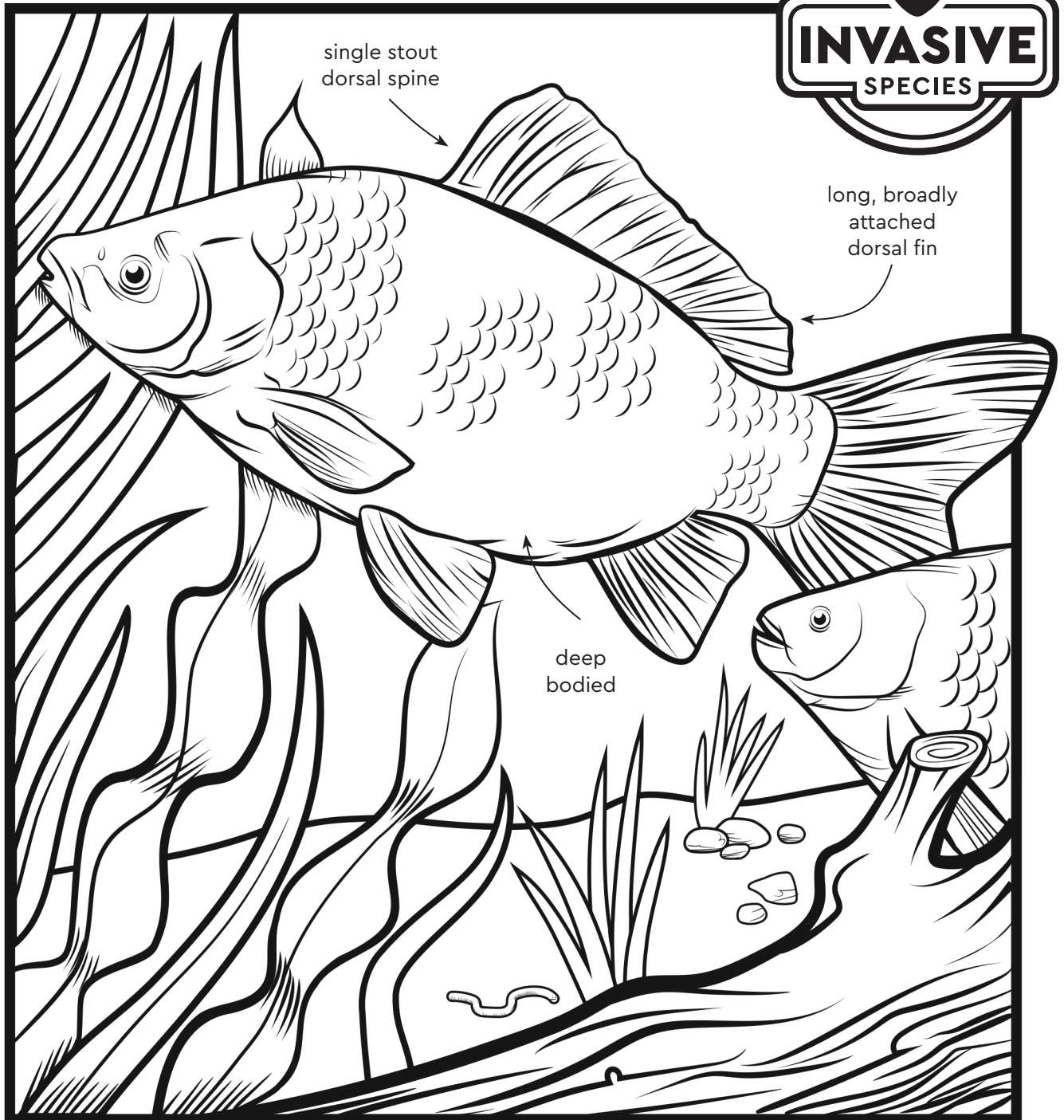
I get confused with Grass Carp.



