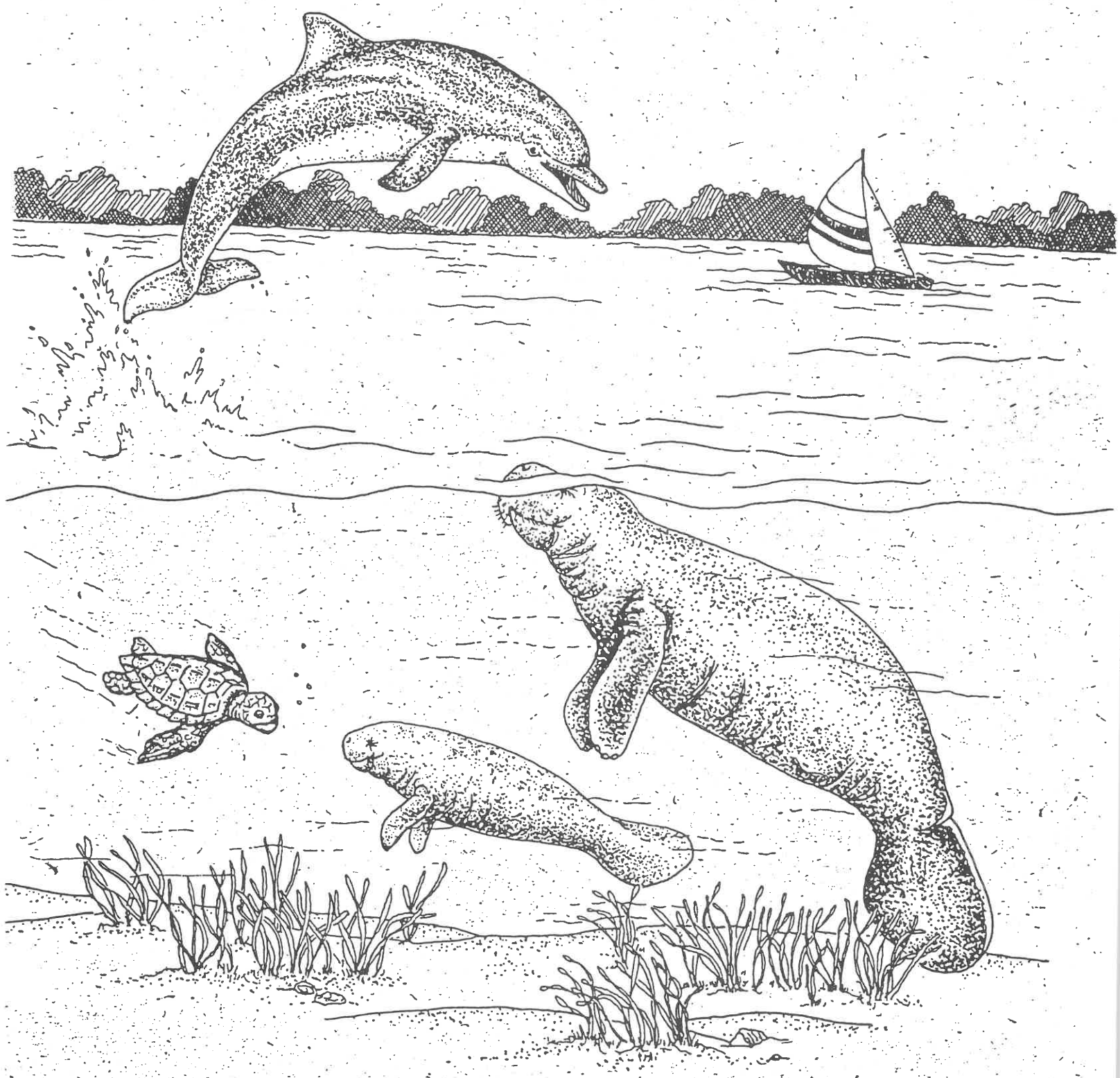
The Indian River-
An Exceptional Lagoon



Dear Parents and Educators,

What is 140 miles long, crosses five counties, has trees on stilts, underwater meadows, and contains over 4,000 kinds of plants and animals?
Answer: The Indian River Lagoon.

What does the lagoon mean - to you? A place to escape to on the weekends, a cool breeze, something thats needs to be crossed to go to the beach, a livelihood?
When asked what the Indian River Lagoon meant to them, excited students raised their hands, saying; "jet, skiing, boating, seeing manatees, clamming, and fishing trips with Mom and Dad."

The lagoon is an important part of many peoples' lives. However the delicate balance of life that exists along the shoreline and under the water goes unnoticed by the majority of people using the lagoon. This delicate balance of life that makes the lagoon so productive is being threatened by Florida's increasing population pressures. The purpose of this activity book is to help young people gain a better understanding of the Indian River Lagoon and the interdependence of its plants and animals. This knowledge is vital, for our young people will soon be the ones managing this valuable resource.

