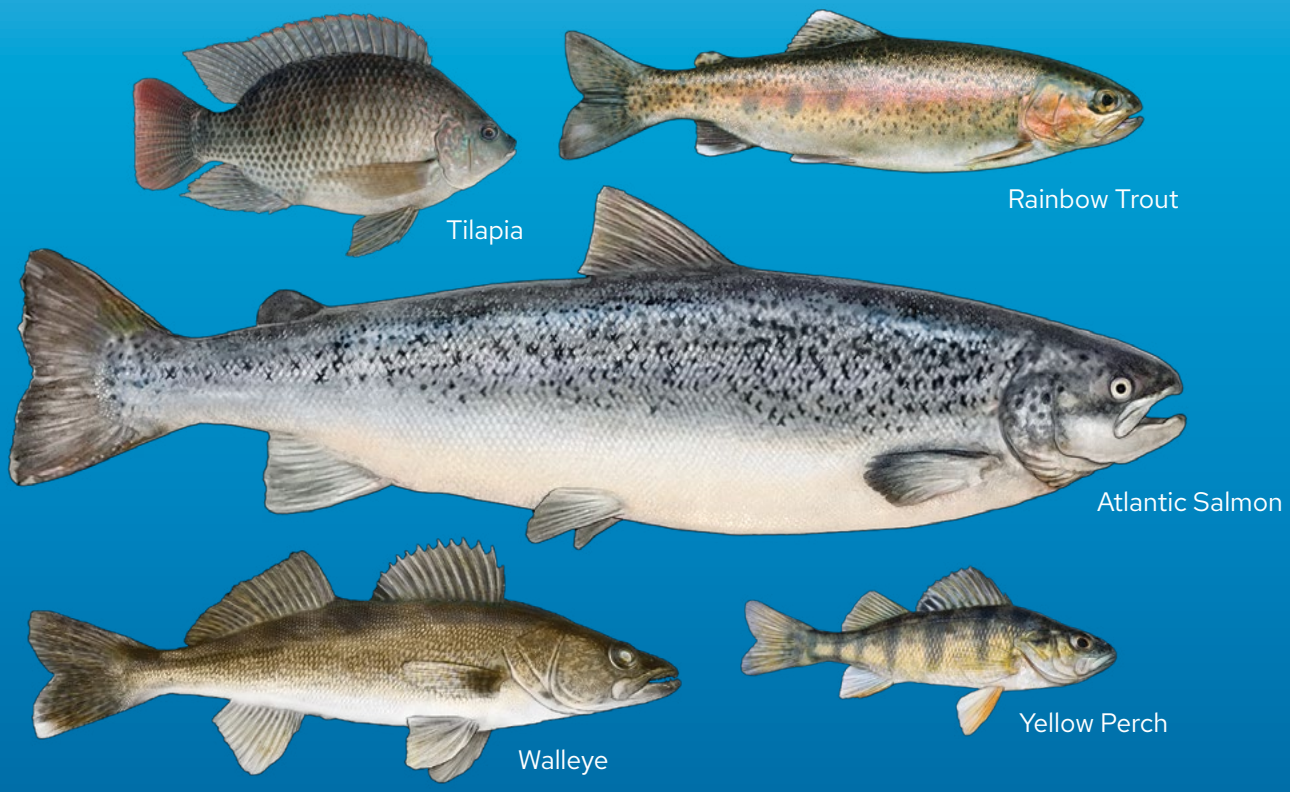
WISCONSIN AQUACULTURE

COLORING AND STICKER ACTIVITY BOOK

STICKERS INSIDE!



University of Wisconsin
Stevens Point

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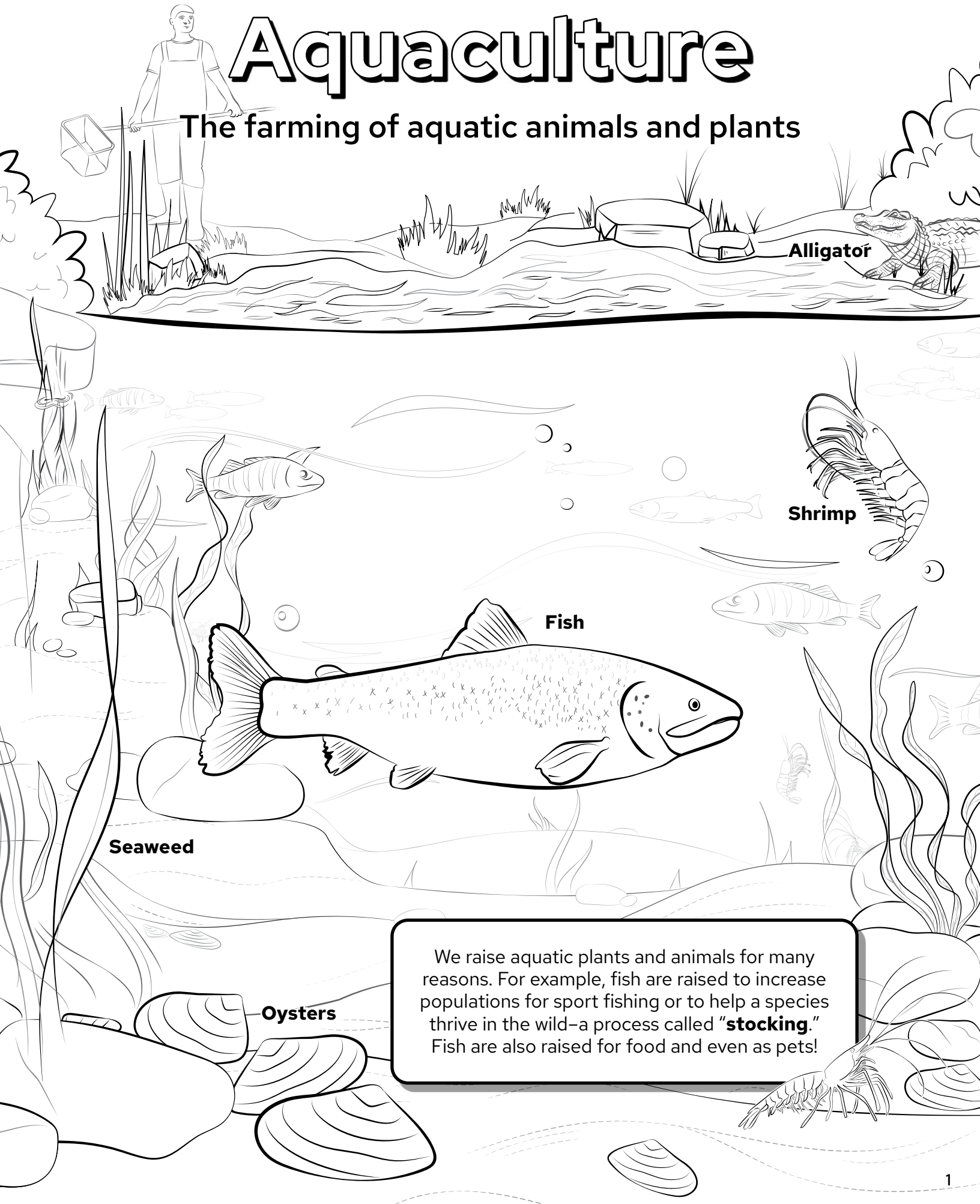
University of Wisconsin-Stevens Point Northern Aquaculture Demonstration Facility is a state-of-the-art research, demonstration and educational facility, showcasing a variety of systems and species that promotes sustainable and best management practices for fish culture. Virtual and in-person tours welcome.

Connect with us at aquaculture.uwsp.edu.

Aquaculture

The farming of aquatic animals and plants



We raise aquatic plants and animals for many reasons. For example, fish are raised to increase populations for sport fishing or to help a species thrive in the wild–a process called "**stocking**." Fish are also raised for food and even as pets!

Be a Fish Farmer

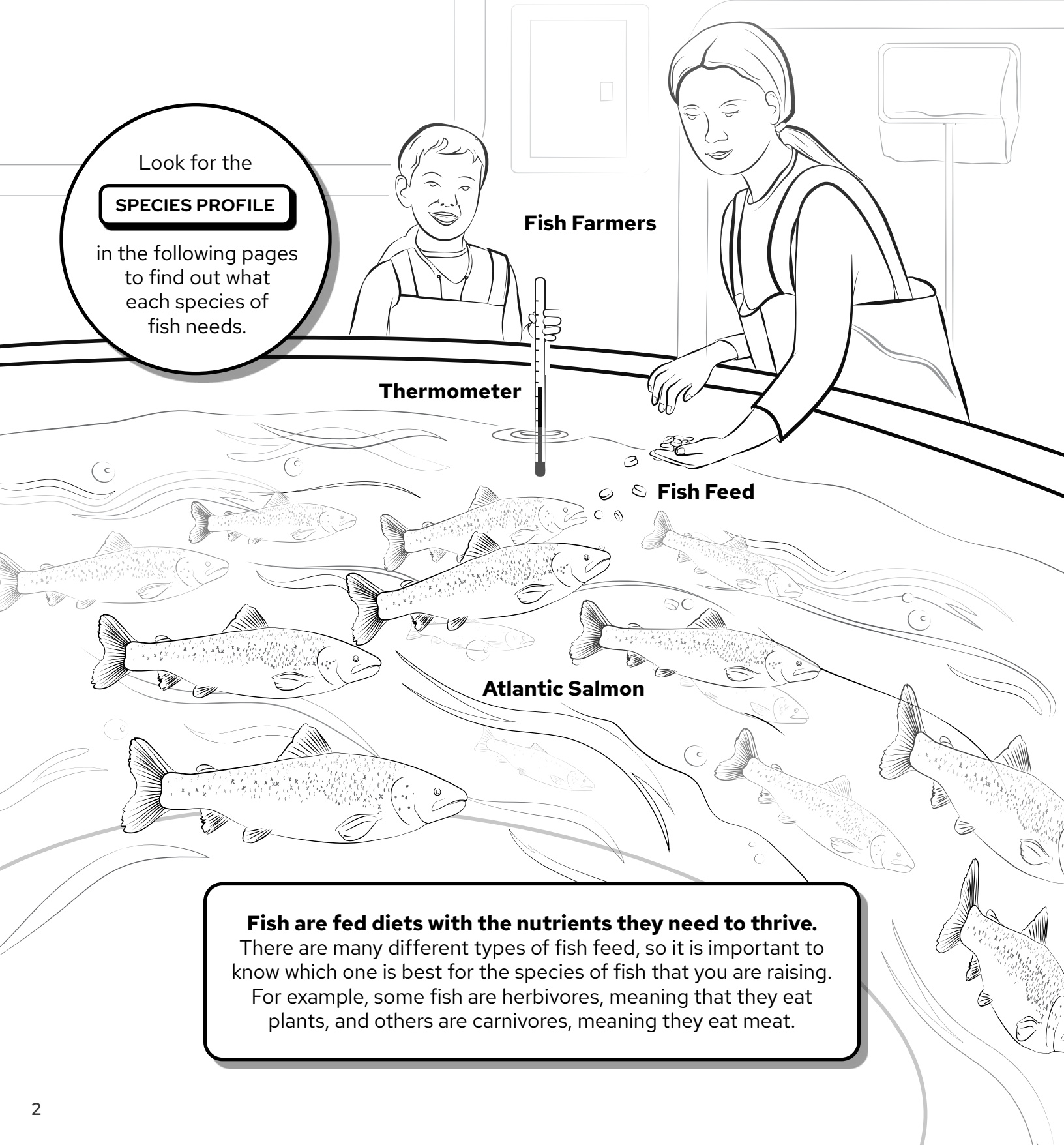
Keep your fish happy and healthy

A farmer needs to know the right water temperature, feed and environment for the fish.