GOLDFISH

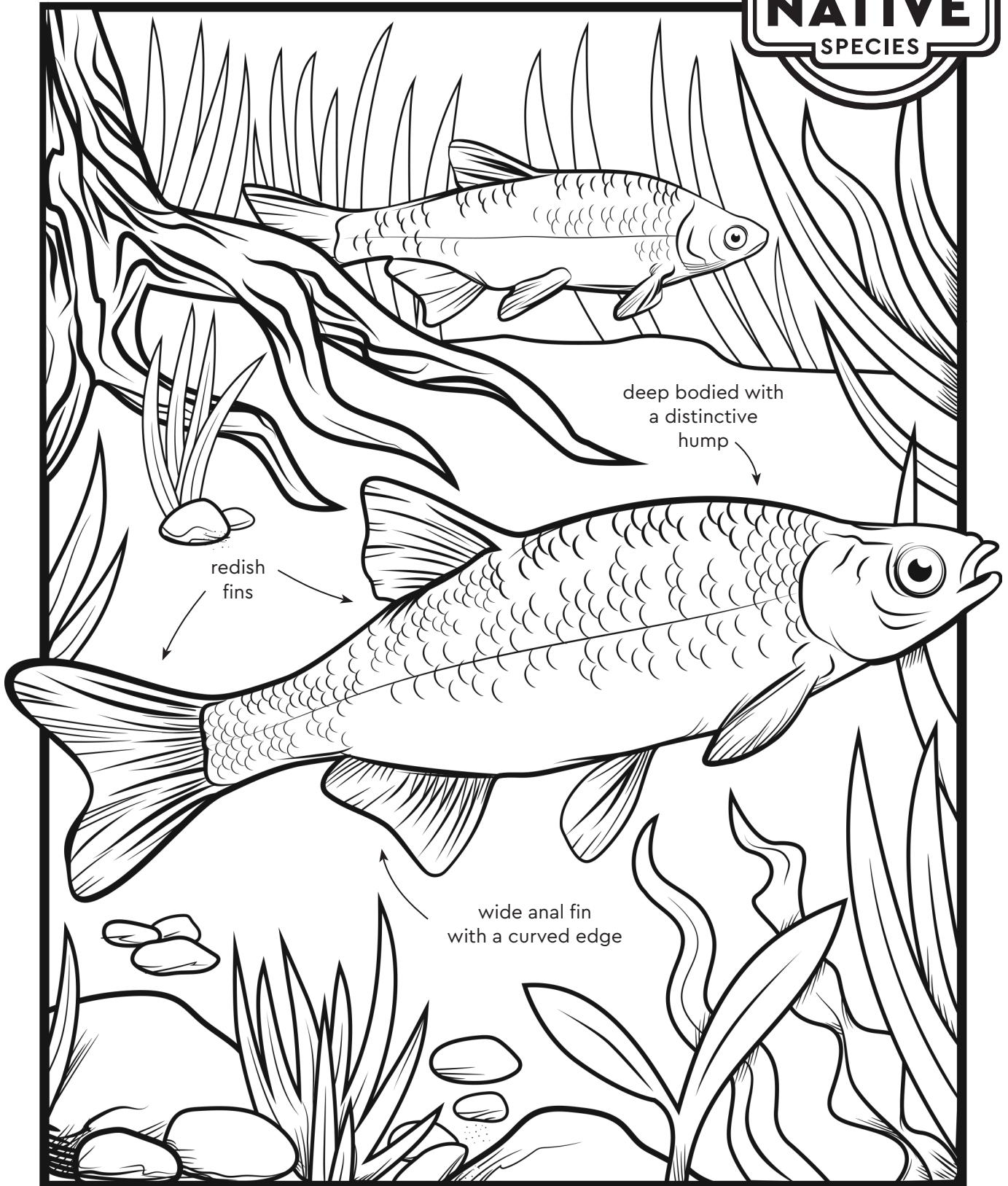
To protect natural ecosystems in Canada, it is important not to release your aquarium pets, like Goldfish, into the wild – Goldfish is also invasive and can harm our native fishes. If you decide you no longer want to own your Goldfish, please find it another home, return it to the pet store, or give it to a local school.

I get confused with Grass Carp.



