

PORT:
Canaveral

Our Fragile Environment

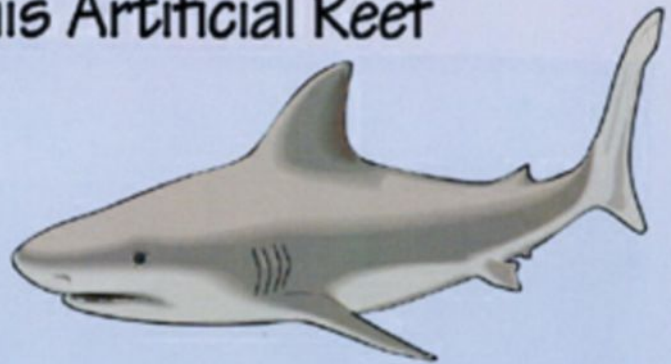
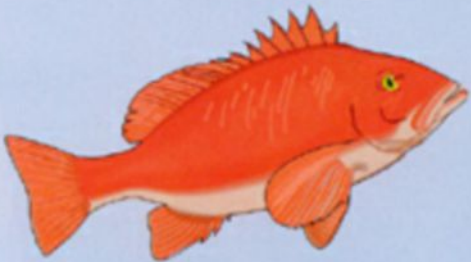


Artificial Reef



This boat is being sunk to make an artificial reef. Artificial reefs are being made for fish habitat because there are not enough natural reefs. Natural reefs are made of coral. Coral is actually lots and lots of tiny animals that grow very, very slowly. It is getting harder for the coral to grow because of all the pollution in the water. Sinking something to make an artificial reef gives coral something that is easy to grow on. Artificial reefs can be made of many different things, like old boats, pieces of concrete, or even old rocket pieces. Things that have lots of places for fish to hide or live can make a good artificial reef. Baby fish can hide and are protected until they grow up.

Connect the Dots to See What Was Used to Build This Artificial Reef



Manatees



Photo courtesy of U. S. Fish & Wildlife Service. Baylen Fiebman, photographer

This is Martha. Martha is a manatee. Manatees are not fish. They are mammals. That means they have to breathe air just like you do. Manatees are endangered which means that there are not very many of them left. Martha can live in freshwater or saltwater, but she has to drink freshwater just like you. Manatees only eat plants, not meat. Martha lives in Florida because she likes warm water like most manatees. When Martha grows up she will be about 10 feet long and weigh almost 3,000 pounds. That means that Martha will be as heavy as a car! Because Martha is so big, she can't move very fast. That is why you have to be extra careful when you are in a boat. If a boat hit Martha, she could be hurt or even killed. So, make sure you pay attention and go slowly in your boat.

