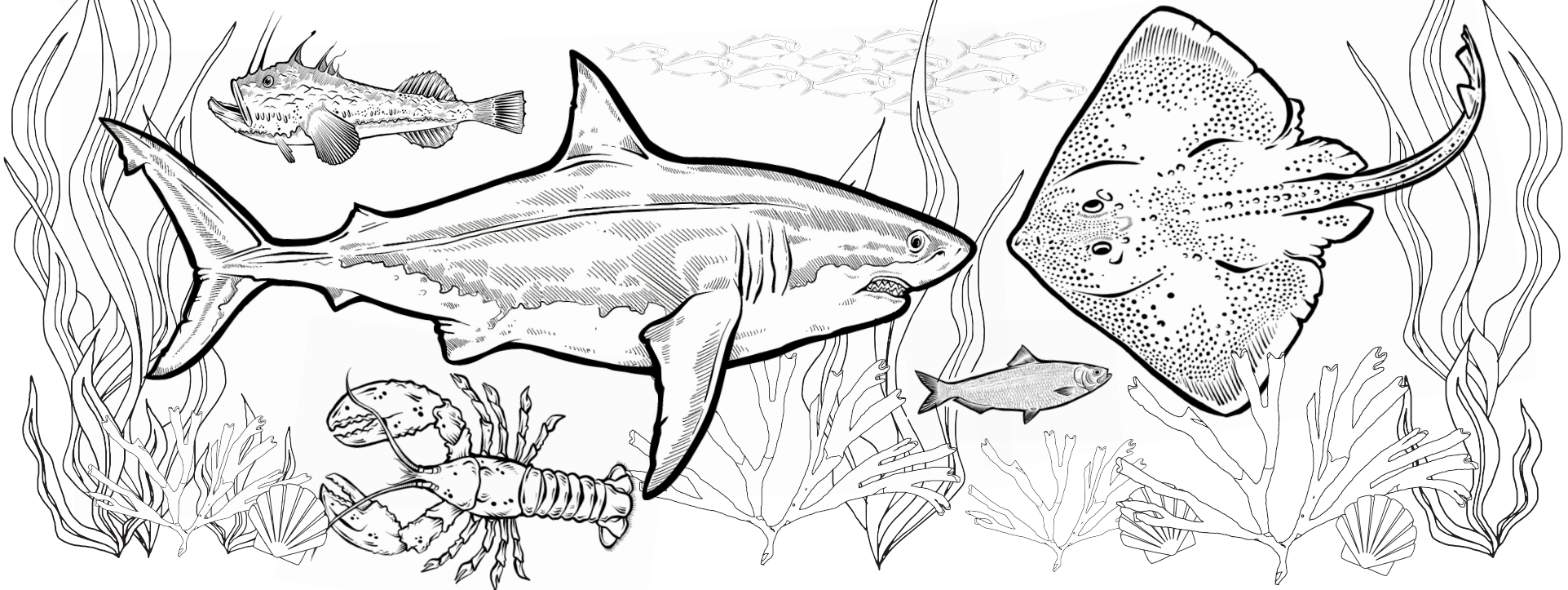




CAPE COD COMMERCIAL
**FISHERMEN'S
ALLIANCE**

Small Boats. Big Ideas.

LEARNING BOOK



THIS LEARNING BOOK WAS MADE WITH SUPPORT FROM:



IN COLLABORATION WITH:



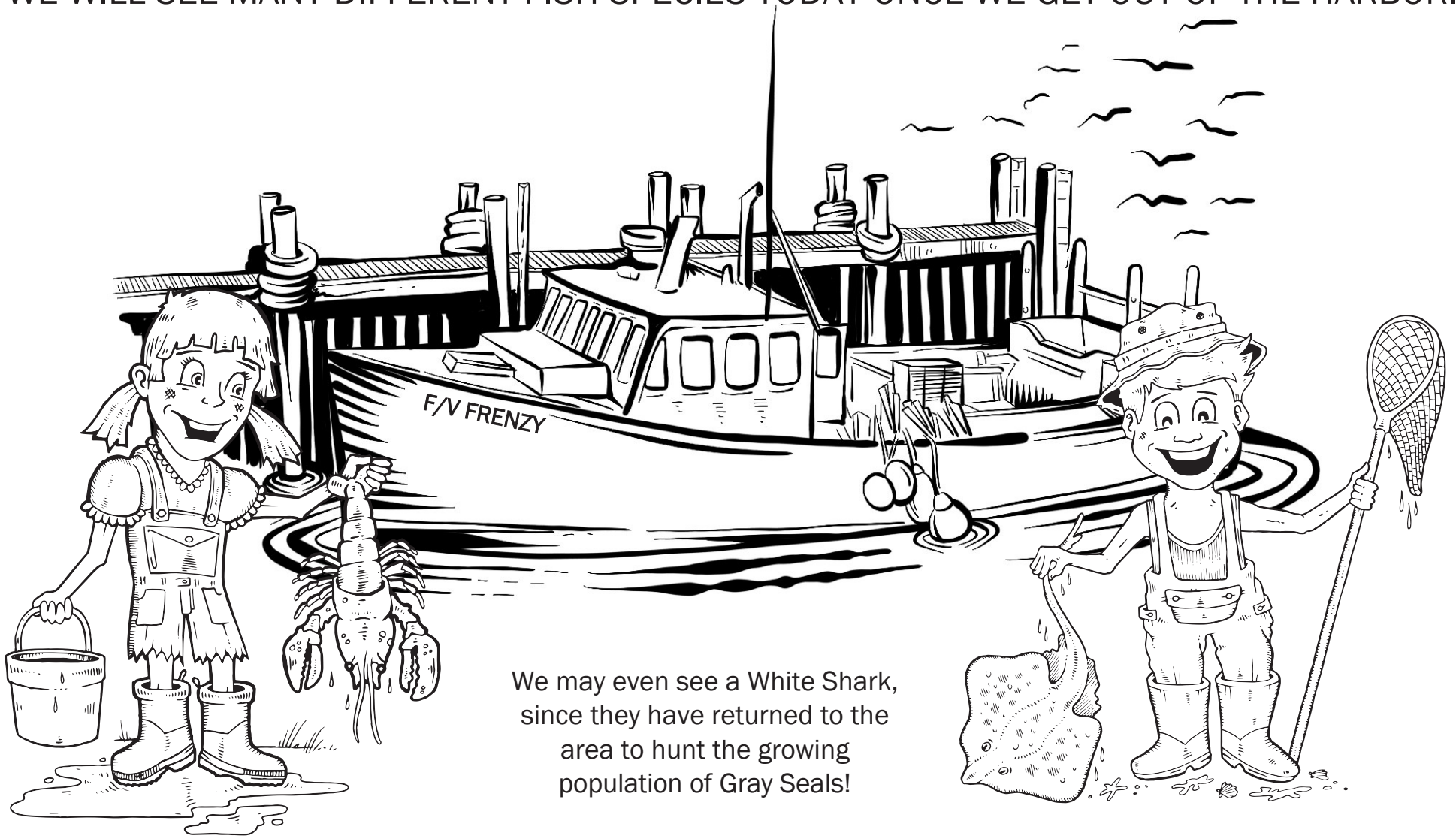
The Northwest Atlantic
Seal Research
Consortium

atlanticwhiteshark.org

nasrc.who.edu | sealconsortium.org

READY TO GO FISHING?