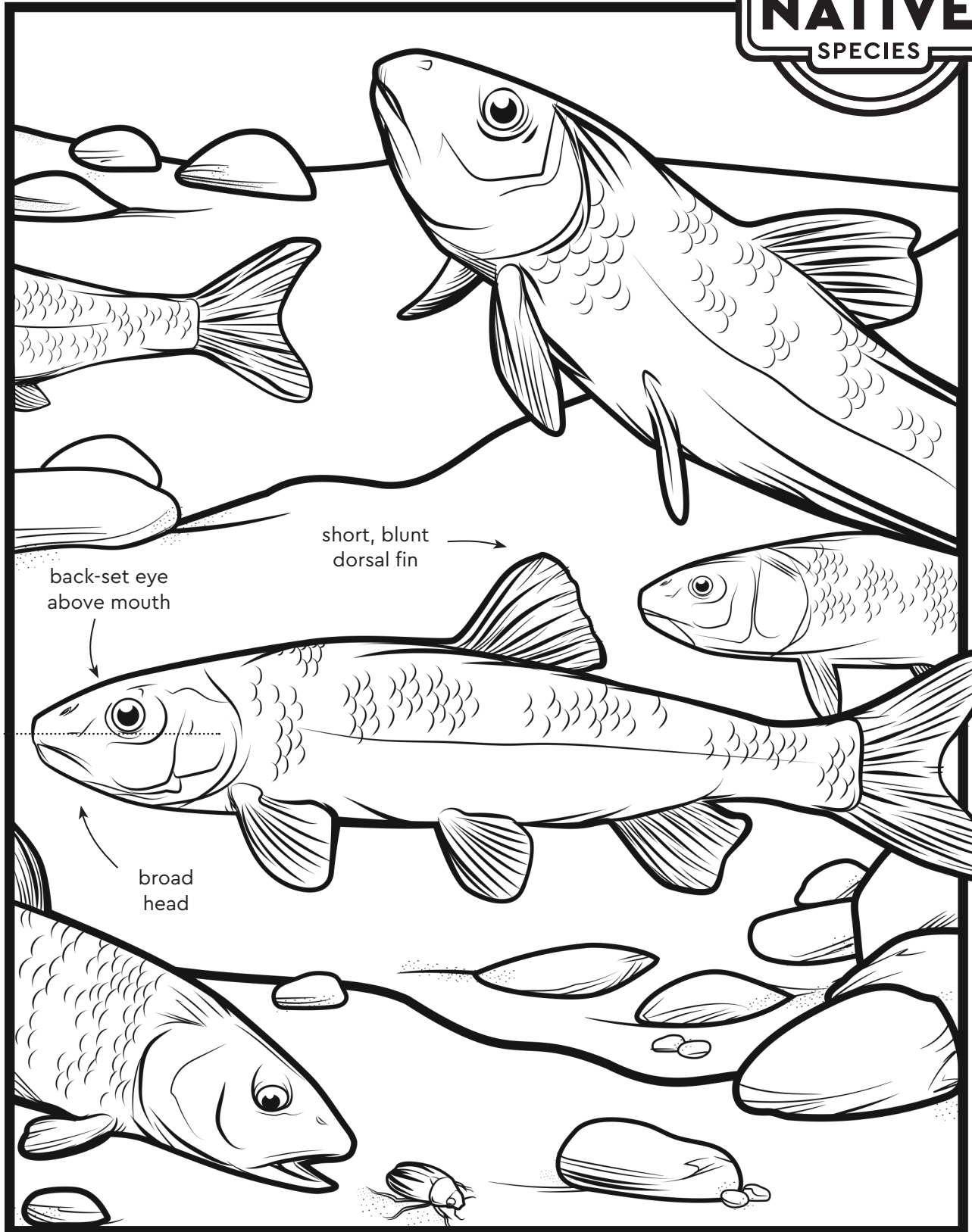
GOLDEN SHINER

I get confused with Grass Carp.