Manatee Crossword Puzzle



ACROSS

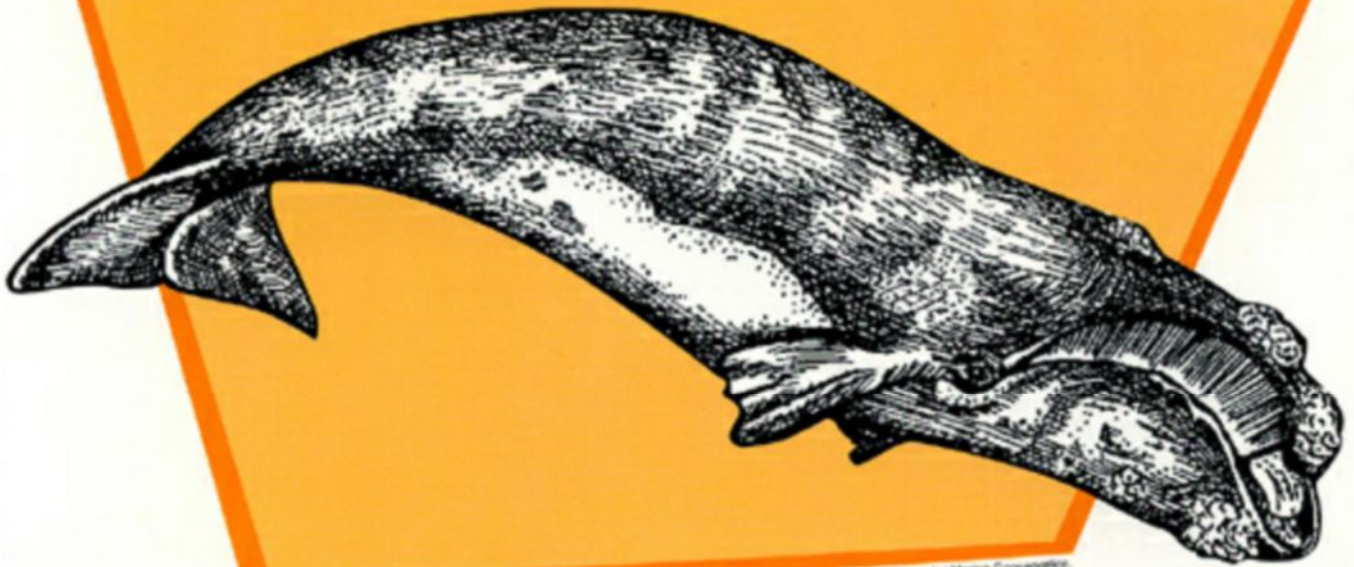
1. Manatees like to live in _____ water.
3. Manatees have to breathe _____.
4. Manatees have to drink _____.
6. Speeding _____ can hurt manatees.
7. Adult manatees weigh as much as a _____.

DOWN

2. Manatees aren't fish. They are _____.
4. Martha lives in _____.
5. Manatees only eat _____.



Right Whales



Artwork Courtesy of Center for Marine Conservation.

Hello! I'm Rita, and I'm a Right Whale. I live in the Atlantic Ocean on the eastern coast of the United States. Right Whales are the rarest whales in the world, and there are only about 300 of us left on the planet. I am an adult Right Whale, so I weigh about 50 tons, and I am about 50 feet long. I eat more than 4,000 pounds of tiny crustaceans every day, and half of my body weight is made up of blubber. Every November, I swim south to Florida to have a baby. A Right Whale baby is called a calf. Because I swim so slowly, it is easy for me to get hit by a ship or caught in a fisherman's net. People need to watch out for Right Whales to keep us safe. You can learn how to look for me on the next page.

How to Spot a Right Whale



Photo courtesy of Center for Coastal Studies, Provincetown, Massachusetts.

Word Scramble

Unscramble the letters to find the answers to the questions.

Right Whales can be killed if they get hit by a .

P H S I

Right Whales can get tangled in fishermen's .

E S N T



Right Whales have a deeply notched .

I L A T

A baby Right Whale is called a .

F C L A

Right Whales live in the .