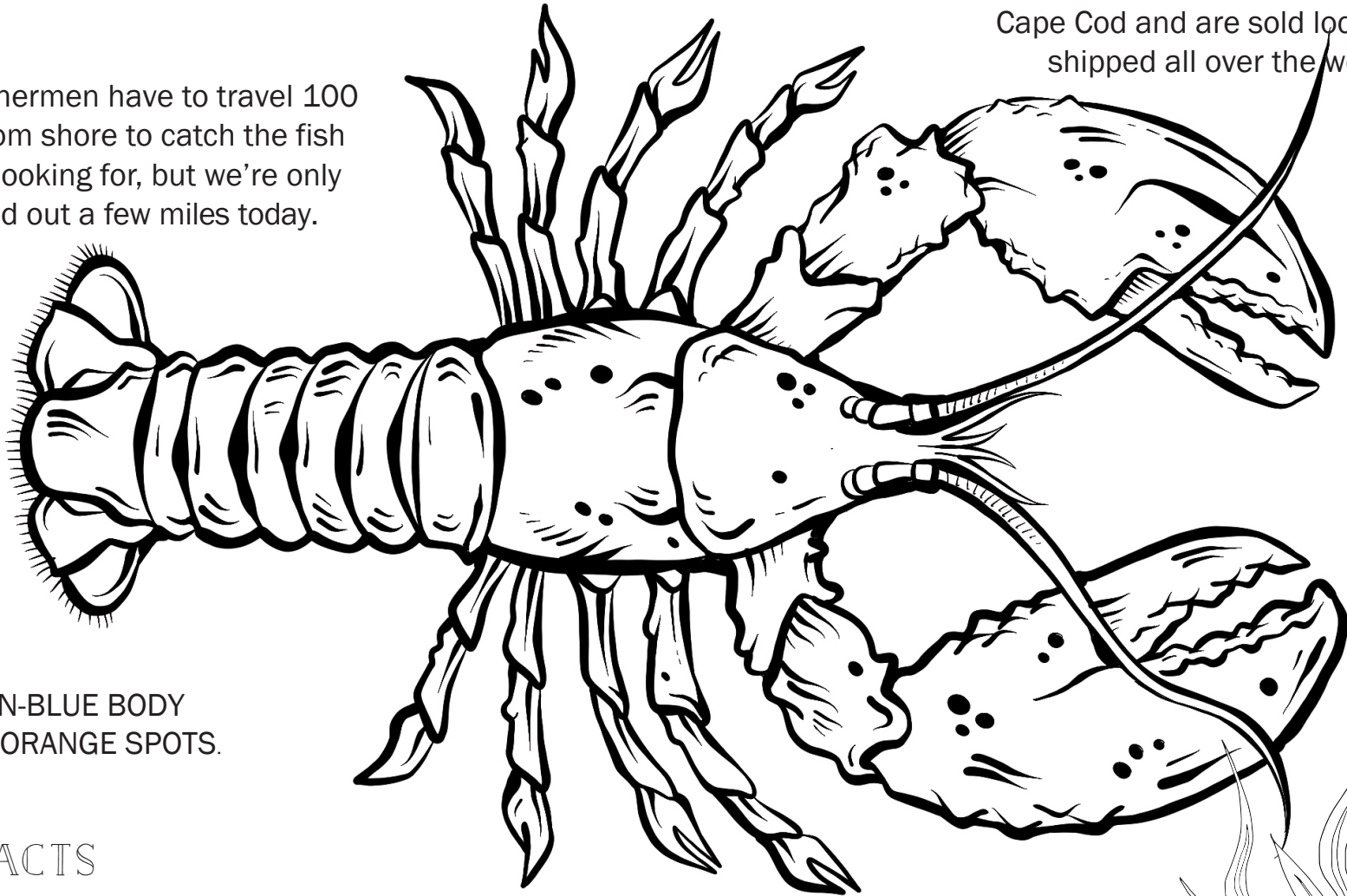
LET'S HEAD DOWN TO THE CHATHAM FISH PIER WHERE WE WILL HOP ABOARD F/V FRENZY. WE WILL SEE MANY DIFFERENT FISH SPECIES TODAY ONCE WE GET OUT OF THE HARBOR.



We may even see a White Shark, since they have returned to the area to hunt the growing population of Gray Seals!

LET'S CHECK OUR LOBSTER POTS! Have you tried locally caught lobster? If not, give it a try! Lobster are caught all around Cape Cod and are sold locally and shipped all over the world.

Some fishermen have to travel 100 miles from shore to catch the fish they're looking for, but we're only headed out a few miles today.



 GREEN-BLUE BODY
WITH ORANGE SPOTS.

FUN FACTS

1

Lobster can be found at depths of 15–1,000 feet both close to shore and up to 190 miles offshore.

2

Fishermen catch lobster from May 1 to January 31 using lobster traps.

3

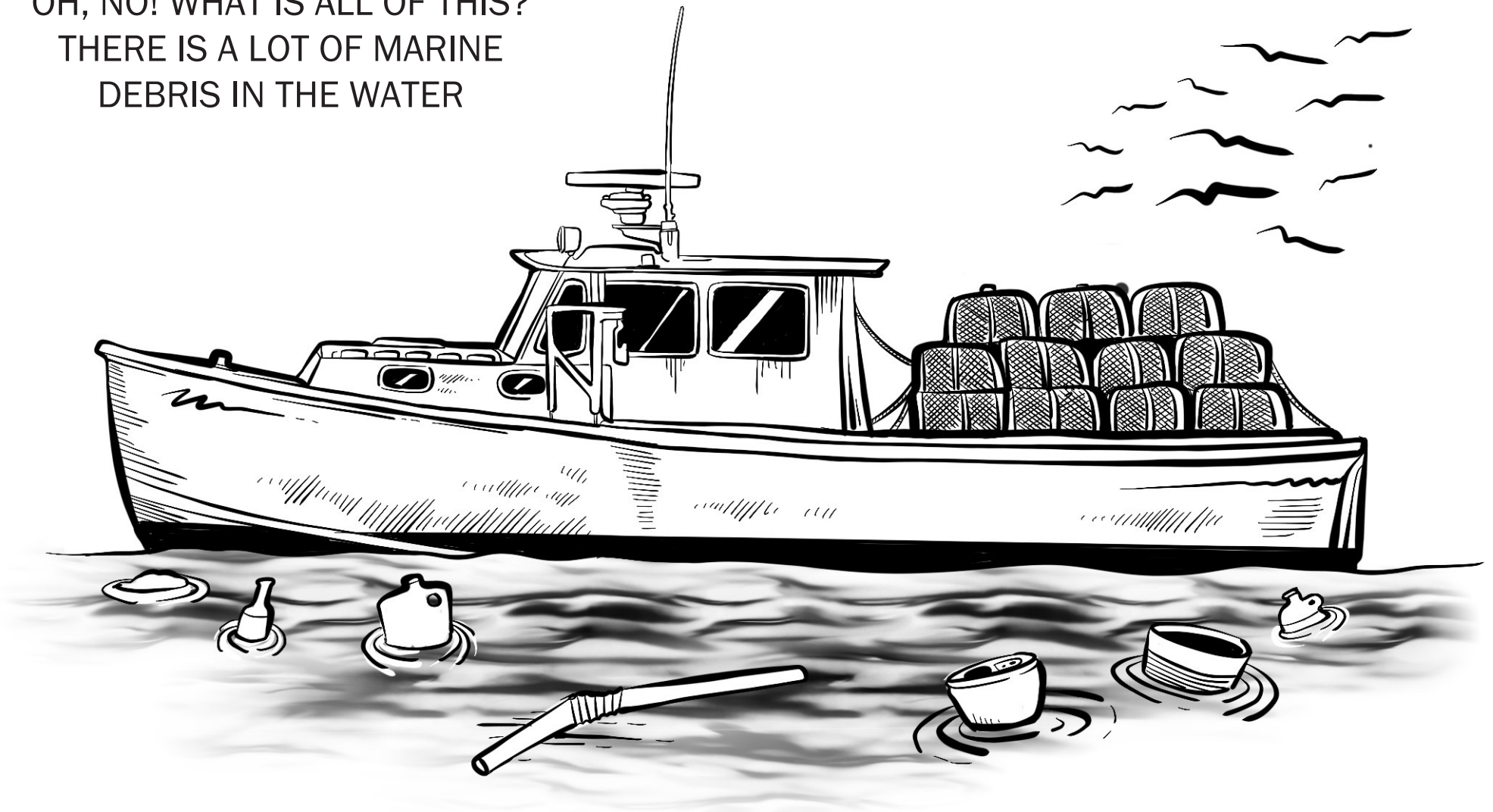
Lobster is used locally and shipped all over the world.