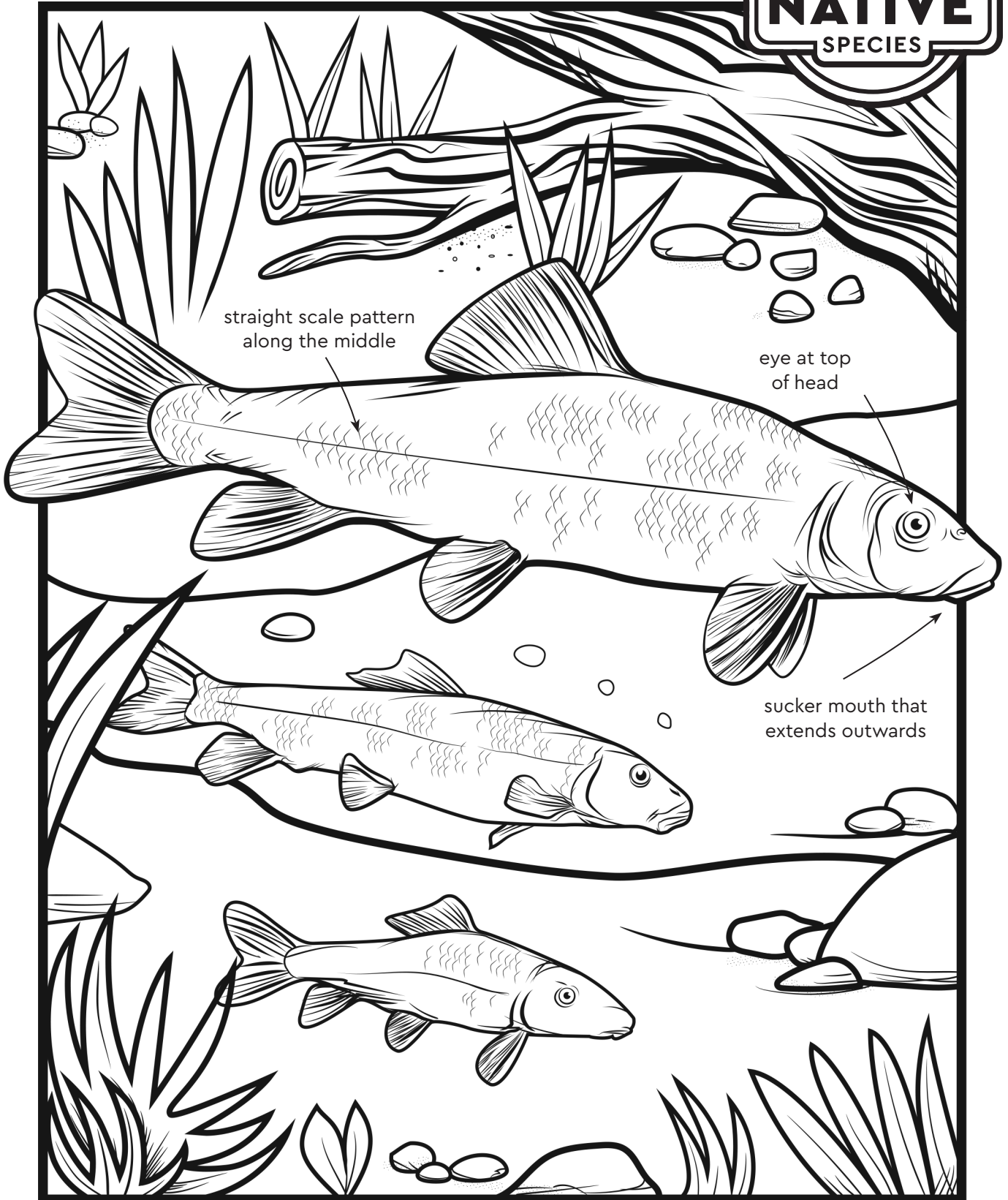
FALLFISH

I get confused with Grass Carp and Black Carp.



WHITE SUCKER

I get confused with Grass Carp and Black Carp.