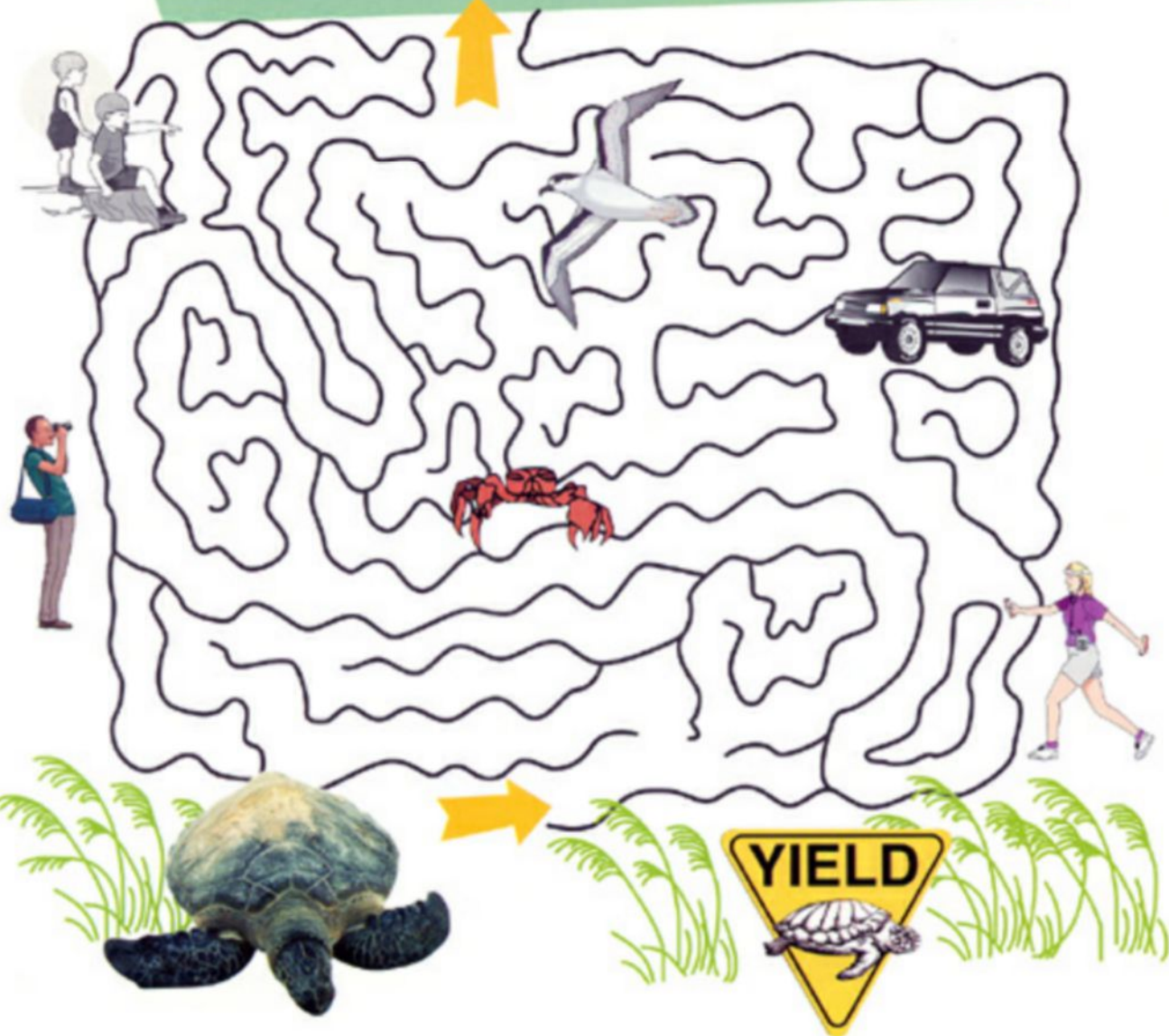
E N C O A

Sea Turtles



This is Sandy Sea Turtle. Every May, Sandy comes and visits Brevard County Beaches. She comes out of the ocean up on to the beach and digs a big hole in the sand. Then she puts about 120 eggs in to the hole and covers them with sand. In about two months the eggs will hatch and lots of little baby sea turtles will dig their way out of the sand. They follow the light of the moon and head toward the ocean. Even though it is a short distance, many bad things can happen to them on the way. Bright lights from cars and buildings can confuse the babies and make them go the wrong way. Birds and crabs try to eat the baby turtles, and people sometimes step on them by accident. Many of the babies never make it to the ocean. Even after sea turtles make it to the ocean, they are still not safe. They can get tangled in fishing line or nets, or get hit by boats. Sandy and the other sea turtles are endangered animals too. To help protect them, make sure you don't touch any nests, and watch out for babies when you are on the beach.