4

Lobster can live up to 70 years old.



OH, NO! WHAT IS ALL OF THIS?
THERE IS A LOT OF MARINE
DEBRIS IN THE WATER



Marine debris is any man-made, solid material that enters waterways through littering, or is washed in via rivers, oceans, streams, and storm drains. Most marine debris is made of plastic, which means it never goes away; it just breaks down into smaller and smaller pieces.

CIRCLE ALL THE MARINE
DEBRIS YOU CAN FIND!

TIP: BRING YOUR OWN CONTAINERS
FOR A DAY AT SEA, AND DON'T
FORGET TO RECYCLE WHEN YOU GET
BACK ON SHORE!



Did you know that it takes 3 liters of water to produce 1 liter of bottled water? The average American drinks 167 bottles of water annually, but only 38 of those water bottles are recycled. That's more than one billion dollars of plastic wasted each year which creates a lot of trash. It can take plastics anywhere from **450-1000 years** to decompose (to break down into tiny pieces). That means we need everyone's help to try and reduce plastic use and to safely clean up marine debris!

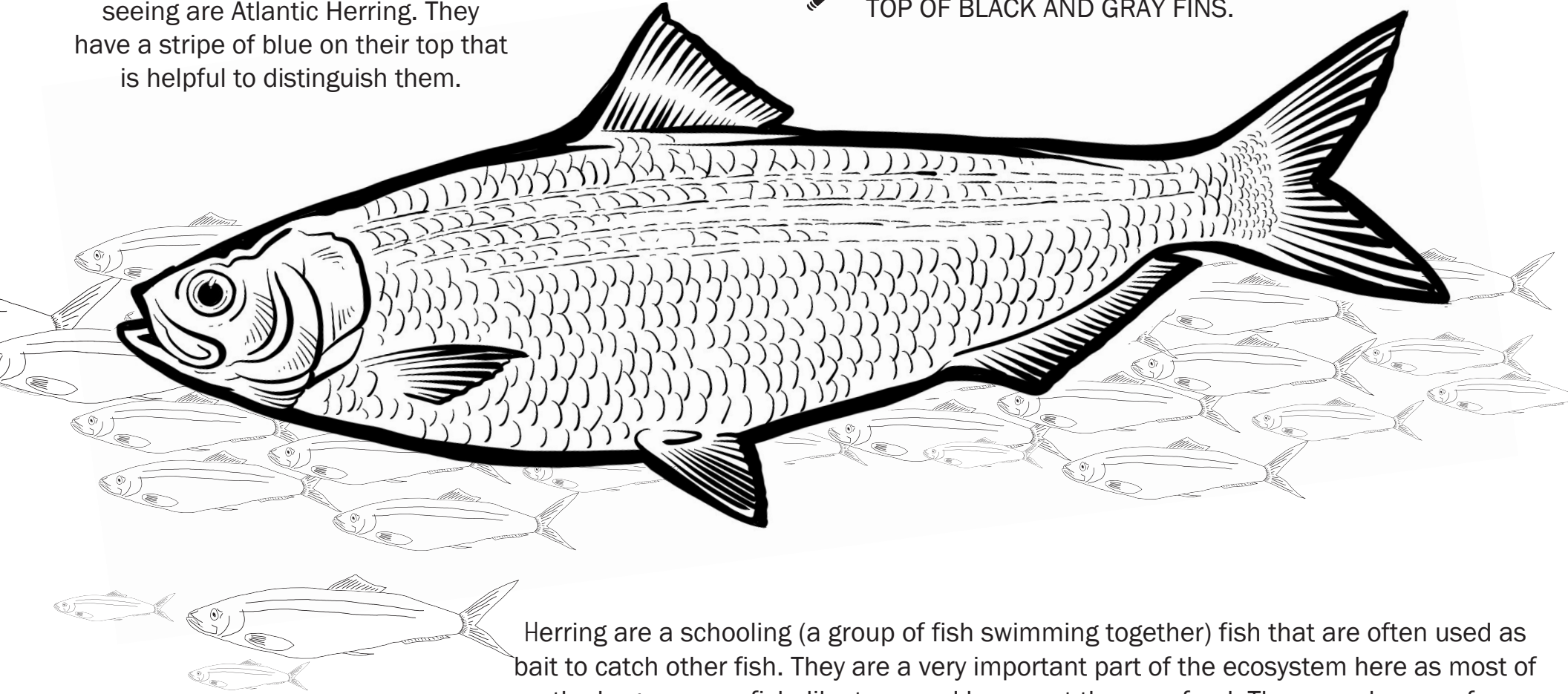
For more information about waste reduction and caring for the environment, visit CareForTheCapeAndIslands.org.

LOOK AT THAT SCHOOL OF FISH!

The small silvery fish that you're seeing are Atlantic Herring. They have a stripe of blue on their top that is helpful to distinguish them.



ALL SILVER WITH A STRIPE OF BLUE ON TOP OF BLACK AND GRAY FINS.

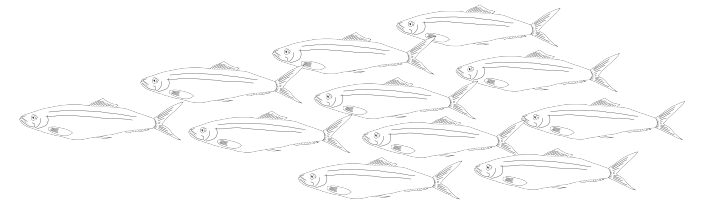


Herring are a schooling (a group of fish swimming together) fish that are often used as bait to catch other fish. They are a very important part of the ecosystem here as most of the larger ocean fish, like tuna and bass, eat them as food. They are also prey for seabirds and other marine mammals. If there are herring around, it's a good time to fish!

FUN FACT




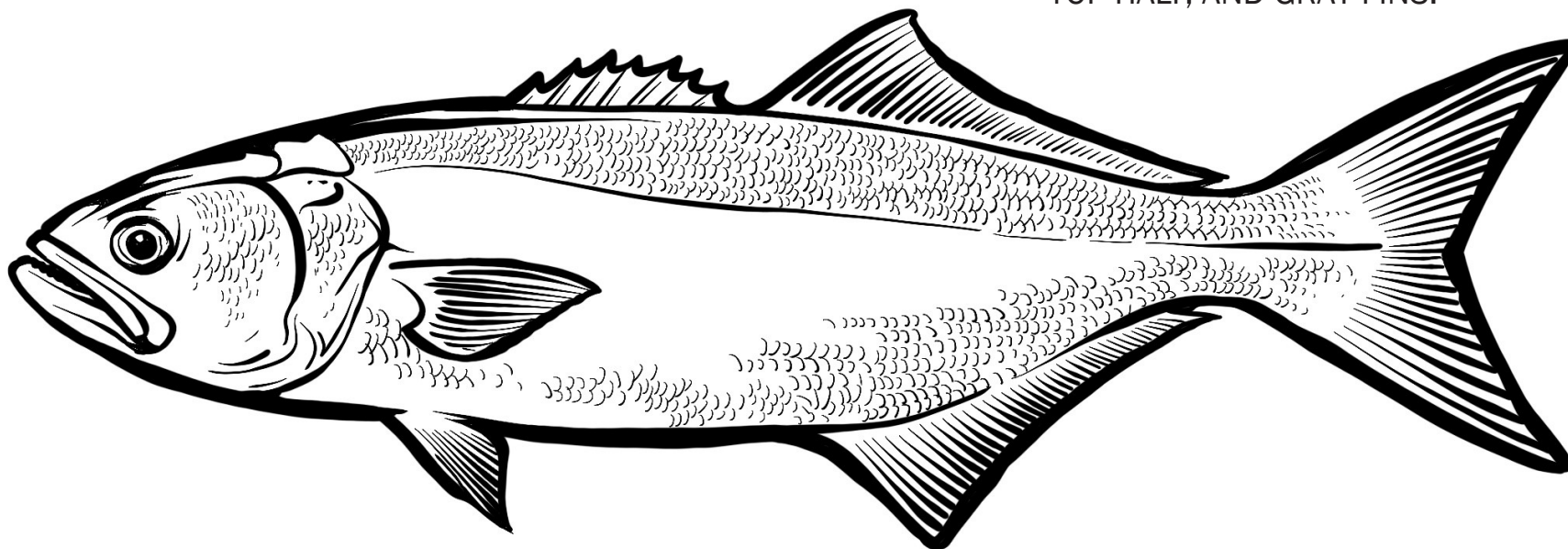
They can live up to 22 years old and can grow up to 18 inches long.