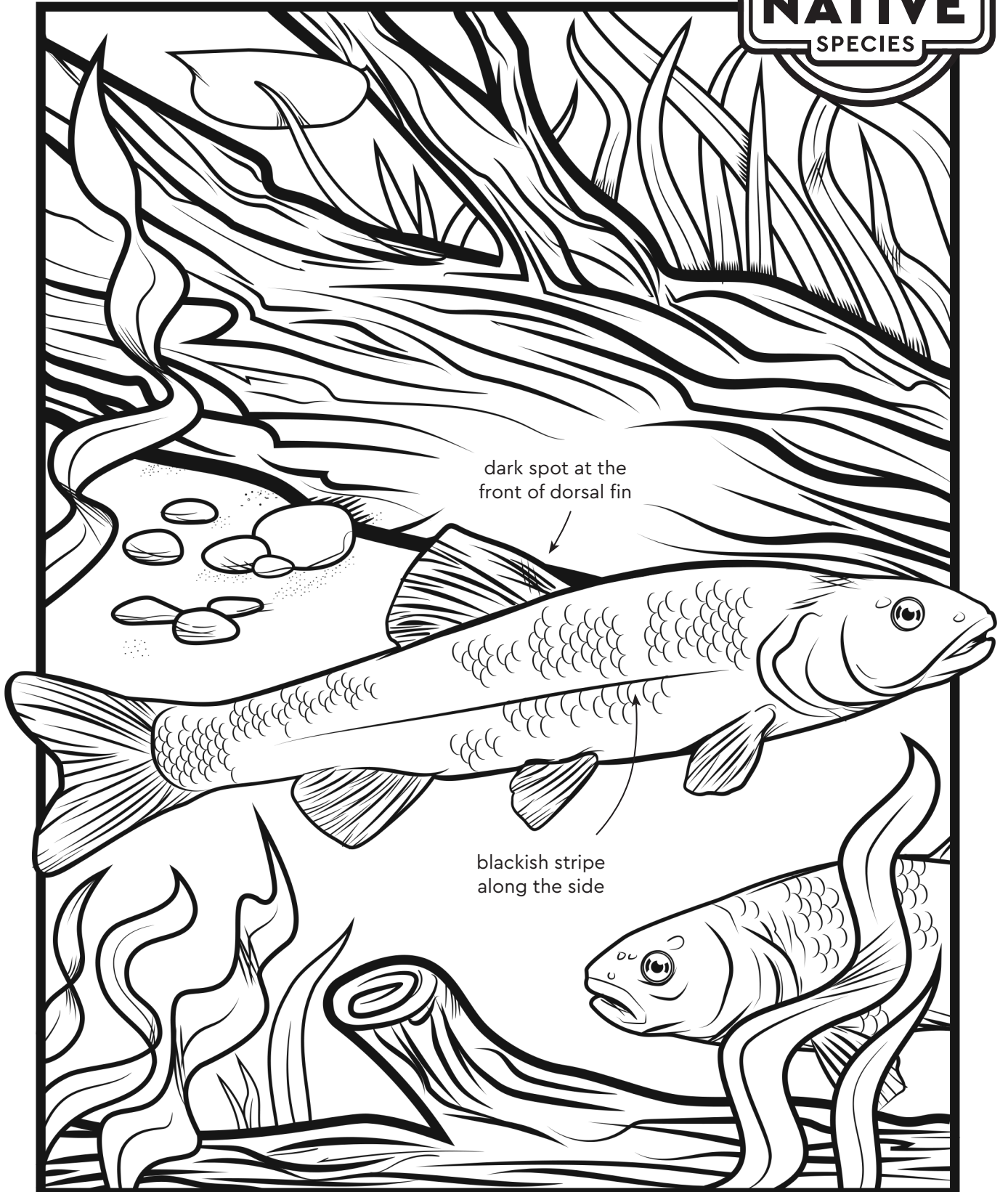
straight scale pattern
along the middle

eye at top
of head

sucker mouth that
extends outwards

CREEK CHUB

I get confused with Grass Carp and Black Carp.