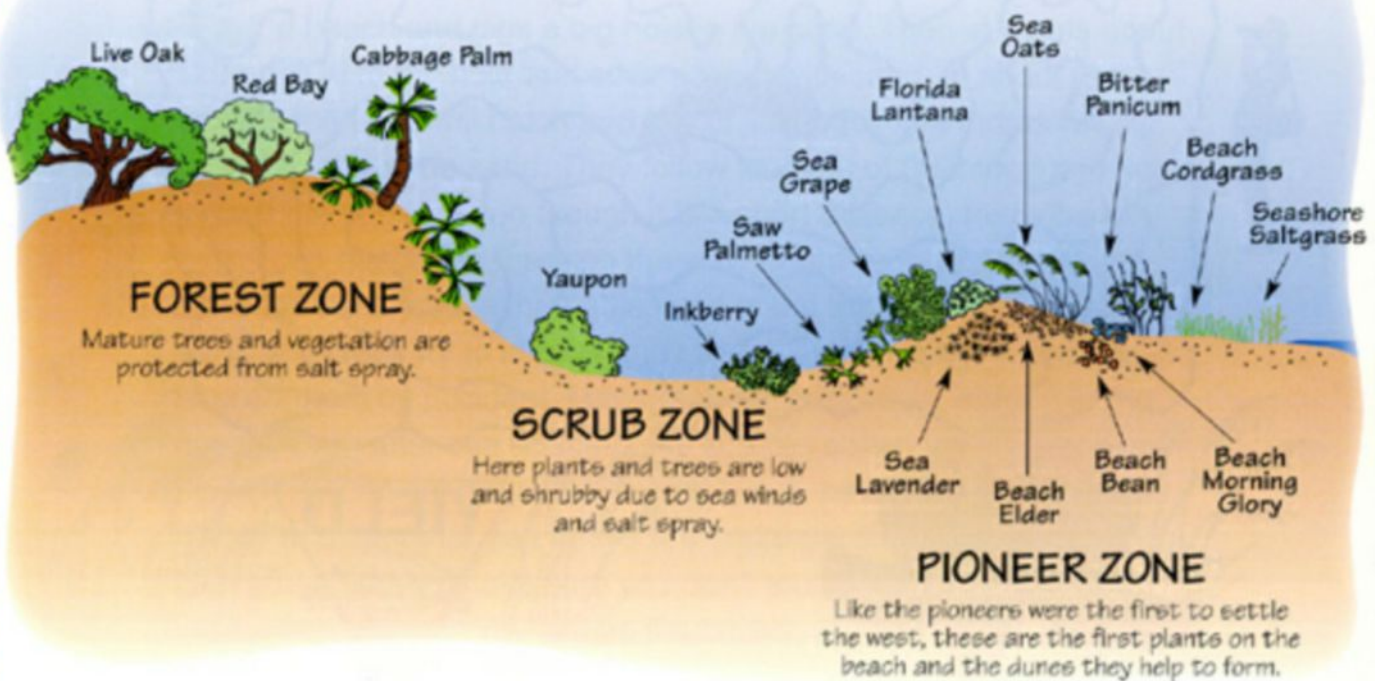
Help Sally Find Her Way Back
to the Ocean Safely



Beach and Dune System

Florida has more than 1,260 miles of coastline. The beach and dune system found along most of Florida's coast is a changing environment. Wind, waves, tides, and storms can all change the beach and dunes. When sand is washed away it is called erosion. Sand can wash back on the beach from sandbars, or underwater sand ridges. Sandbars are found in the water close to the beach, called the nearshore. Plants are an important part of the beach and dune system. They help keep the sand in place and provide a habitat for coastal animals. Many animals depend on the beaches and dunes for all or part of their lives. Beaches are used by shorebirds for resting, eating and nesting. Marine turtles come ashore in the summer to nest on the beach. Beach mice and gopher tortoises live in the dunes and eat the dune plants.

Here are some common native plants found in the coastal environment and their vegetation zones.