Bluefish are very common around Cape Cod and can also be found all along the Atlantic coast from Maine to Florida. This is another fish that tastes very good, especially when smoked. Be careful unhooking it—they have lots of sharp teeth!

GREAT JOB! YOU
CAUGHT A BLUEFISH!

 LIGHT SILVER ON BELLY,
DARKER BLUE-GRAY ON
TOP HALF, AND GRAY FINS.



FUN FACT



Fishermen use hook-and-line or strike nets to catch Bluefish from May to October.

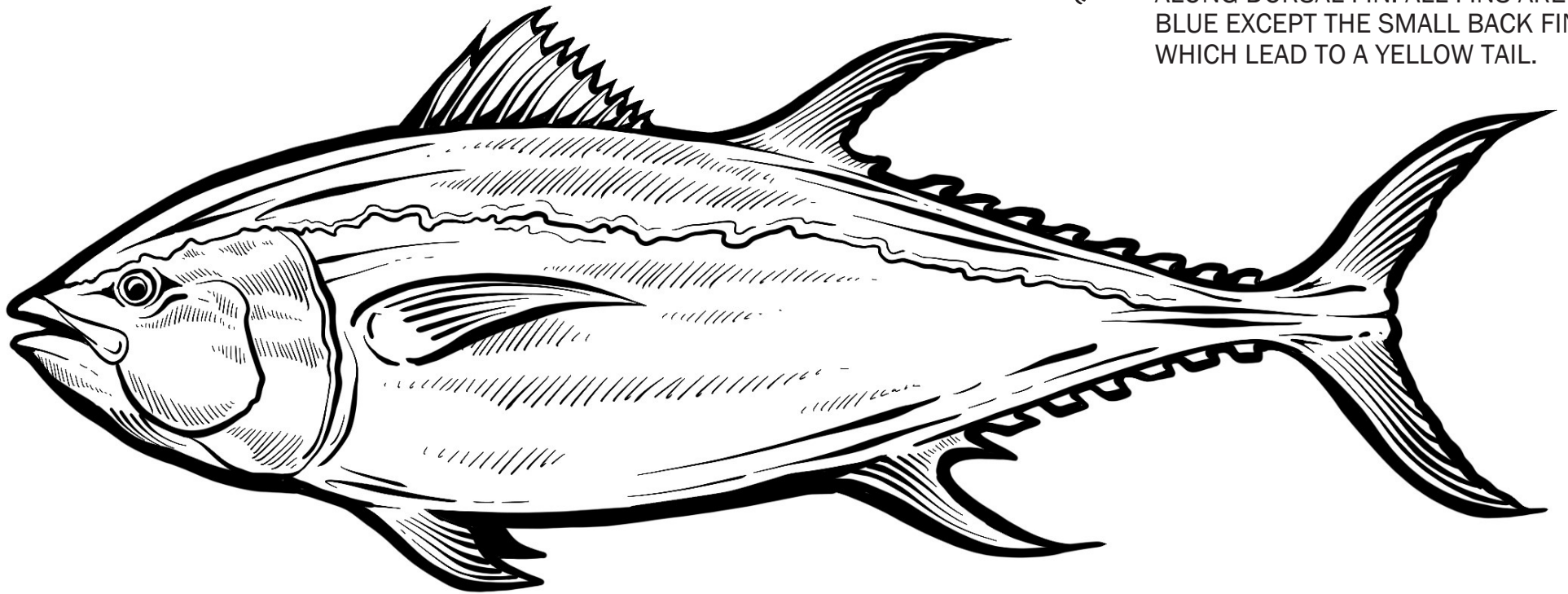


You can tell this is a Bluefin Tuna by the dark blue along its dorsal fin. Almost all of its fins are blue, except for the back fins which fade to a yellow tail. Bluefin Tuna can grow up to 6-8 feet long, and can weigh over 500 pounds! They are typically found right off Cape Cod shores and make great sushi.

WOW, THIS IS A BIG ONE!
I CAUGHT A TUNA!



SILVER ON BELLY, DARK BLUE
ALONG DORSAL FIN. ALL FINS ARE
BLUE EXCEPT THE SMALL BACK FINS
WHICH LEAD TO A YELLOW TAIL.



FUN FACTS



Commercial fishermen use rod-and-reel or harpoon to catch bluefin tuna from June to November.