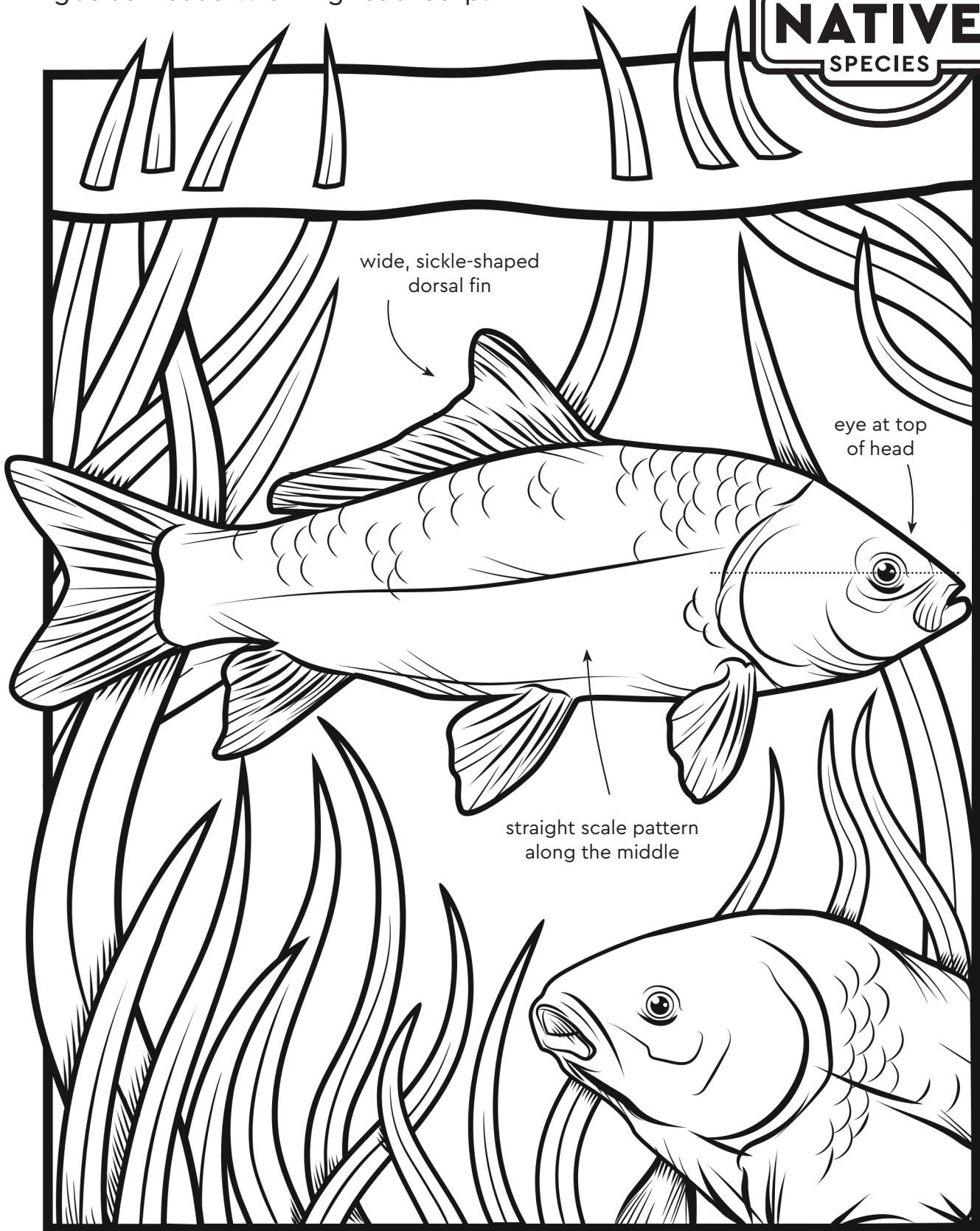


dark spot at the front of dorsal fin

blackish stripe along the side