Draw a Line to Connect Each Plant to Its Vegetation Zone

Beach Morning-glory

Beach Cordgrass

Red Bay

Inkberry

Sea Oats

Florida Lantana

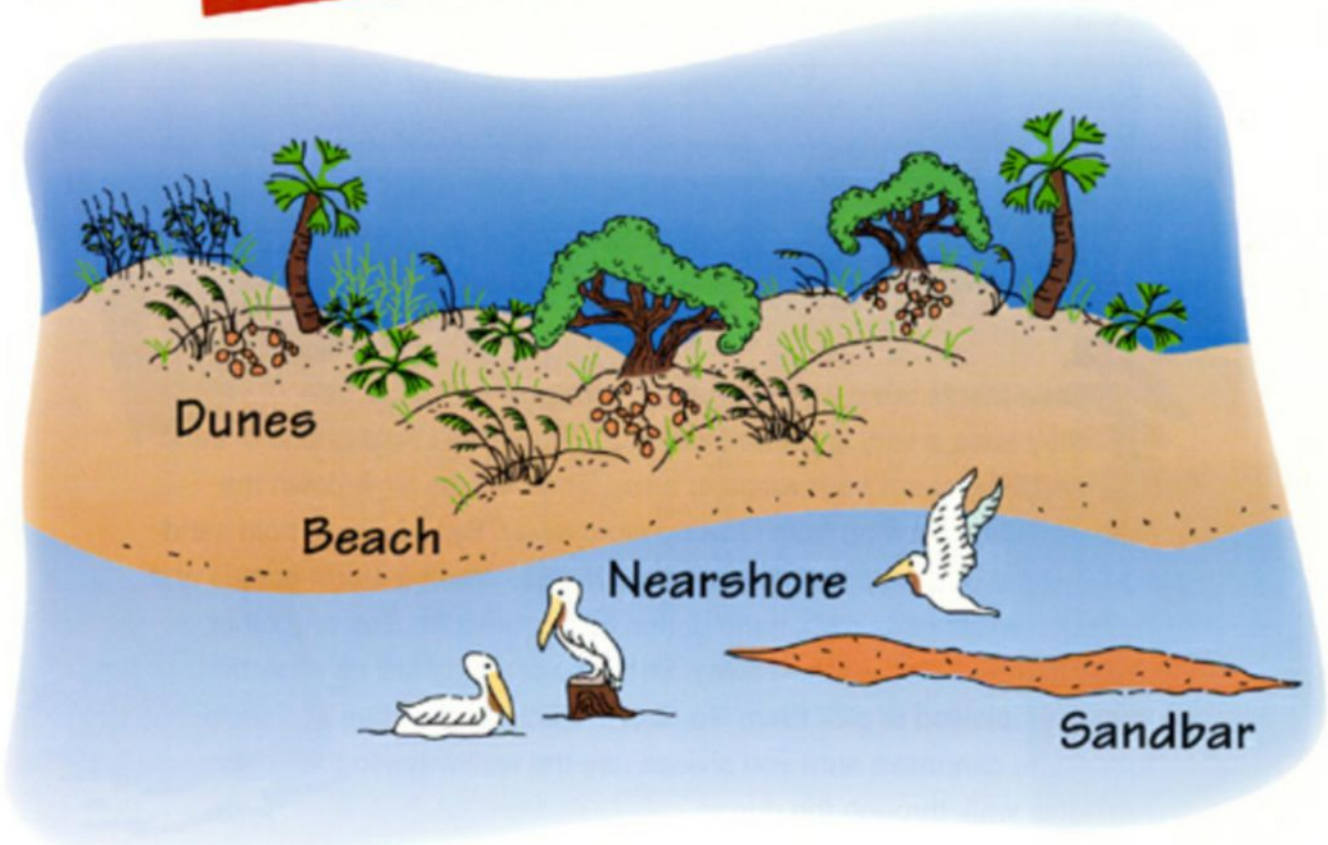
Live Oak

Yaupon

PIONEER ZONE

SCRUB ZONE

FOREST ZONE



Sea Oats



These plants are called sea oats. They grow along the beach, and they have a very important job to do. Their roots hold grains of sand and keep them from washing away. Their leaves slow down the wind and keep the wind from blowing sand away. By helping to hold sand in place, sea oats help build bigger sand dunes. When a storm comes and the ocean water rises high, sand dunes help protect houses and other buildings from being washed away. Because sea oats are so important, you aren't allowed to pick them. To help protect our beaches and sand dunes, you can make sure you always use the walkways to the beach, and never walk through the dunes.

Beach and Sand Dune Word Search

See if you can find these hidden words.
Words may be backwards, down, across or diagonal.