Look for the

SPECIES PROFILE

in the following pages to find out what each species of fish needs.



Fish are fed diets with the nutrients they need to thrive. There are many different types of fish feed, so it is important to know which one is best for the species of fish that you are raising. For example, some fish are herbivores, meaning that they eat plants, and others are carnivores, meaning they eat meat.

Tilapia

Freshwater fish that live in warm water

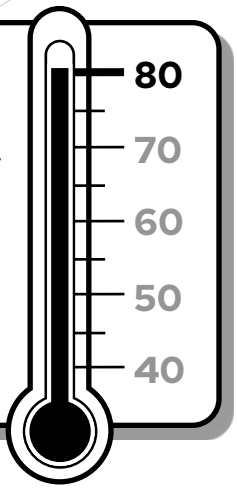
DID YOU KNOW?

Aquaculture of tilapia dates back to ancient Egypt, where it was a symbol of rebirth and thought to protect the sun god on his daily journey across the sky.

SPECIES PROFILE

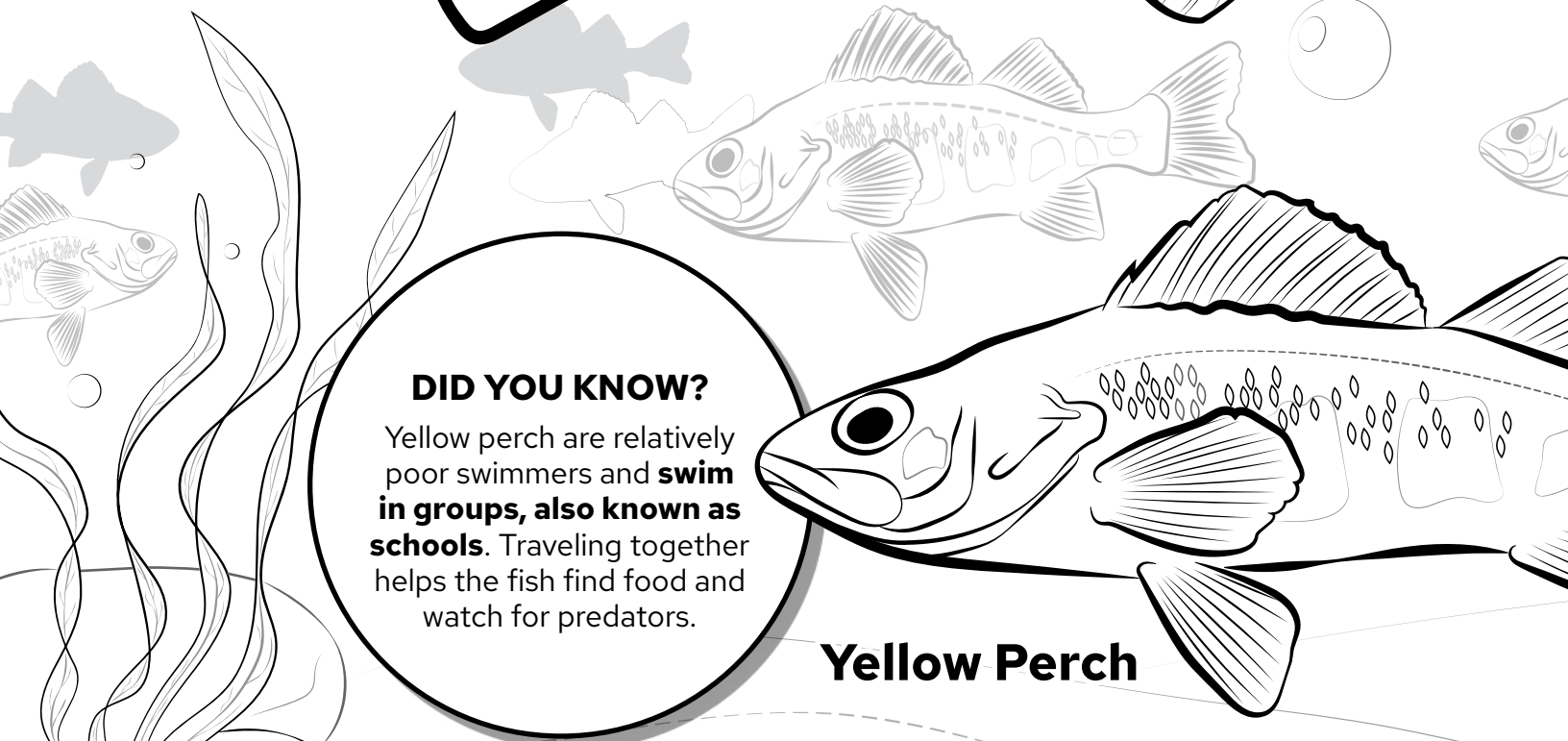
HOW TO RAISE TILAPIA

Tilapia prefer the warmest water of any fish in this book, enjoying water around **80 degrees F**. In Wisconsin, this fish needs to be kept indoors in **tanks with warm water.**



The Perch Family

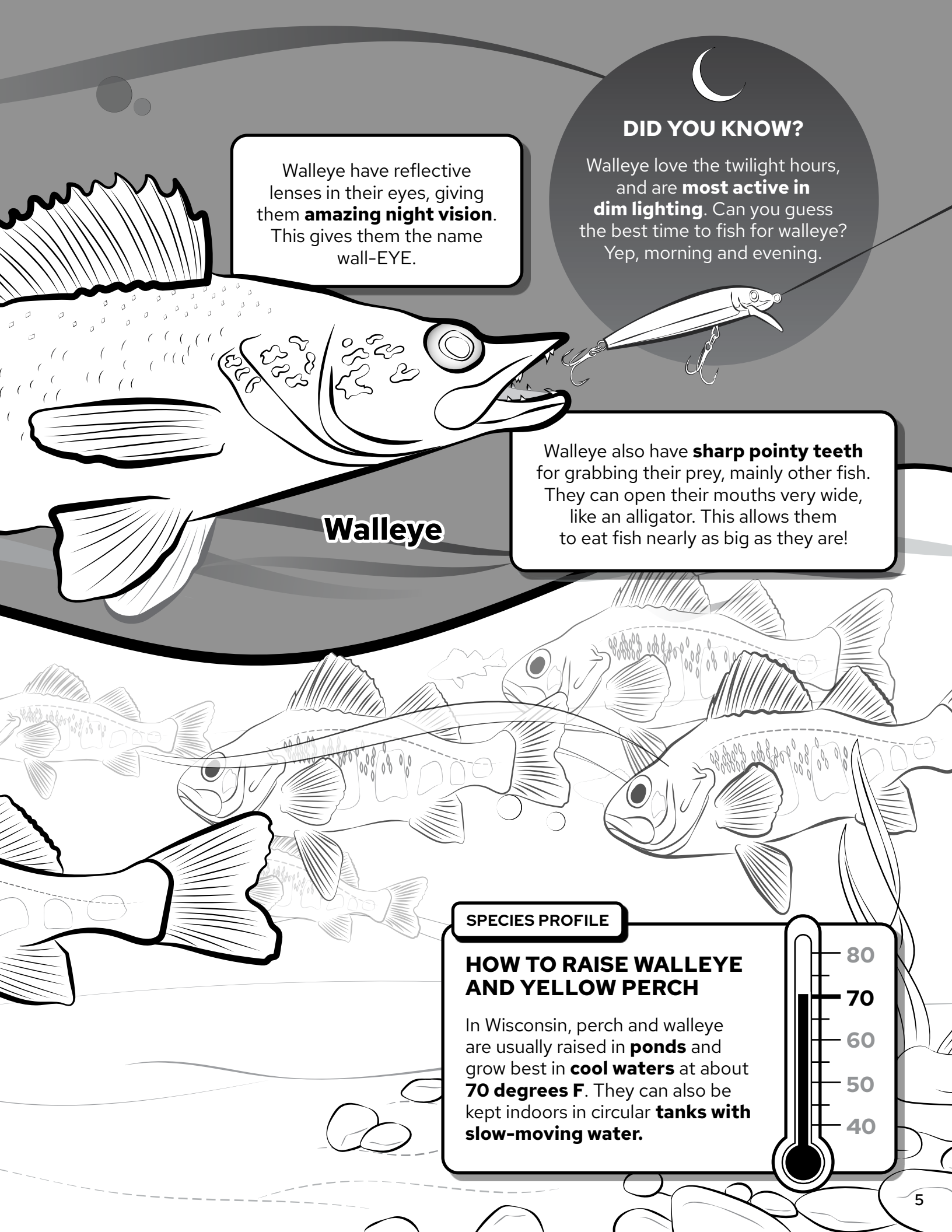
Walleye and yellow perch are the two family members commonly raised in Wisconsin



DID YOU KNOW?