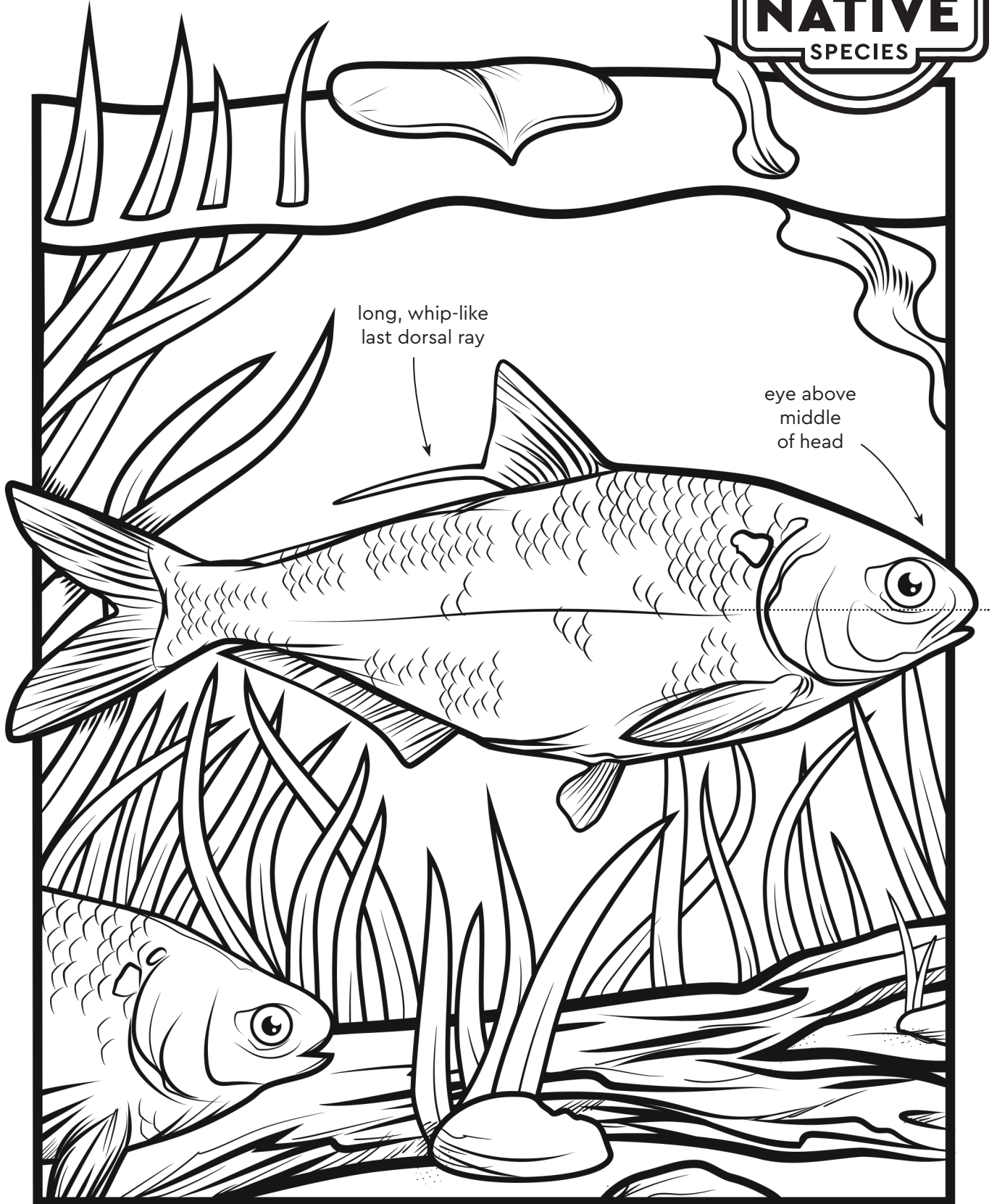
BIGMOUTH BUFFALO

I get confused with Bighead Carp.