SEA OATS EROSION
DUNES PIONEER
BEACH SANDBAR
HABITAT PELICAN
SEA TURTLE LEAST TERN



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



Gopher Tortoises



Gus is a Gopher Tortoise. Tortoises are turtles that live on land instead of in the water. Gus lives in the sand dunes along the beach. Gopher Tortoises can also live where oak trees and pine trees grow. Gus lives in a burrow that he dug underground. His burrow is almost 50 feet long. Many other animals like mice, owls, frogs, and snakes sometimes share the burrow with Gus. Gus spends most of his time in his burrow keeping safe and warm. When Gus gets hungry, he goes in search of plants to eat. Gus can live to be as much as 60 years old! Gus and other Gopher Tortoises like him are losing some of their burrows when new stores, houses, and farms are built. They are also in danger from people and cars. Special care is being taken to make sure that Gopher Tortoises are protected.

Color the Animals That Might Share
This Burrow With Gus

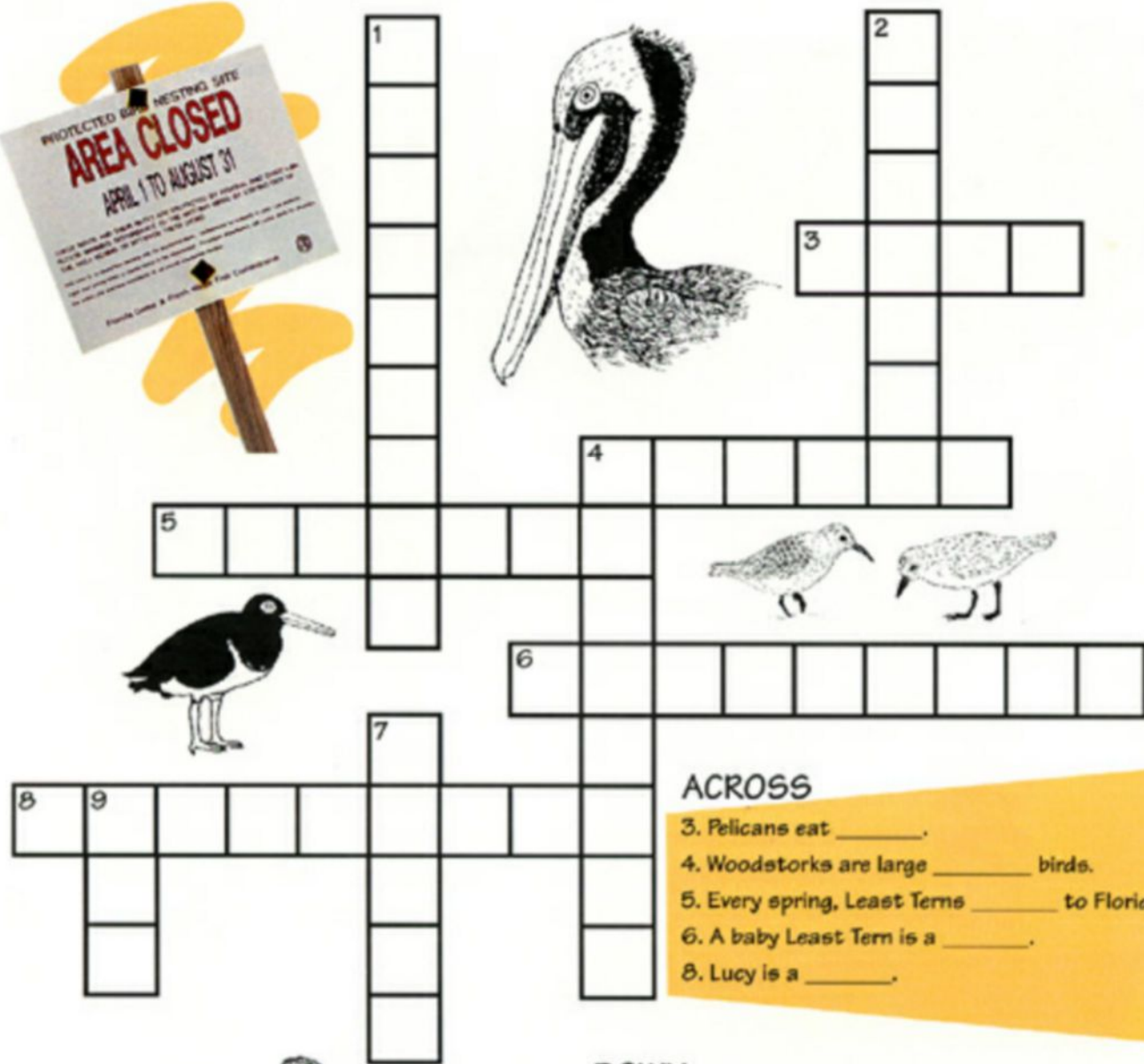


Endangered Birds



Hello, I am Penny. I am a Brown Pelican. If you come to the beach you might see me diving from high up in the air to catch fish in my large bill. These are my feathered friends, Wally, Lucy, and Betty. Lucy is a Least Tern. Every spring she migrates to Florida from up north to lay her eggs. When the eggs hatch, the babies are called fledglings. Wally is a Woodstork. He is a large wading bird. He is endangered because he lives in wetlands that are being destroyed. Betty is a black-necked stilt. She is a shorebird that lives in mud flats and grassy marshes. Betty has long skinny legs to help her wade through the water. We are just a few of Florida's many endangered birds. Help protect us by not disturbing any bird nests you see.