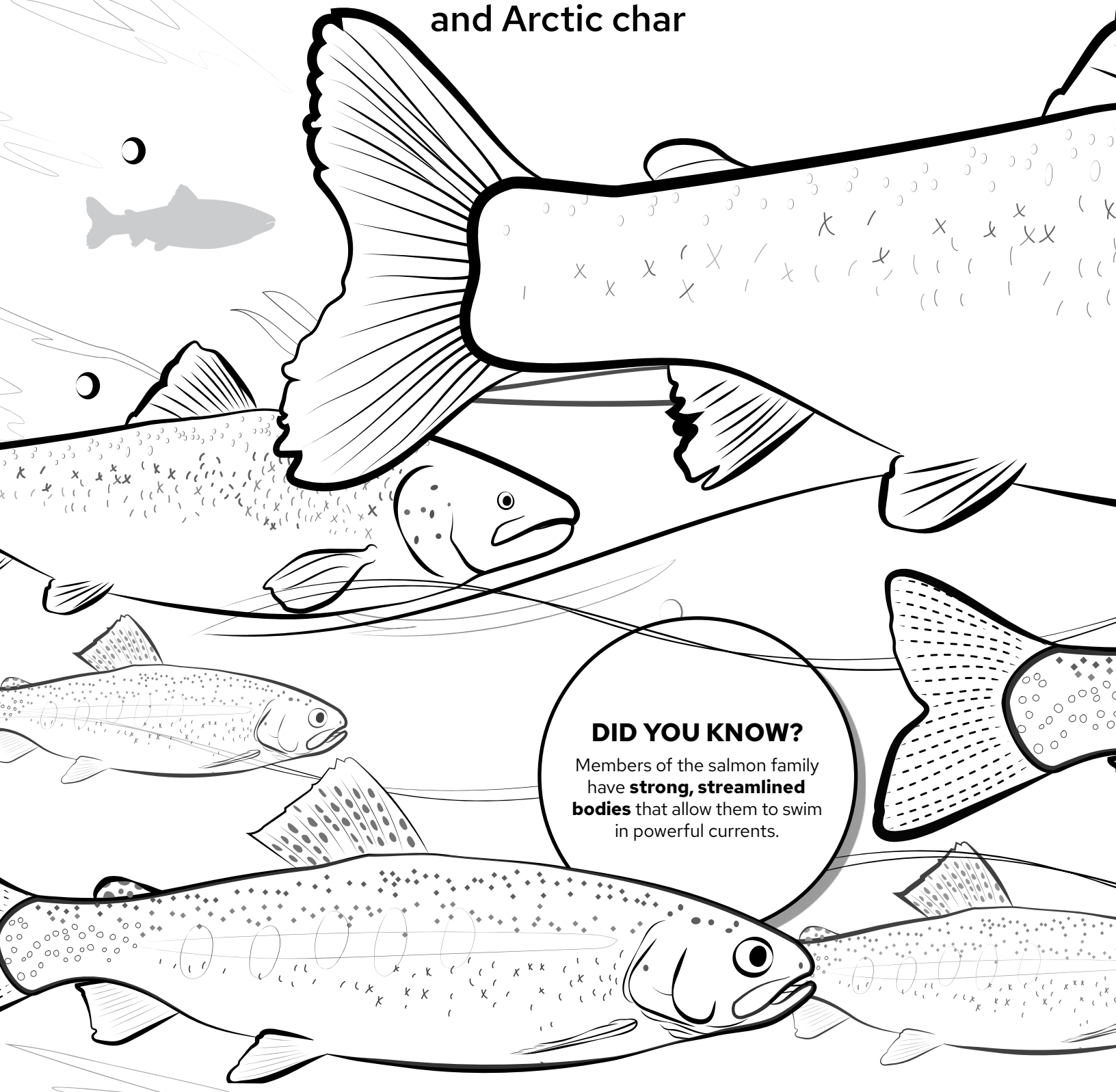
Yellow perch are relatively poor swimmers and **swim in groups, also known as schools**. Traveling together helps the fish find food and watch for predators.

Yellow Perch


DID YOU KNOW?
Walleye love the twilight hours, and are **most active in dim lighting**. Can you guess the best time to fish for walleye? Yep, morning and evening.
Walleye have reflective lenses in their eyes, giving them **amazing night vision**. This gives them the name wall-EYE.
Walleye
Walleye also have **sharp pointy teeth** for grabbing their prey, mainly other fish. They can open their mouths very wide, like an alligator. This allows them to eat fish nearly as big as they are!
SPECIES PROFILE
HOW TO RAISE WALLEYE AND YELLOW PERCH
In Wisconsin, perch and walleye are usually raised in **ponds** and grow best in **cool waters** at about **70 degrees F**. They can also be kept indoors in circular **tanks with slow-moving water.**
80
70
60
50
40

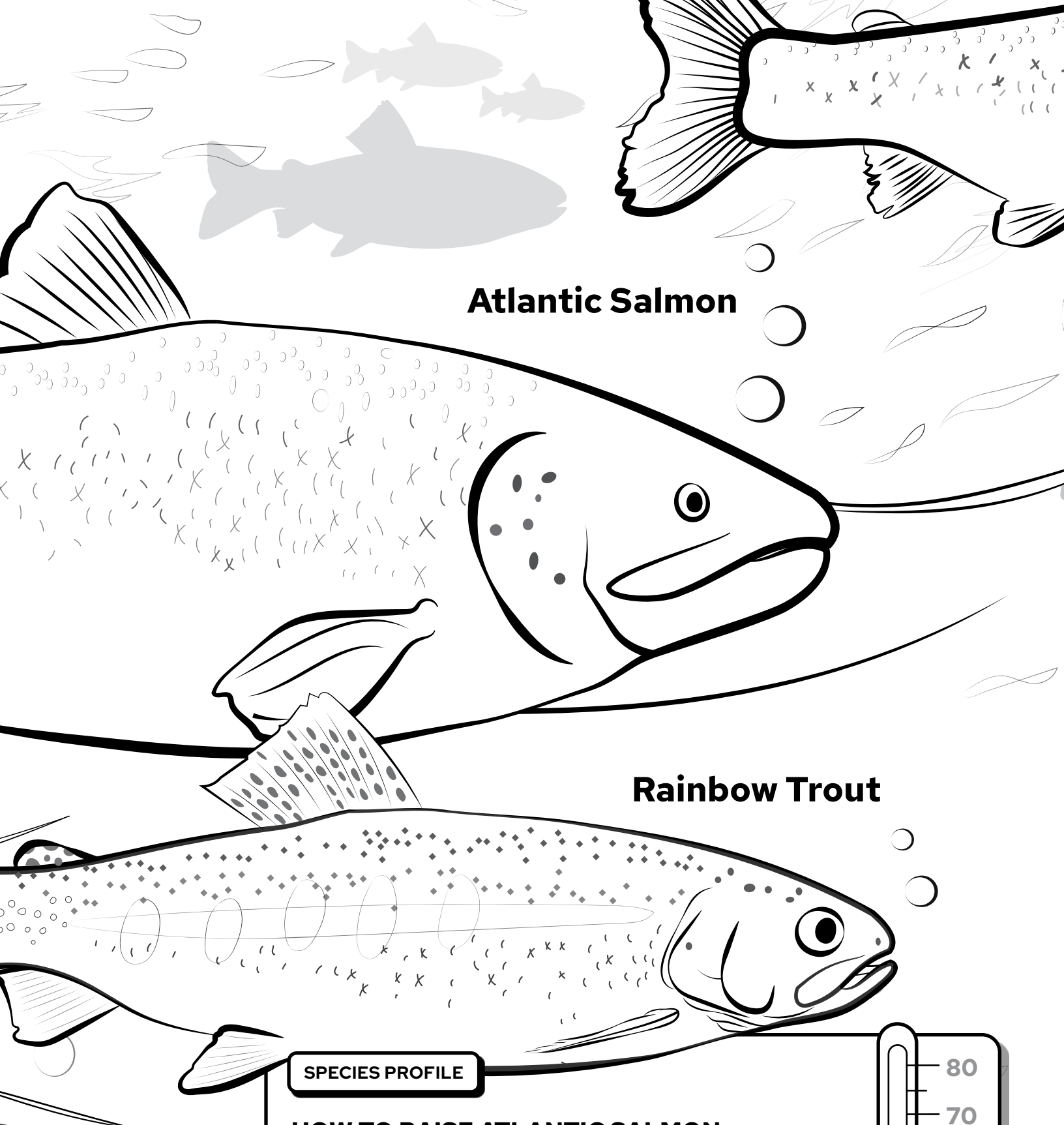
The Salmon Family

Some family members raised for aquaculture include Atlantic salmon, brook trout, rainbow trout and Arctic char



DID YOU KNOW?

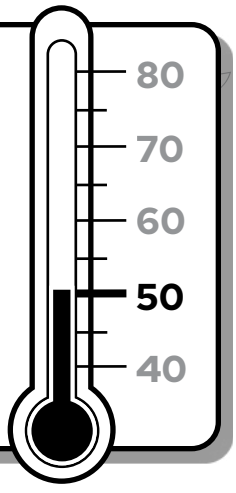
Members of the salmon family have **strong, streamlined bodies** that allow them to swim in powerful currents.



SPECIES PROFILE

HOW TO RAISE ATLANTIC SALMON AND RAINBOW TROUT

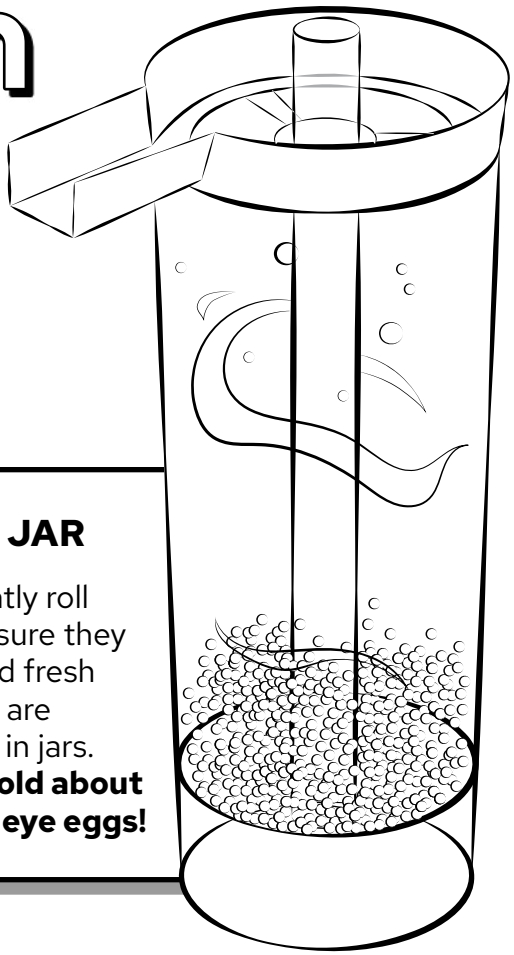
Many salmon species are raised in **raceways**, which are constructed rivers with cold stream-like water that flows from one end to the other. Salmon species can also be raised in circular fish **tanks with fast-moving, cold water**.