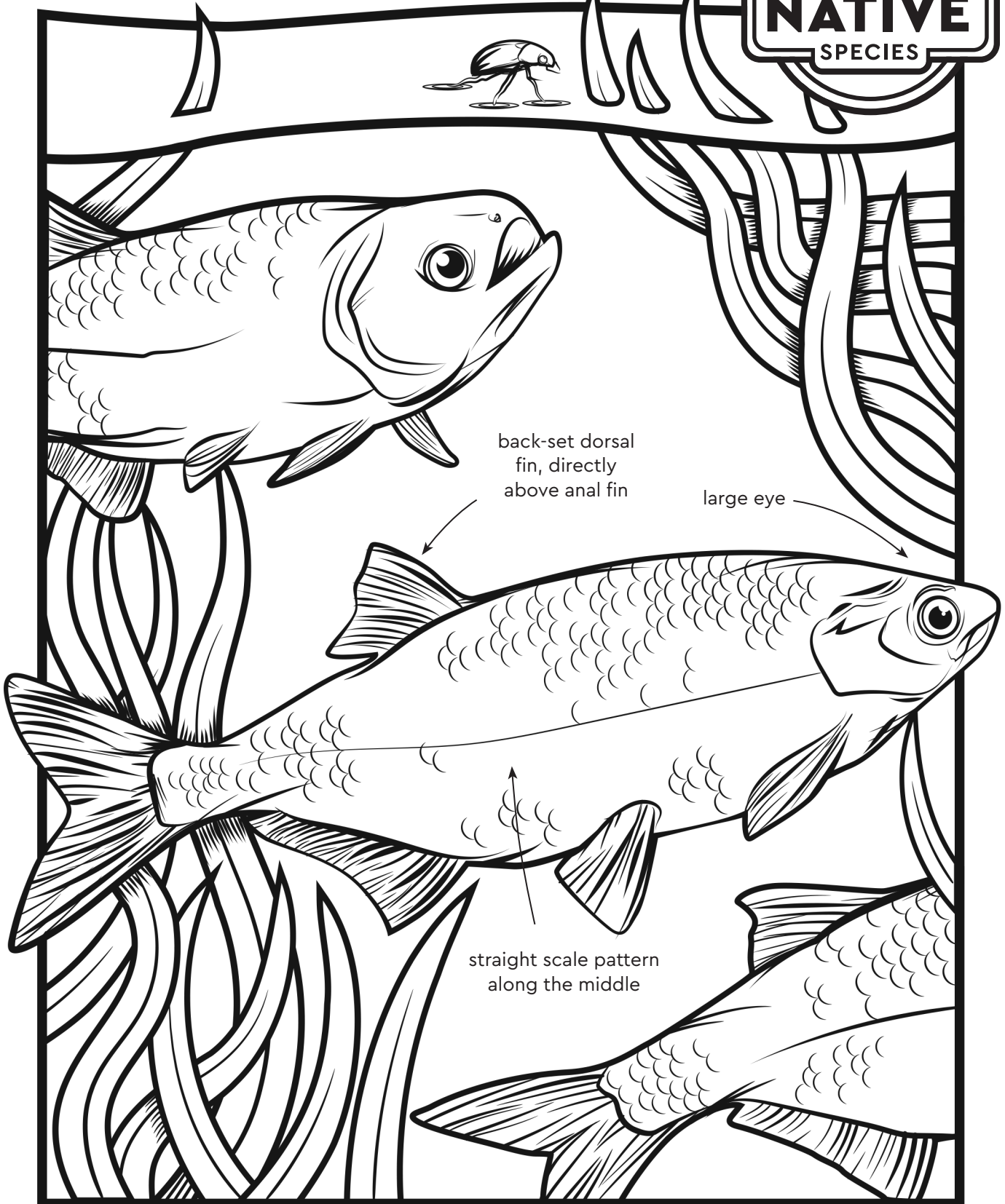
GIZZARD SHAD

I get confused with Silver Carp.



MOONEYE

I get confused with Silver Carp.



back-set dorsal
fin, directly
above
anal fin

large eye

straight scale pattern
along the middle

WORD SEARCH

Find the list of words in the puzzle and circle them! Remember they could be in any direction, even backwards!

CARPS
GREAT LAKES
ONTARIO
BIGHEAD
BLACK

SILVER
GRASS
AQUACULTURE
STOP
INVADER




SPOT THE DIFFERENCE

Grass Carp, Bighead Carp, Silver Carp and Black Carp do not belong in the Great Lakes. In the picture below, find the changes that could happen if these fishes invade our waters.



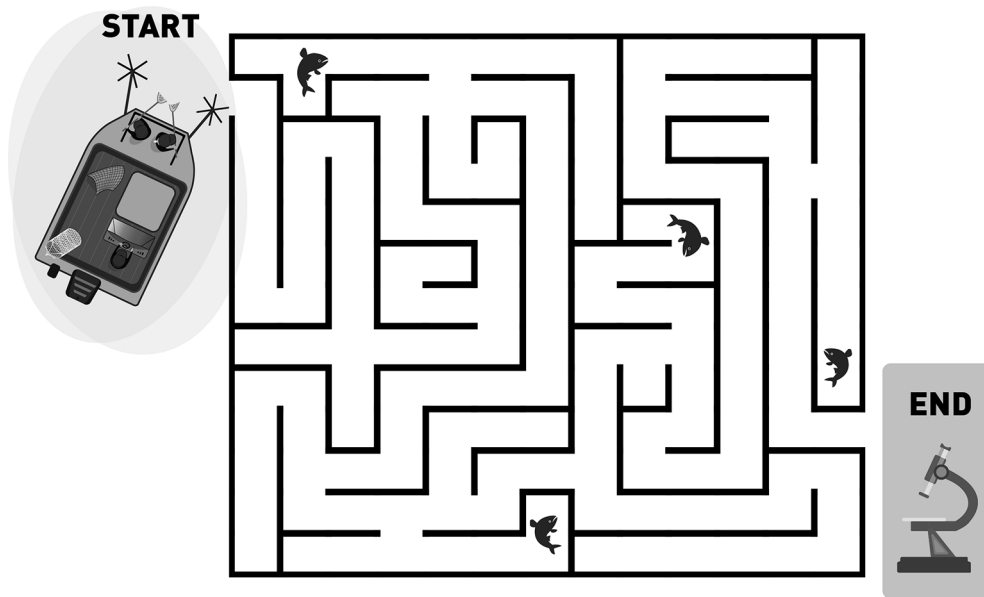
Illustration: Dave Whamond

SUSPECT YOU FOUND A GRASS CARP?

<p>DOCUMENT</p>  <p>Do not release</p>  <p>Take a photo, note exact location</p>	→	<p>REPORT</p> <p>Call Invading Species Hotline 1-800-563-7711</p>  <p>or go to eddmaps.org/ontario</p>	→	<p>RETAIN</p>  <p>Keep fish in cooler, double-bagged, head above the ice</p>  <p>We will arrange to pick it up</p>
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CATCH THE CARP

We need YOUR help! Follow the maze to help catch all of the Grass Carp and then bring them back to the lab. Good luck!



DRAW YOUR OWN!

Draw an image of your favourite or imagined fish or fishes that you want to help protect in the Great Lakes!