Endangered Birds Crossword Puzzle



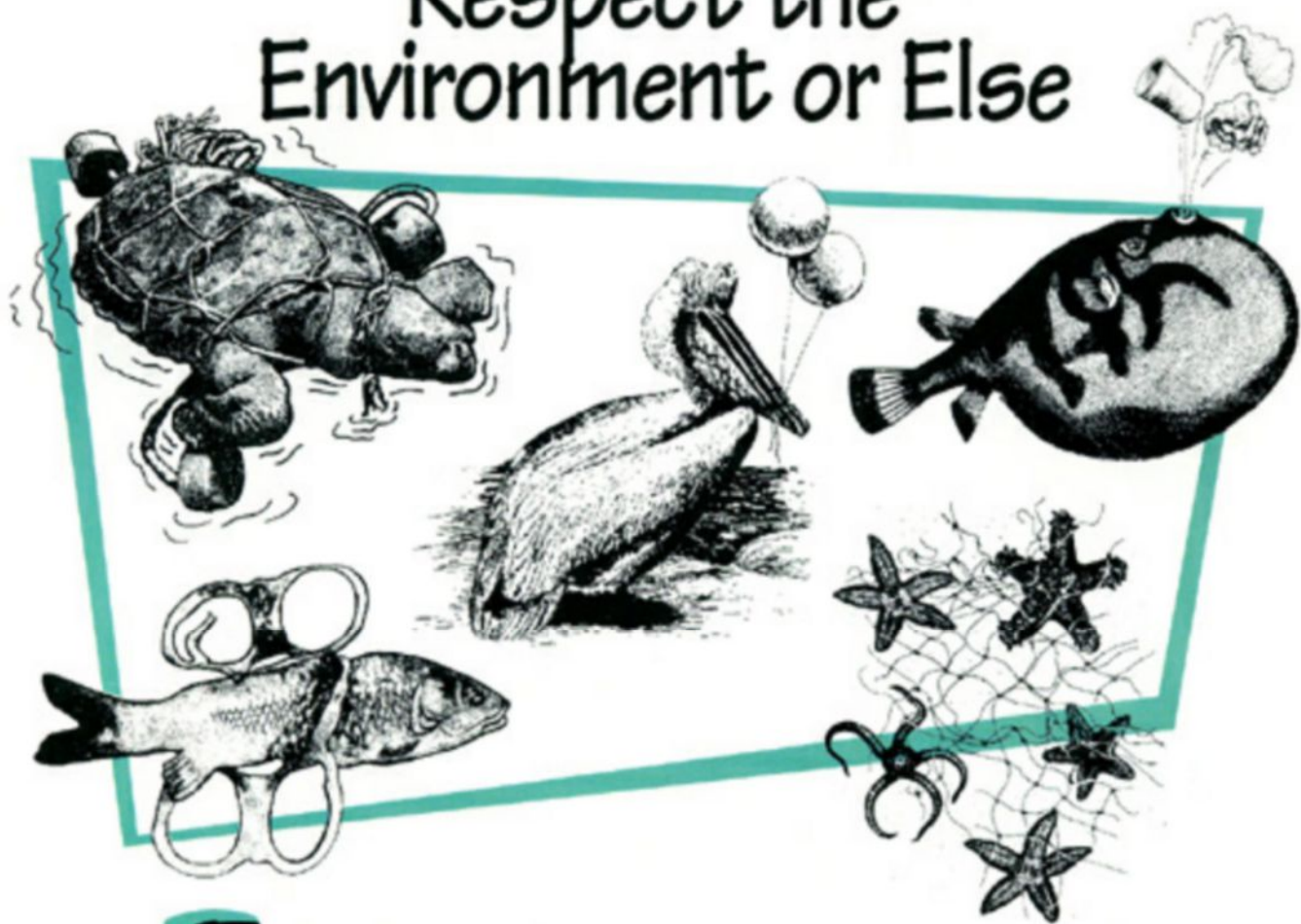
ACROSS

3. Pelicans eat _____.
4. Woodstorks are large _____ birds.
5. Every spring, Least Terns _____ to Florida.
6. A baby Least Tern is a _____.
8. Lucy is a _____.

DOWN

1. Wally is a _____.
2. Penny is a _____.
4. Woodstorks live in _____.
7. Betty is a black-necked _____.
9. Baby birds hatch from an _____.

Respect the Environment or Else



Fishing line, nets, and other trash can get tangled around animals and hurt them. Some animals try to eat the trash and get sick. In order to protect all wildlife, make sure to always throw your trash away properly. The best thing you can do for the environment is to remember the 3 R's, Recycle, Reduce and Reuse. Many things such as aluminum, plastic, glass and paper can be recycled to make new products. Reduce means using less of things that get thrown away. For example, instead of using a paper cup, you can use a glass. That way you can wash it and use it over and over without making any garbage. Reusing an item helps cut down on trash too. Next time you go to the grocery store, take your plastic bags back and reuse them. If everyone does their part, we can all help keep the environment clean.

Vocabulary List and Message Game

BLUBBER — the fat of whales and other large marine mammals
24 6

CRUSTACEANS — a group of marine animals that have their skeleton on the outside like lobsters, crabs, and shrimp
23 7

DORSAL — the back of an animal
17

DUNE — A hill or ridge of sand piled up by the wind
21

ENDANGERED — an animal that is in danger of going extinct
20 25

EXTINCT — no longer existing
2 22

FLEDGLINGS — baby birds
3 15

HABITAT — a place for an animal to live
1 26

MIGRATE — to move from one place to another