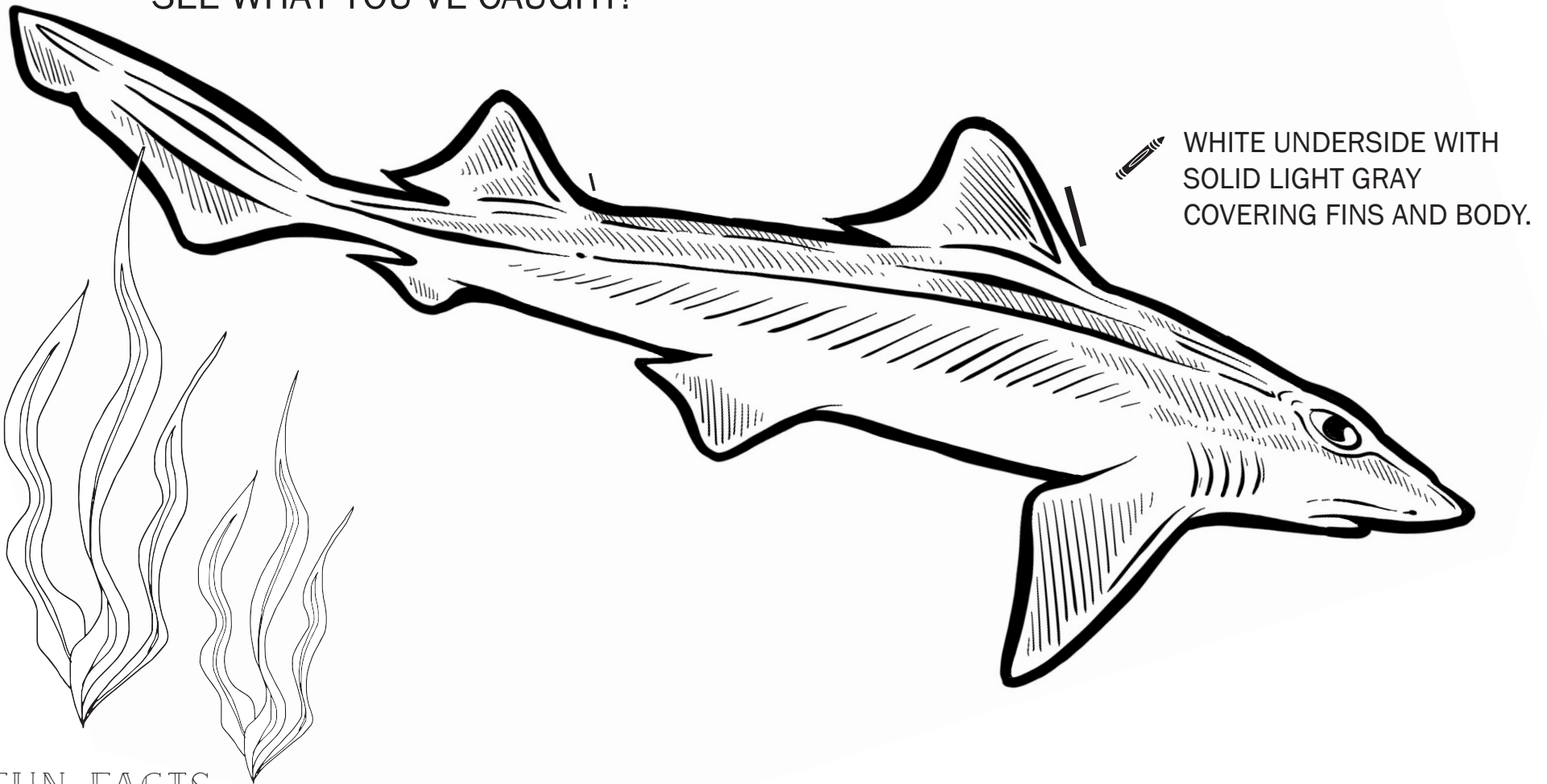


They are typically found along Georges Bank and the Gulf of Maine but can also be found right off Cape Cod shores.

THEY'RE REALLY BITING TODAY!
REEL IN YOUR LINE AGAIN AND
SEE WHAT YOU'VE CAUGHT!

A SPINY DOGFISH!

Dogfish, otherwise known as Cape Shark, are part of the shark family and are found worldwide but are very common here in New England.



FUN FACTS



Fishermen use longlines, handlines and gillnets to catch dogfish from May–December.



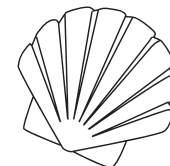
Cape and Islands fishermen landed more than 12 million pounds of dogfish in 2017.



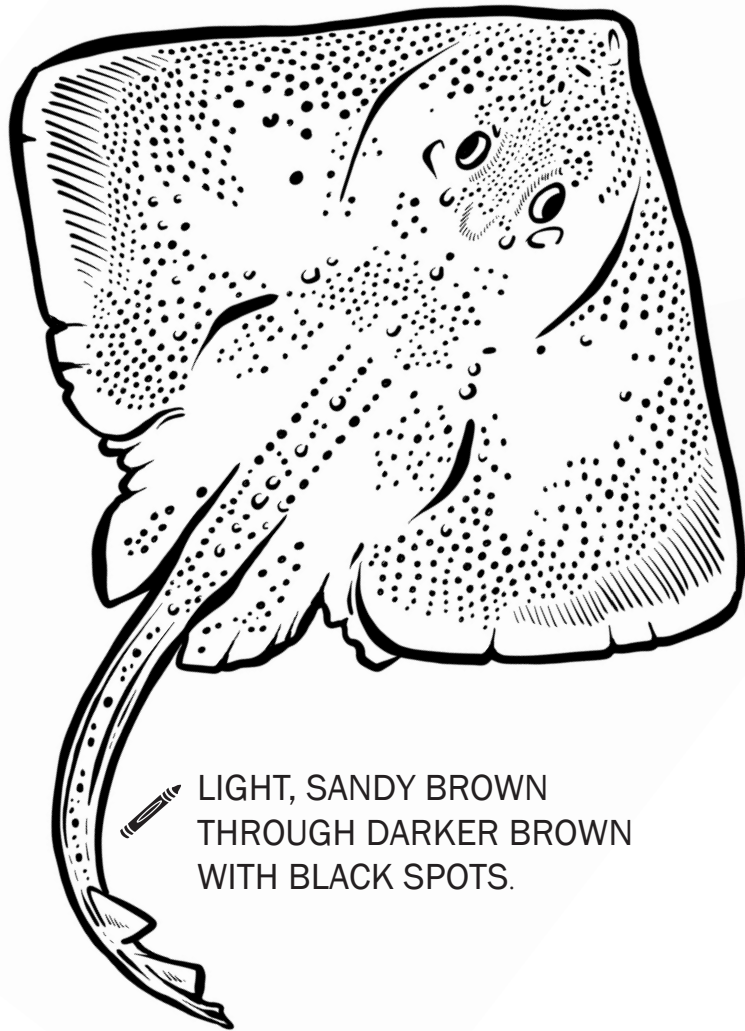
Most dogfish are exported to Europe for fish and chips



They can be found within 10 miles of Chatham's shoreline.

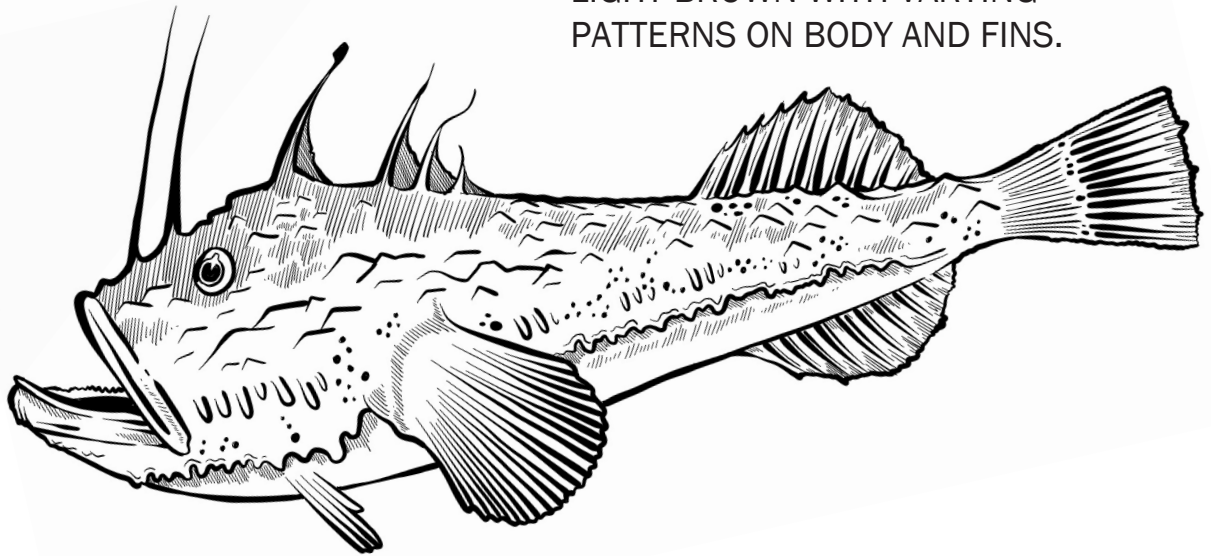


ON OUR WAY BACK TO THE PIER, WE MAY SEE OTHER FISHERMEN CATCHING SKATE OR MONKFISH.

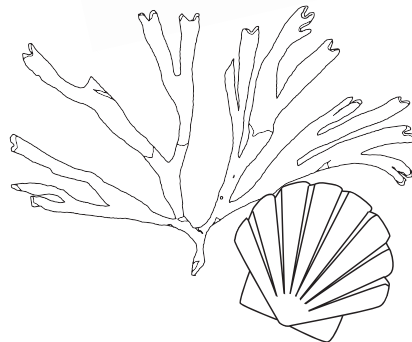


LIGHT, SANDY BROWN
THROUGH DARKER BROWN
WITH BLACK SPOTS.

Skates are a light sandy brown and have a body shaped like a ray. There are 7 different species of skate but we mostly catch Winter Skate. It's delicious!