Hatching Fish

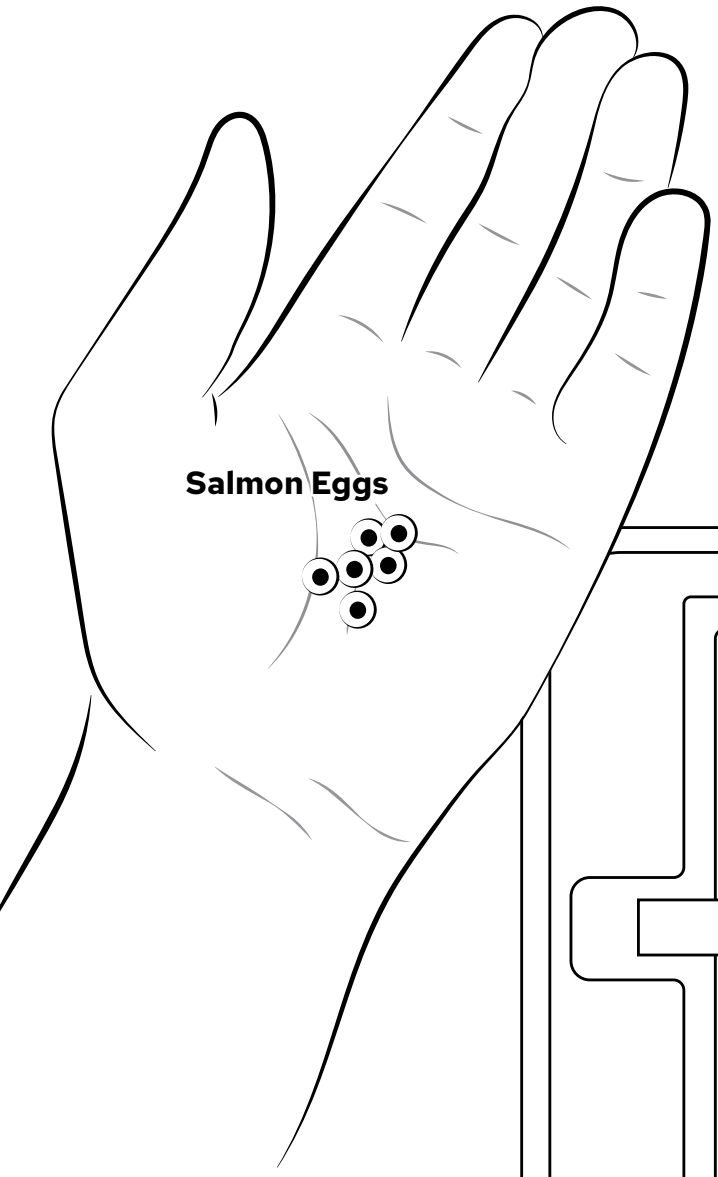
Most fish hatch from an egg, just like a chicken!

Two places to hatch fish are **hatching jars** and **vertical trays**.



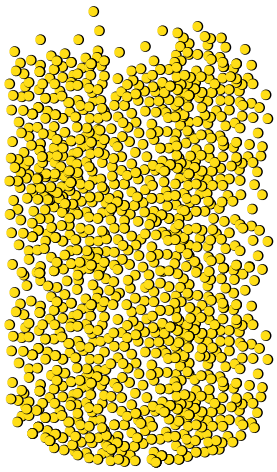
HATCHING JAR

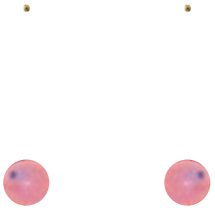
These jars gently roll eggs to make sure they get oxygen and fresh water. Walleye are often hatched in jars. **One jar can hold about 400,000 walleye eggs!**