19

NEARSHORE — water close to the beach
27 16

POLLUTION — chemicals or waste that is unhealthy to the environment
4 10 18

PROTECT — to keep safe
8 5

SANDBARS — underwater sand ridges
13

SHOREBIRDS — birds that live along the coast
11

VEGETATION — plant life
14 12 9



To read the message below, fill in the blanks with the letter that matches the number in the vocabulary code. The first one has been done for you.

H 1 2 3 4 5 6 7 8 9 10 11

12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

A Message From the Canaveral Port Authority

Since we opened for business in 1953, the Canaveral Port Authority has been expanding Port Canaveral's cruise and cargo facilities while remaining environmentally sensitive. Not only does Port Canaveral have more recreational facilities than all other Florida ports combined, but we're known throughout the port industry for our award-winning environmental programs. The programs described in this book are just a few of the efforts undertaken by the Canaveral Port Authority as part of our commitment to protecting the environment. This activity book is part of a newly initiated educational effort aimed at elementary aged children. We believe that educating our children is the first step in protecting our environment.

For additional information on any of the environmental programs at Port Canaveral, please contact:



Canaveral
PORT AUTHORITY

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Children's Activity Book

*Cover Photos: Sea Otter—Jim Argy, Least Tern—Florida Fish & Wildlife Conservation Commission,
Right Whale—Center for Coastal Studies, Manatee—Pat Rose*

The Canaveral Port Authority wishes to express their appreciation for the use of all photos and illustrations contained in this book.