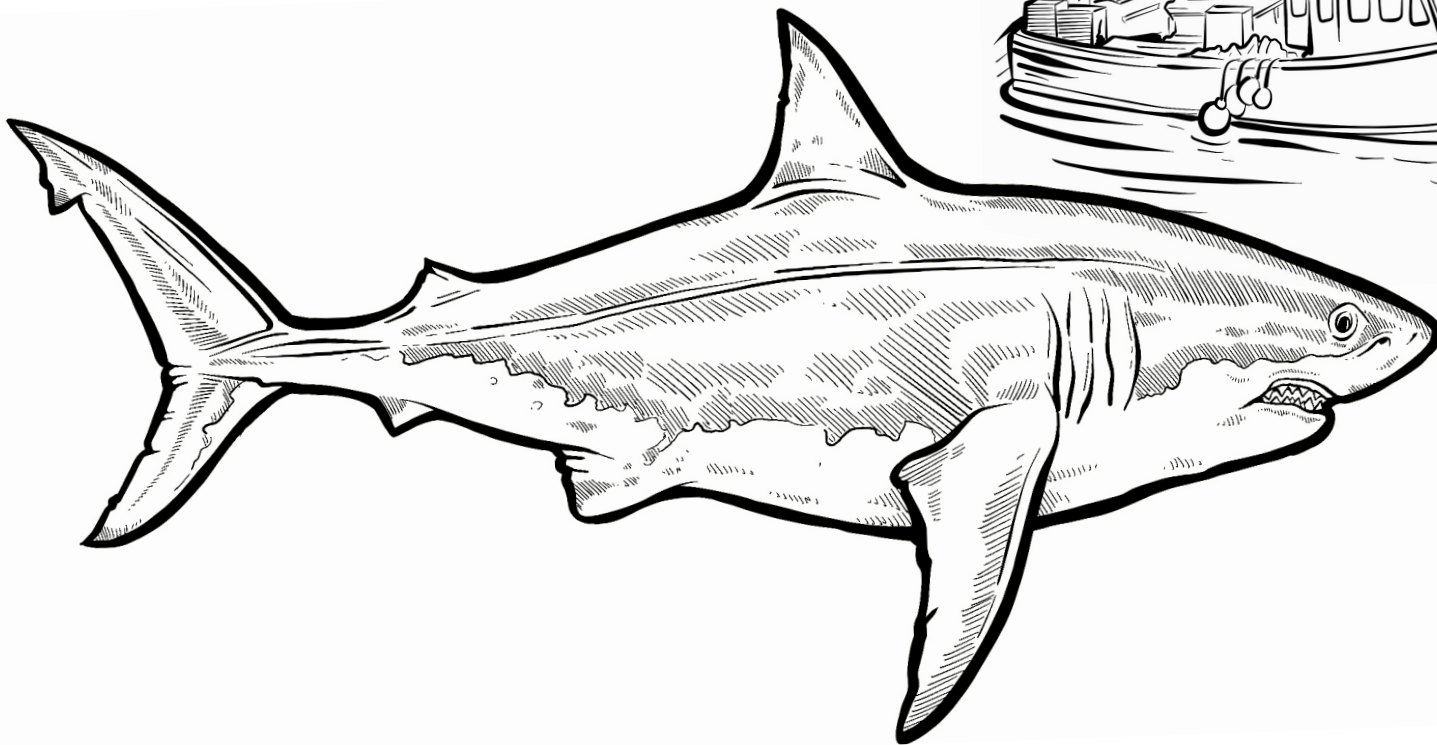
WHITE ON UNDERSIDE, DARK TO
LIGHT BROWN WITH VARYING
PATTERNS ON BODY AND FINS.



Monkfish are known as the “poor man's lobster” because the meat has a similar texture to lobster tail. Although they are mainly exported to Asia or Europe, many Cape restaurants serve this tasty fish.

Now that we have gotten back near Monomoy Island,
closer to the seals, we may see a White Shark.

LOOK QUICK! THERE IS ONE OVER THERE!

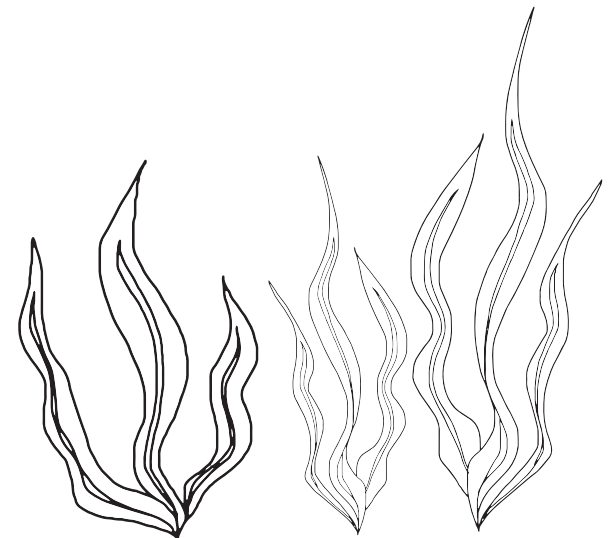
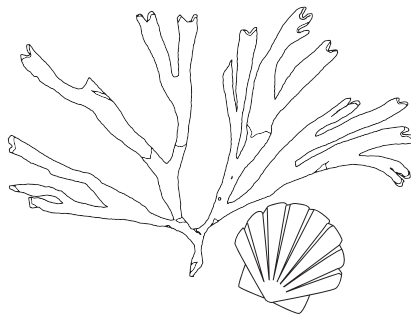
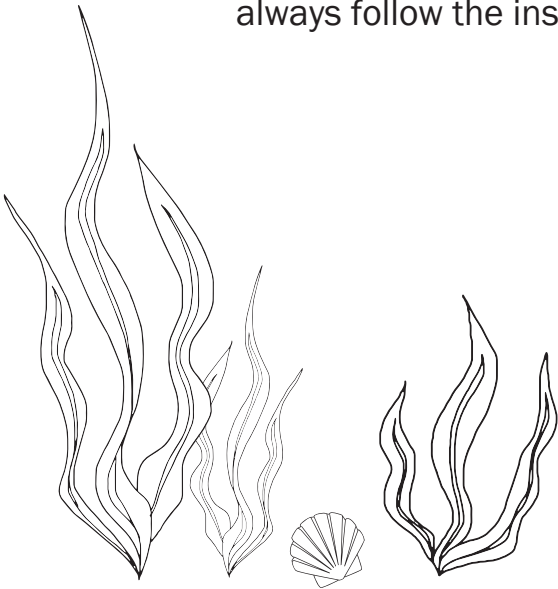


Great White Sharks are known for their distinct coloration, a white belly and a gray back. This color pattern is a type of camouflage called countershading. It helps them to not be seen by prey looking down on them (or up at them), allowing them to sneak up on their prey. White Sharks are apex predators, meaning that they are at the top of the ocean food chain—an important role in our ecosystem! They help control the ocean food chain from the top down, keeping it balanced. They are known for their sharp teeth, and those teeth are necessary for biting into the blubber of seals or whales. Currently there are scientists tagging sharks to better understand their movements in the northwest Atlantic ocean.

WHEN SWIMMING IN THE OCEAN WATERS OFF OF CAPE COD,
it is important to remember that you are swimming in an area where white
sharks, seals, and other wildlife are found.