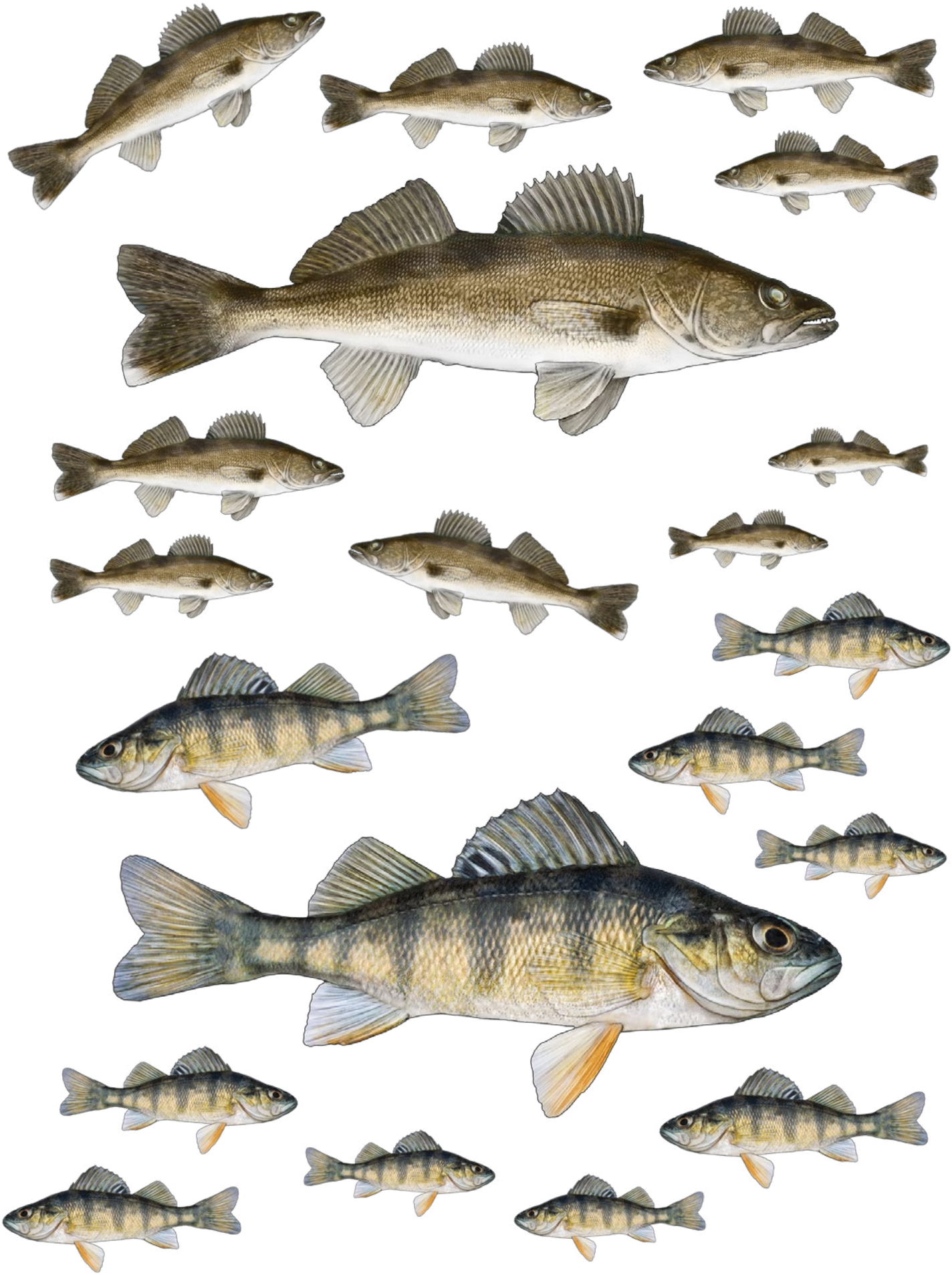


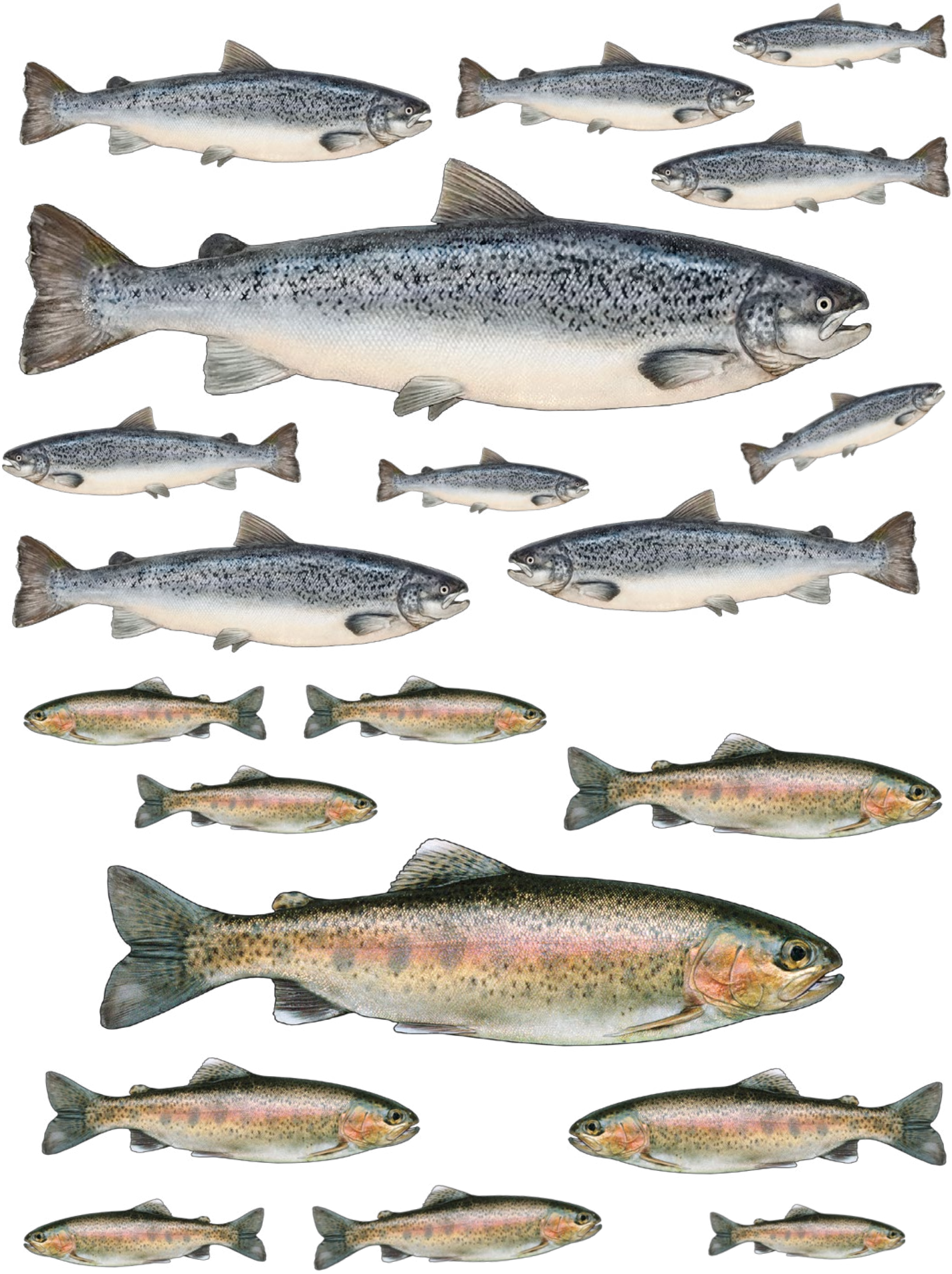
VERTICAL TRAYS

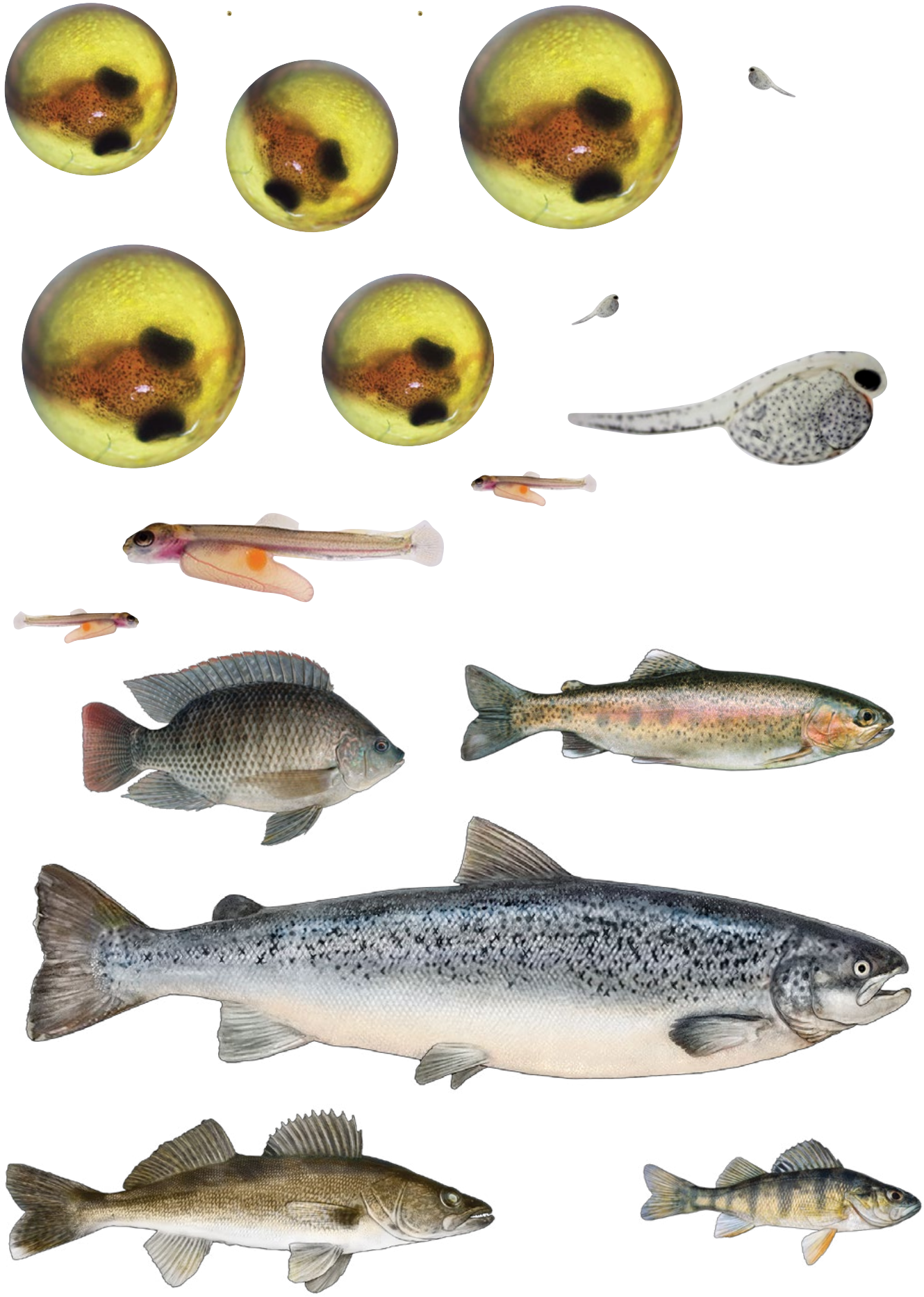
These trays are used for cold-water species like trout and salmon. The eggs are gently laid out in each tray and provided with fresh cold water.



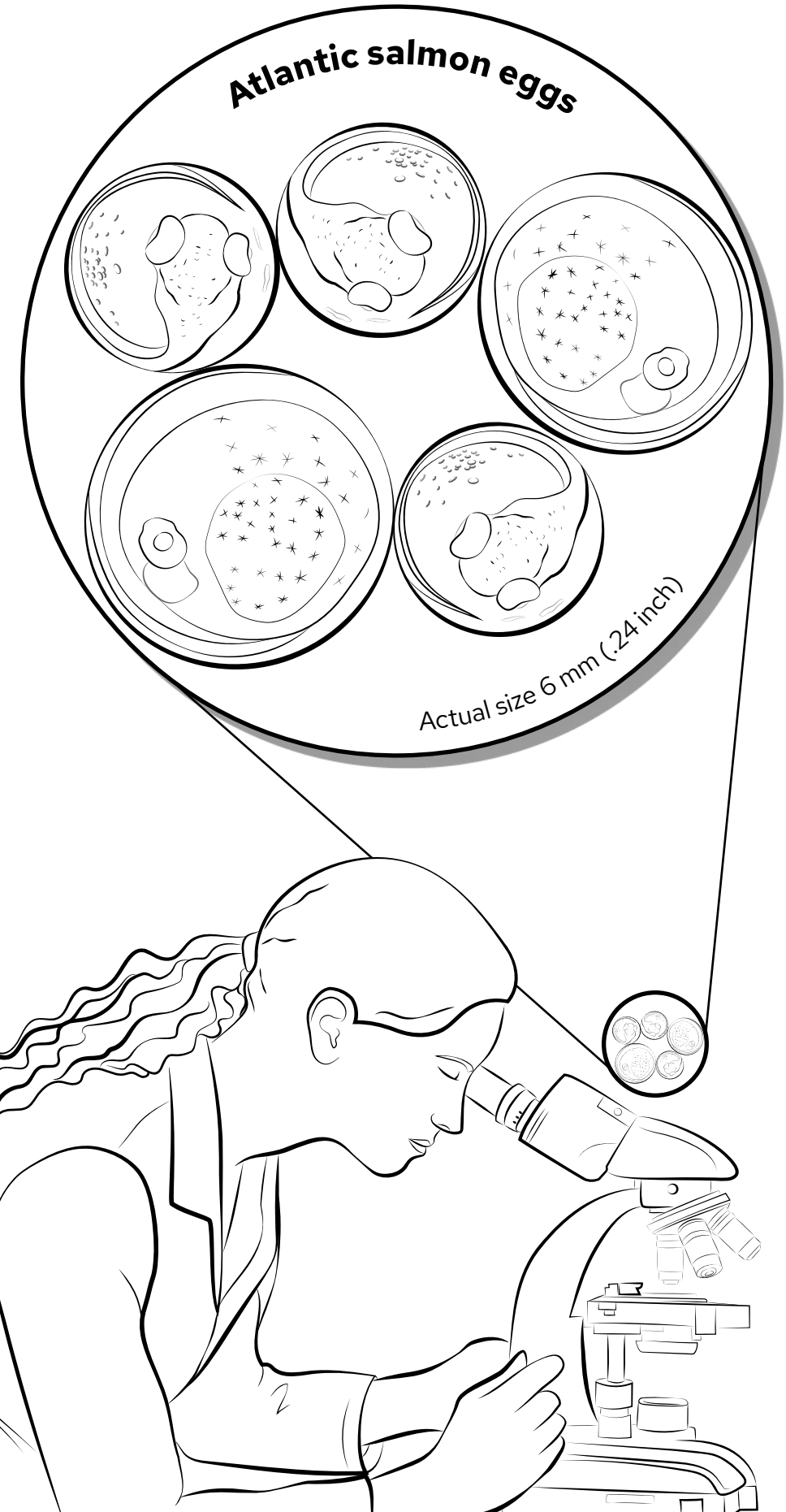






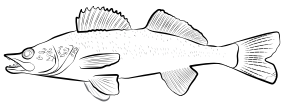


How Fish Grow



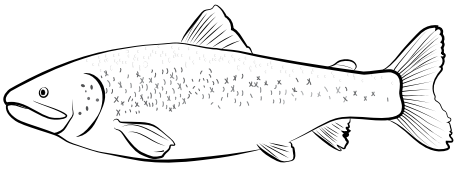
HOW BIG ARE THEY?

The size of a fish egg depends on the species.