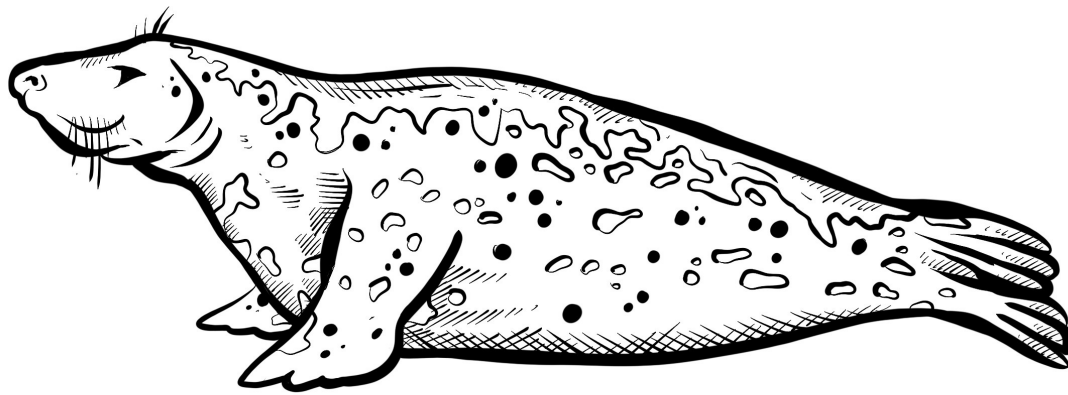
Here are a few things to keep in mind when in the water:

- Be aware that sharks hunt for seals in shallow water.
- Stay close to shore where rescuers can reach you.
- Swim, paddle, kayak, and surf in groups so you are not alone in the water.
- Avoid areas where seals are present, schools of fish are visible, and murky or low visibility water.
- Limit splashing.
- Adhere to all signage and flag warnings at beaches and always follow the instructions of lifeguards.



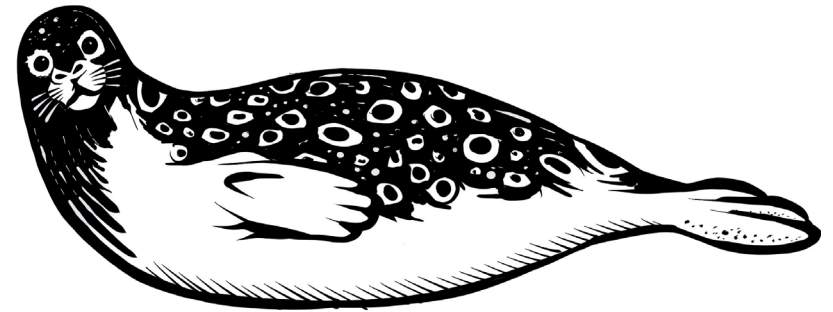
As we head back to the harbor, look out for seals! You'll probably see a family of harbor seals in the channel around Monomoy Island and Gray Seals by the docks. Can you tell the difference between the two species?

DID YOU KNOW?
DURING THE SPRING AND SUMMER,
THERE CAN BE AN ESTIMATED
30,000-50,000 GRAY SEALS AROUND
THE CAPE AND ISLANDS.



GRAY SEALS

- 🐚 Large-sized seals
- 🐚 Pups nurse and stay with mom for only 2-3 weeks
- 🐚 Adult males are larger than females
- 🐚 Males average 7-10 feet in length and 580 lbs to a max of 800 lbs
- 🐚 Mature at 3-7 years old
- 🐚 Live 25-35 years



HARBOR SEALS

- 🐚 Medium sized seals
- 🐚 Males average 63 inches long; females about 58 inches
- 🐚 Harbor seal pups average 32 inches
- 🐚 Mature at 3-7 years old
- 🐚 Harbor seals range from 130 to 160 lbs
- 🐚 Pups nurse and stay with moms for 4-6 weeks
- 🐚 Live 25-30 years



That was very exciting! Now, on the flats, you'll see some folks shell fishing. It looks like they're raking for clams today. Chatham shell fishermen harvest more quahogs than any other town in the state. Oysters and mussels are other types of shellfish found here on Cape Cod. Shellfish can be farmed or harvested from the wild.

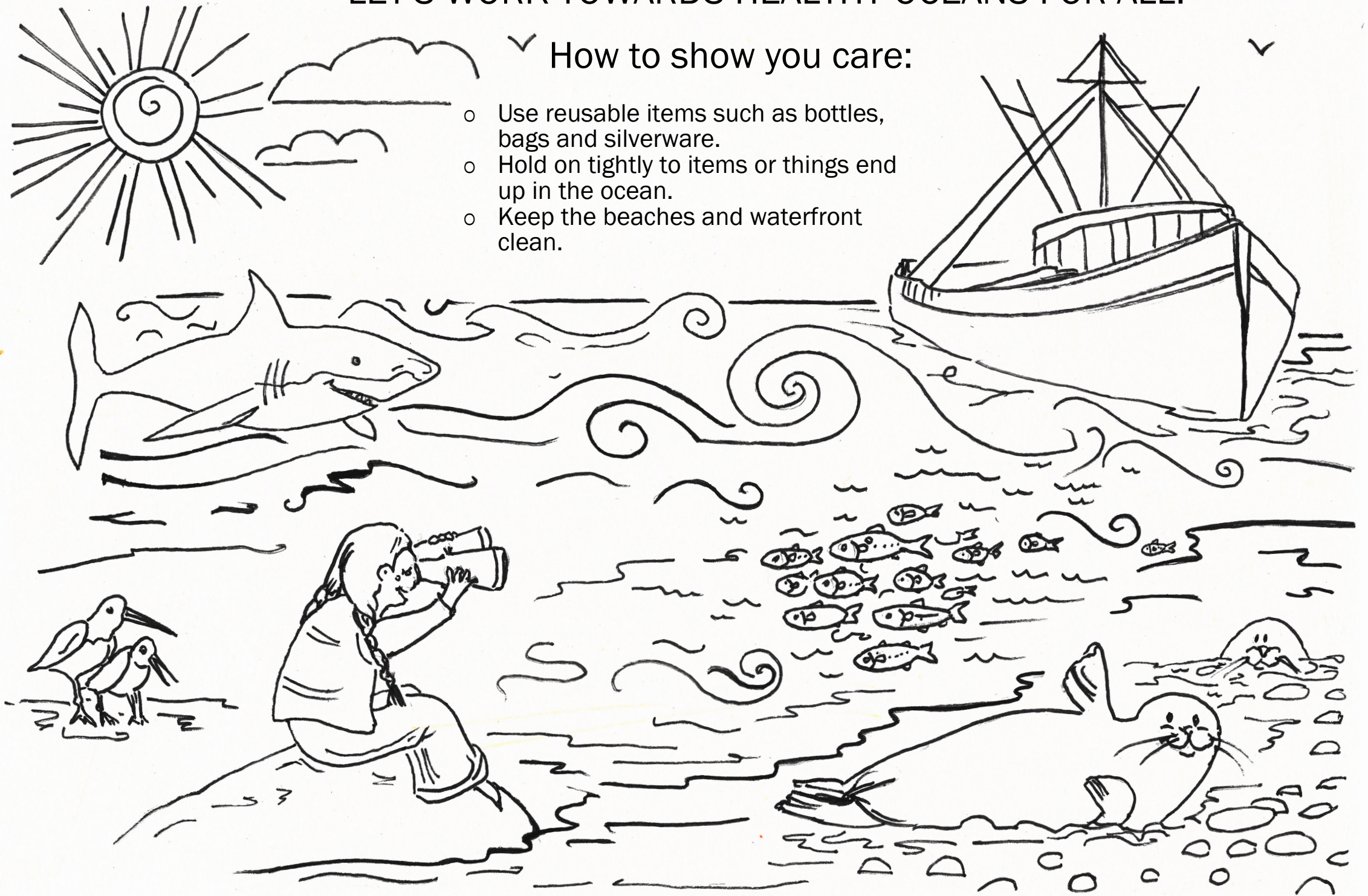
Only shellfish from clean waters can be harvested for your dinner plate.

DON'T FORGET TO KEEP THEM COLD!

LET'S WORK TOWARDS HEALTHY OCEANS FOR ALL!