Walleye egg

- Actual size 1 mm



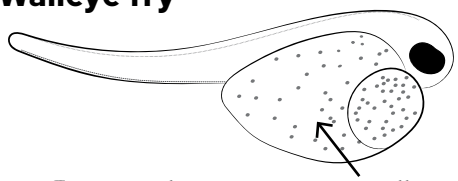
Atlantic salmon egg

Actual size 6 mm

A baby fish is called a fry

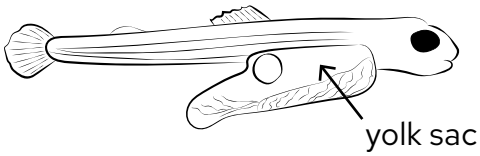
Notice the big bellies? Fry hatch with something called a **yolk sac**. The yolk sac provides nutrients until the fry are strong enough to look for food.

Walleye fry



Actual size 9 mm yolk sac

Atlantic salmon fry



yolk sac

Actual size 24 mm

Stock a Pond

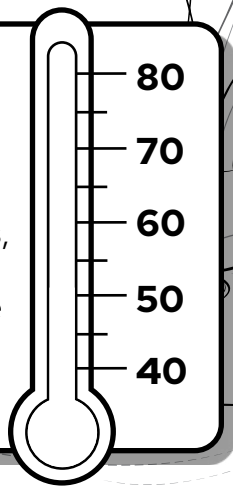
"Stocking" means adding fish to a tank, pond or other system

WHICH FISH LIVE HERE?

Check the species profiles and then stock your pond!

DIRECTIONS

Choose the right fish for this environment from the stickers, and color in the thermometer to show the right temperature for raising your fish.

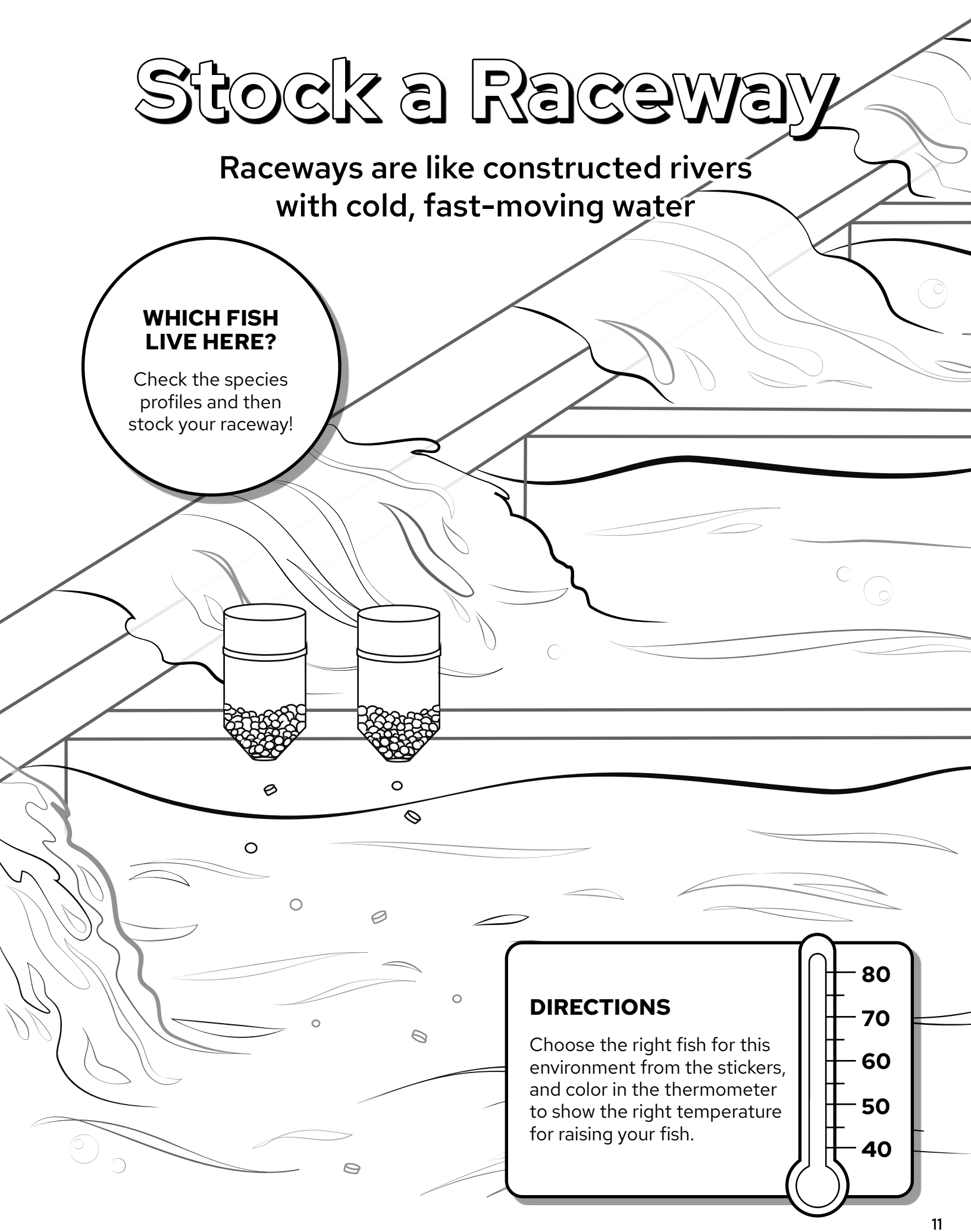


Stock a Raceway

Raceways are like constructed rivers with cold, fast-moving water

WHICH FISH LIVE HERE?

Check the species profiles and then stock your raceway!

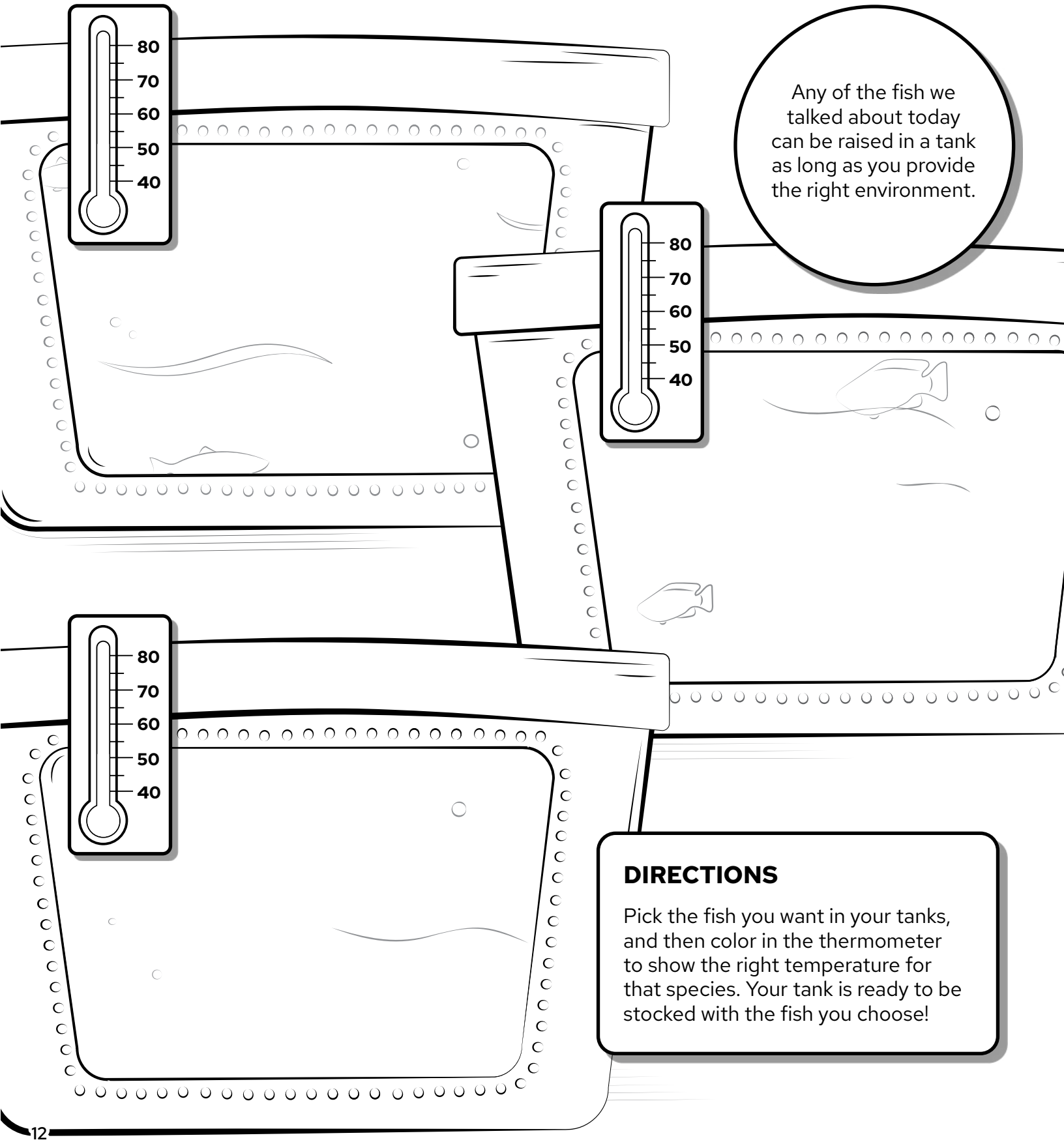


DIRECTIONS

Choose the right fish for this environment from the stickers, and color in the thermometer to show the right temperature for raising your fish.

Stock a Tank

Choose the water temperature, and choose your fish



Any of the fish we talked about today can be raised in a tank as long as you provide the right environment.

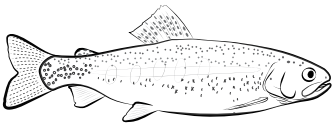
DIRECTIONS

Pick the fish you want in your tanks, and then color in the thermometer to show the right temperature for that species. Your tank is ready to be stocked with the fish you choose!

Right Fish, Right Tank

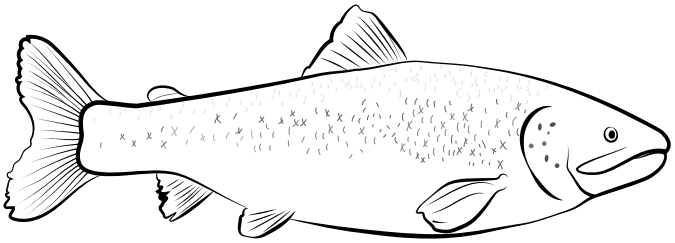
DIRECTIONS

Draw a line from the fish to the tank with the right conditions.



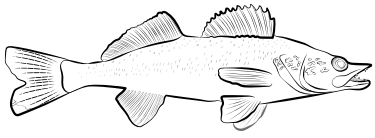
Rainbow Trout

Tilapia

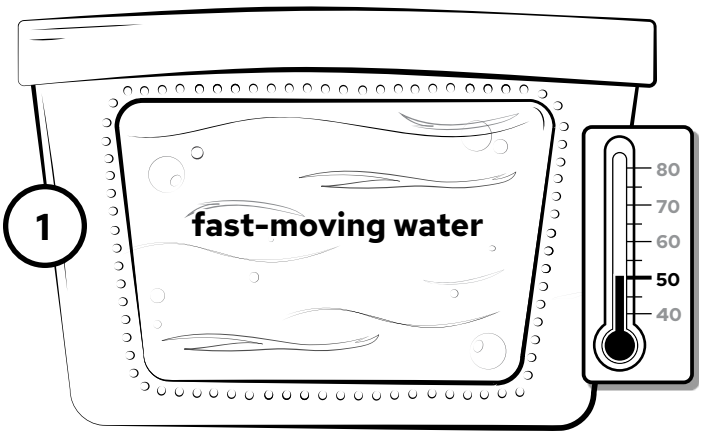


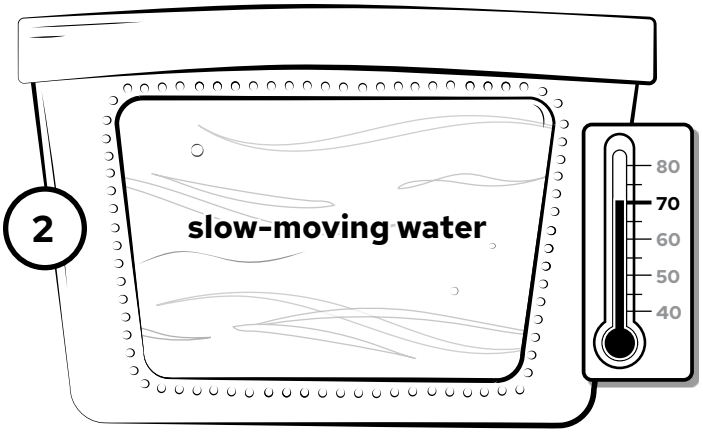
Atlantic Salmon

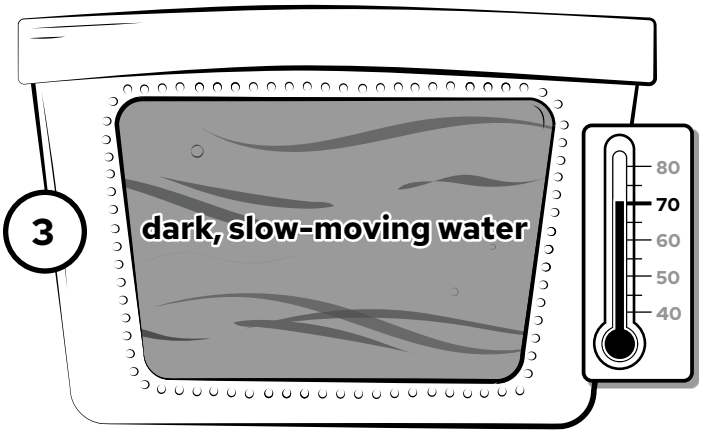
Yellow Perch

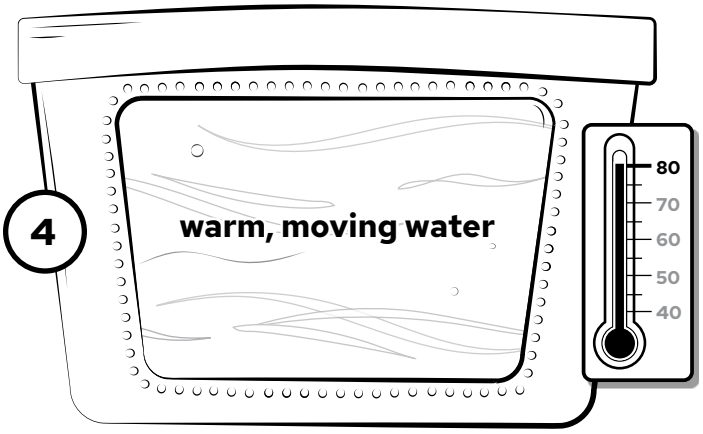


Walleye

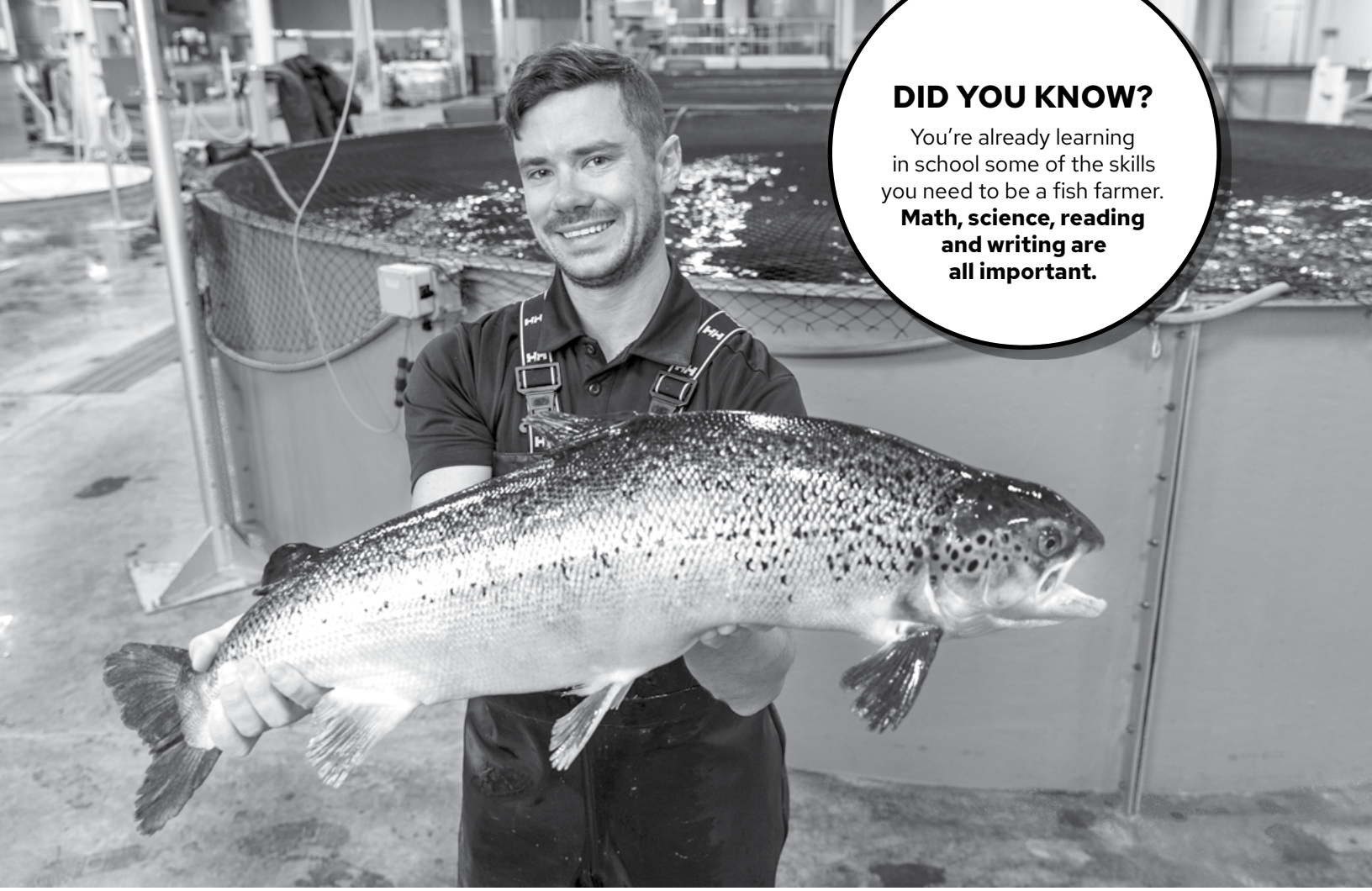








ANSWERS: Tank 1: Atlantic salmon and rainbow trout, tank 2: yellow perch, tank 3: walleye, tank 4: tilapia



DID YOU KNOW?

You're already learning in school some of the skills you need to be a fish farmer. **Math, science, reading and writing are all important.**

Working as a Fish Farmer

Aquaculture takes a lot of different people with many different skills

Water Chemistry

Testing and maintaining clean water.

Veterinary and Animal Care

Keeping the fish healthy, treating illnesses, feeding the fish, cleaning the tanks and taking samples.

Data and Record Keeping

Planning an aquaculture system, determining how many fish can live in the space, calculating how much to feed the fish, tracking water quality, and more.

System Maintenance and Design

Designing an aquaculture system and keeping it running, including engineering, plumbing and electrical work.

Marketing, Advertising and Outreach

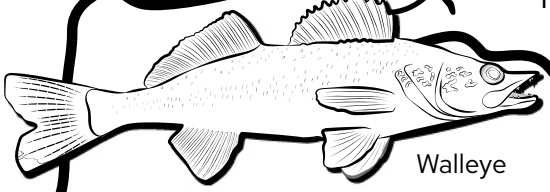
Making sure people know where to find your product and letting everyone know how good it is for them to eat.