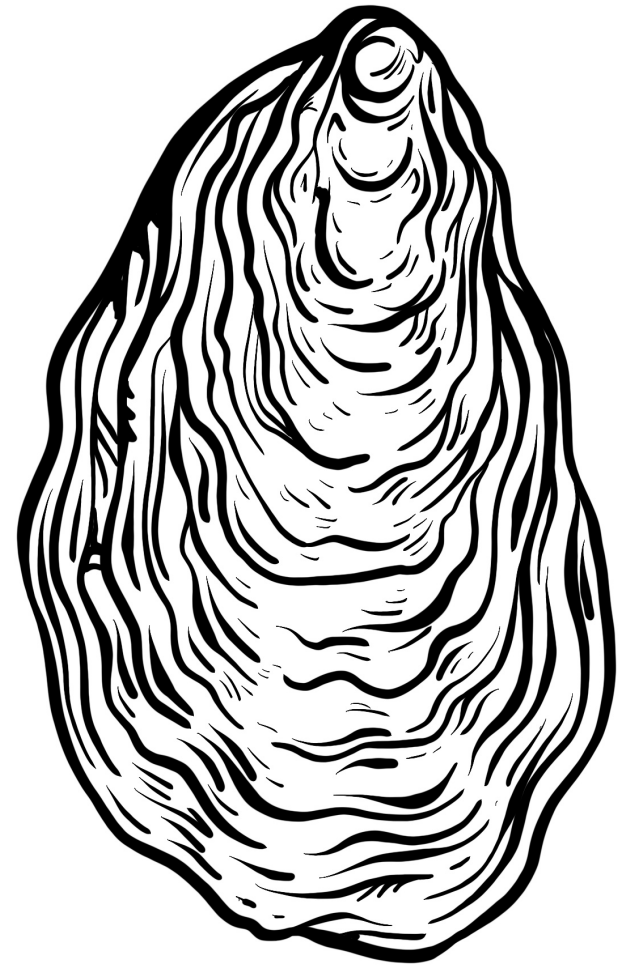
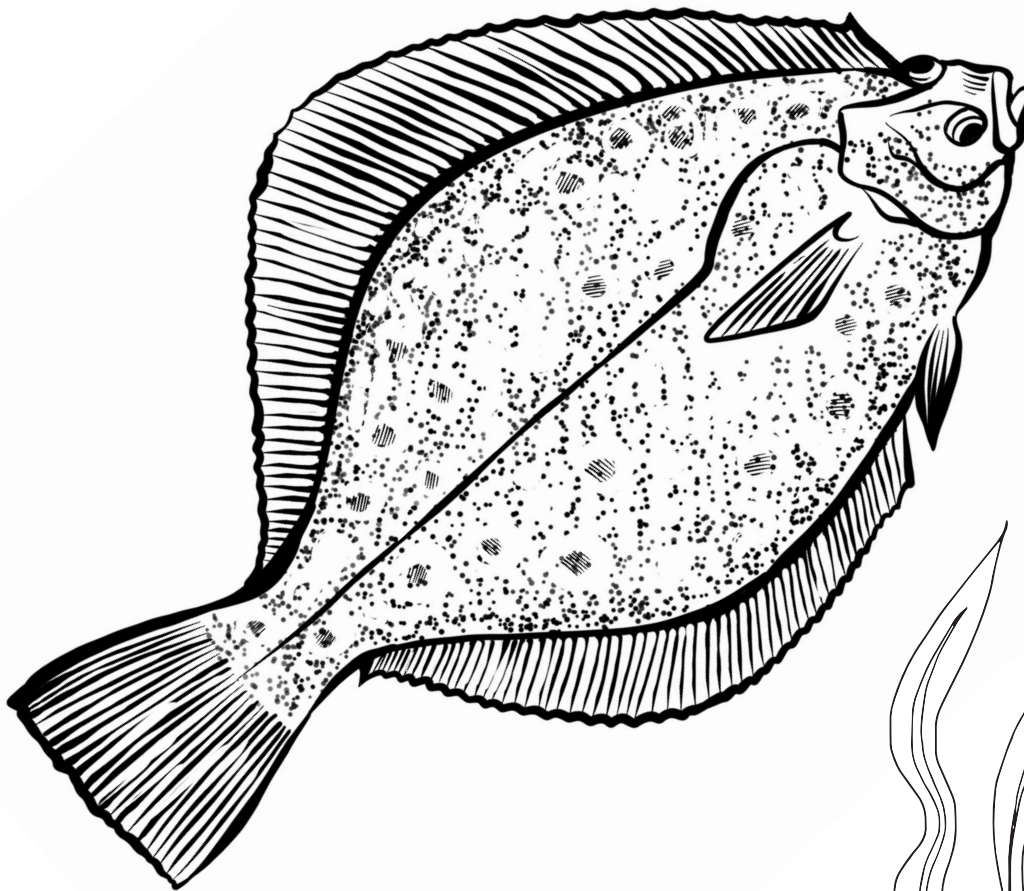
✓ How to show you care:

- Use reusable items such as bottles, bags and silverware.
- Hold on tightly to items or things end up in the ocean.
- Keep the beaches and waterfront clean.



MORE MARINE LIFE FOUND ON CAPE COD!

A summer flounder is commonly known as a fluke. The flounder can change the color.



Oysters are filter feeding animals that can clean up to 50 gallons of water per day. Some are farmed, and some are harvested from the wild! Some oyster farmers leave their oysters in the water all year round, while others bring them on land in the winter.

EAT LOCAL FISH



* Types of Flounder: American Plaice (Dabs), Witch Flounder (Grey Sole), Yellowtail, Winter (Blackbacks), Summer (Fluke)

** Fish and shellfish seasonality subject to change depending on weather patterns, fishery regulation and what the ocean provides.

WORD SEARCH

A	R	C	S	K	A	T	E	P	S	C	I	E	N	C	E	C	F
K	M	A	R	I	N	E	M	N	O	C	E	A	N	W	P	H	S
U	J	O	I	D	A	H	W	Z	V	A	H	H	W	G	R	A	S
K	G	R	A	Y	S	E	A	L	P	I	E	I	T	Z	O	D	E
R	E	C	Y	C	L	E	Y	K	I	V	R	H	U	Q	T	D	A
B	L	U	E	F	I	N	T	U	N	A	R	O	N	O	E	O	F
Q	G	G	D	C	O	Y	S	T	E	R	I	Z	N	U	C	C	O
L	D	O	G	F	I	S	H	S	Q	A	N	M	M	M	T	K	O
S	E	A	G	R	A	S	S	A	Y	Q	G	I	L	A	E	A	D
Y	G	R	E	A	T	W	H	I	T	E	S	H	A	R	K	N	P
L	O	B	S	T	E	R	T	U	N	A	E	P	Q	I	G	G	T
W	S	D	W	M	O	N	K	F	I	S	H	C	O	A	S	T	M

Find the following words in the puzzle.

Words are hidden → ↓ and ↘ .

BLUEFIN TUNA
COAST
DOGFISH
ENVIRONMENT
GRAY SEAL
GREAT WHITE SHARK
HADDOCK

HERRING
LOBSTER
MARINE
MONKFISH
OCEAN
OYSTER
PROTECT

RECYCLE
SCIENCE
SEAFOOD
SEAGRASS
SKATE
TUNA



Small Boats. Big Ideas.

SUPPORT LOCAL FISHERMEN

The Cape Cod Commercial Fishermen's Alliance is a nonprofit organization that was launched in 1991 by a group of local commercial fishermen who saw the need for better fisheries management and wanted their experience to inform it. We are an organization rooted in first-hand knowledge of ocean life and committed to sustaining our tradition of small-scale fishing.

Our work—on fisheries management, economic development and community education—is all aimed at protecting fish and fishing for future generations.

To learn more or make a donation, please visit capecodfishermen.org or scan the QR Code.