Above: Kyle Woolever, aquaculture manager at Superior Fresh in Hixton, Wis., holds a farm-raised salmon. Image by Sara Stathas

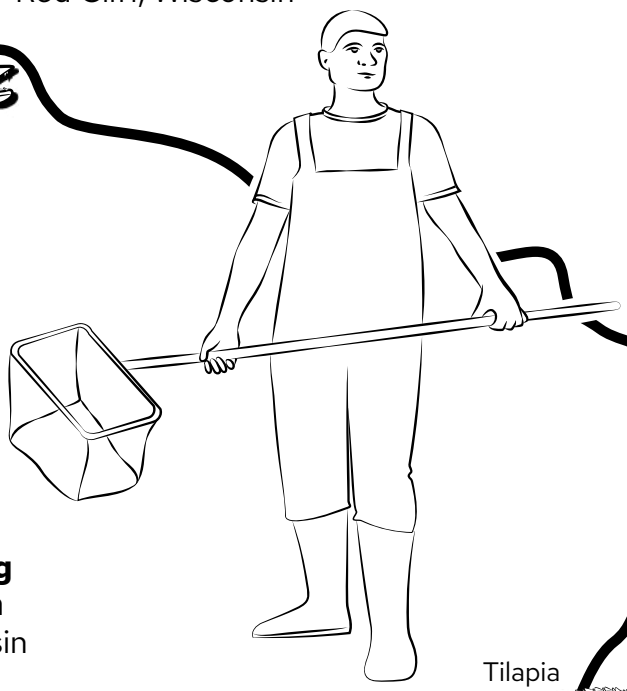
Wisconsin Fish Farms

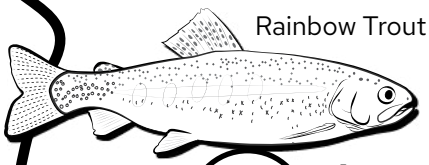
Visit EatWisconsinFish.org to see all our local farmers

University of Wisconsin-Stevens Point
Northern Aquaculture Demonstration Facility
Red Cliff, Wisconsin



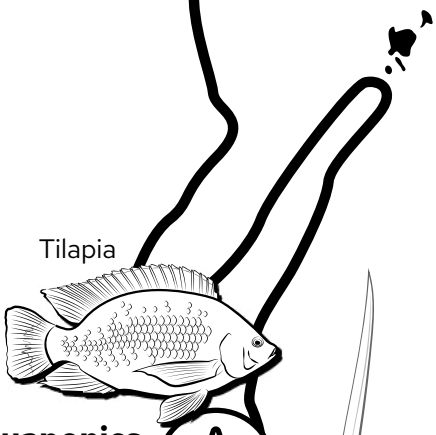
Walleye





Rainbow Trout

Jeremiah's Bullfrog
"Eat My Fish" Farm
Menomonie, Wisconsin



Tilapia

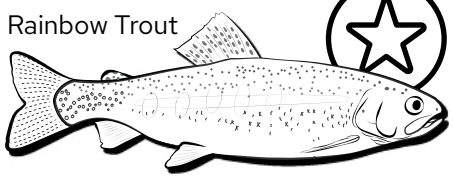
Superior Fresh, LLC
Hixton, Wisconsin

Lake Orchard Aquaponics
Sheboygan, Wisconsin

Atlantic Salmon

Yellow Perch

University of Wisconsin-Milwaukee
School of Freshwater Sciences
Milwaukee, Wisconsin



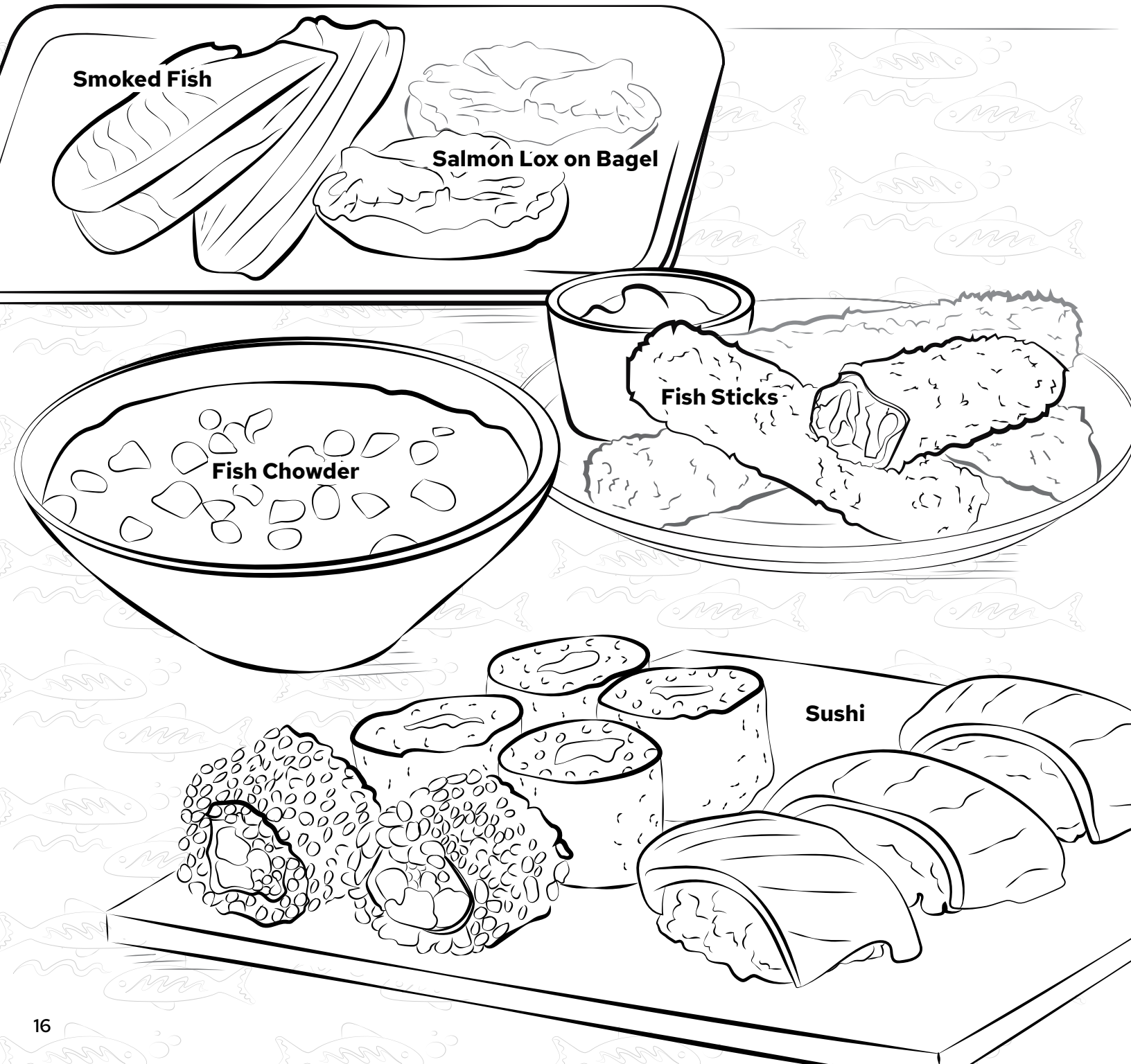
Rainbow Trout

Rushing Waters Fisheries
Palmyra, Wisconsin

Have You Eaten Fish Lately?

Eating fish is good for you, and tasty too!

Fish can be made into all sorts of different foods. Have you eaten any of these before?



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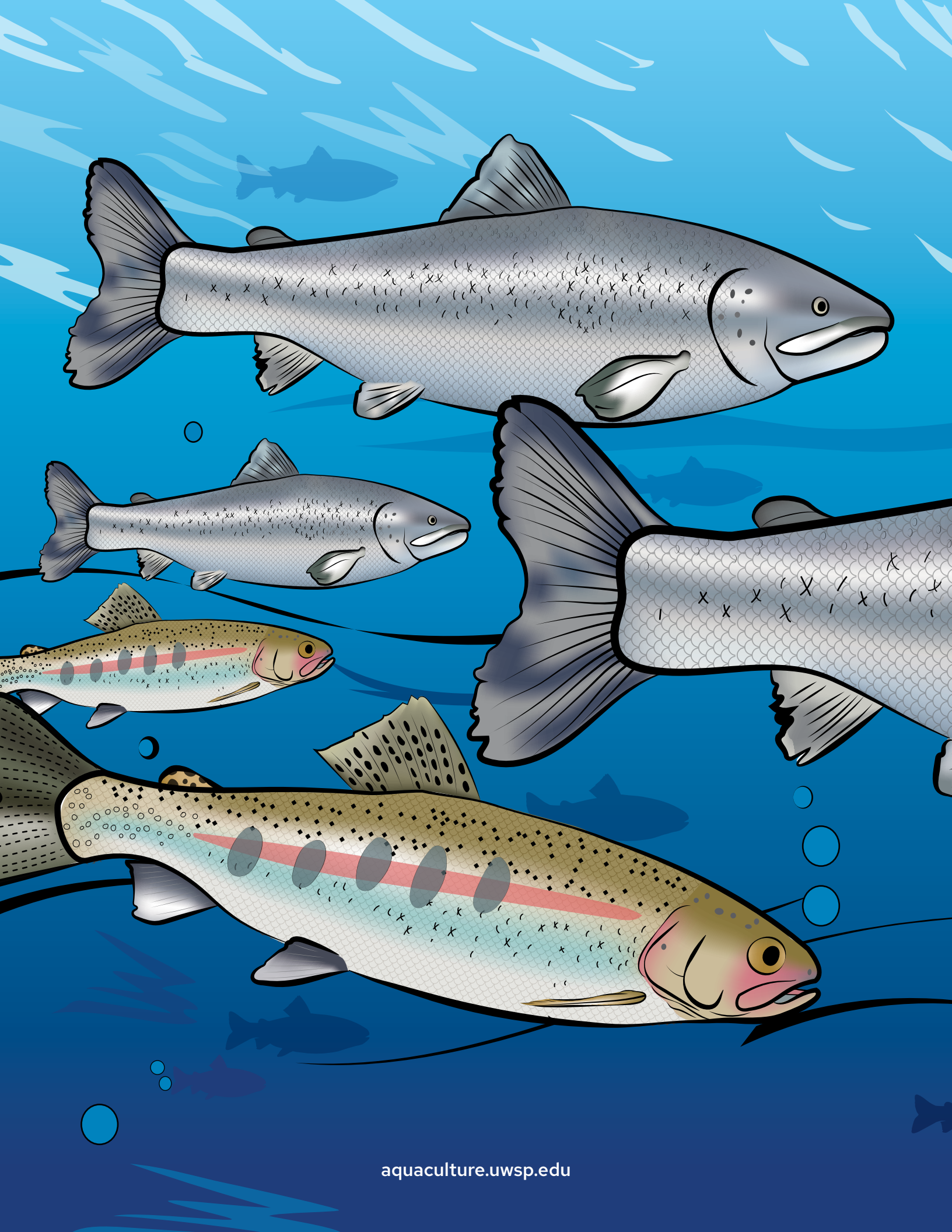

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