Please take time to explore this activity book with your child. Let your child share with you the new knowledge he or she has gained. Their excitement is contagious!

"If a child is to keep alive his inborn sense of wonder... he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in."
-Rachel Carson

Sincerely,

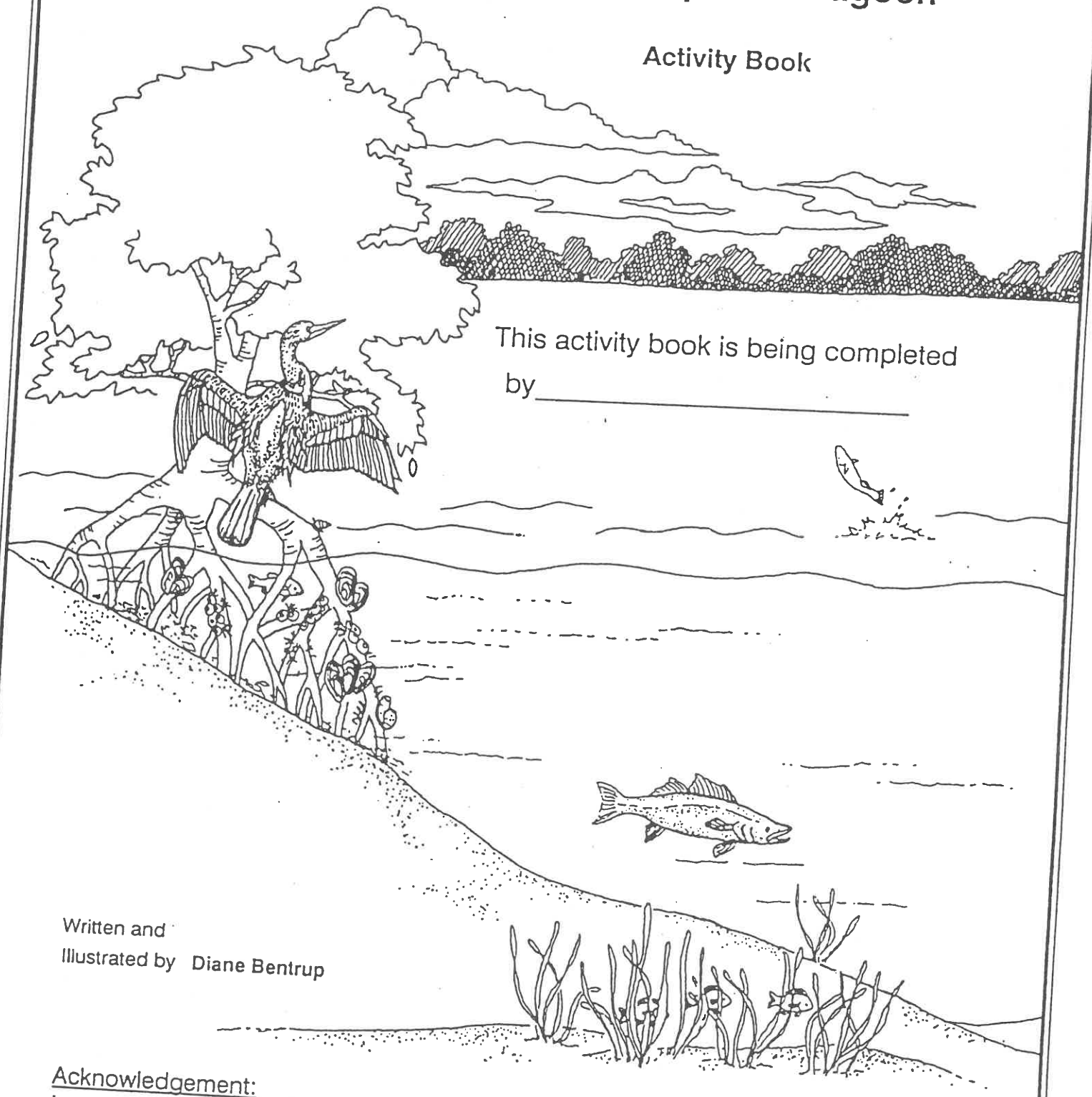
St. Johns River Water Management District
Florida Department of Environmental Protection

This environmental education program is part of the Indian River Lagoon Surface Water Improvement and Management program (SWIM). SWIM is a state act passed by the legislature in 1987. The act provides state funds for programs that restore and preserve Florida's important water bodies. The governor has declared the Indian River Lagoon as a priority water body needing special attention. Environmental education and awareness is a major goal of the SWIM plan. These materials were developed by the Florida Department of Environmental Protection in cooperation with St. Johns River Water Management District and South Florida Water Management District.

SWIM
Surface Water Improvement and Management

The Indian River -
An Exceptional Lagoon

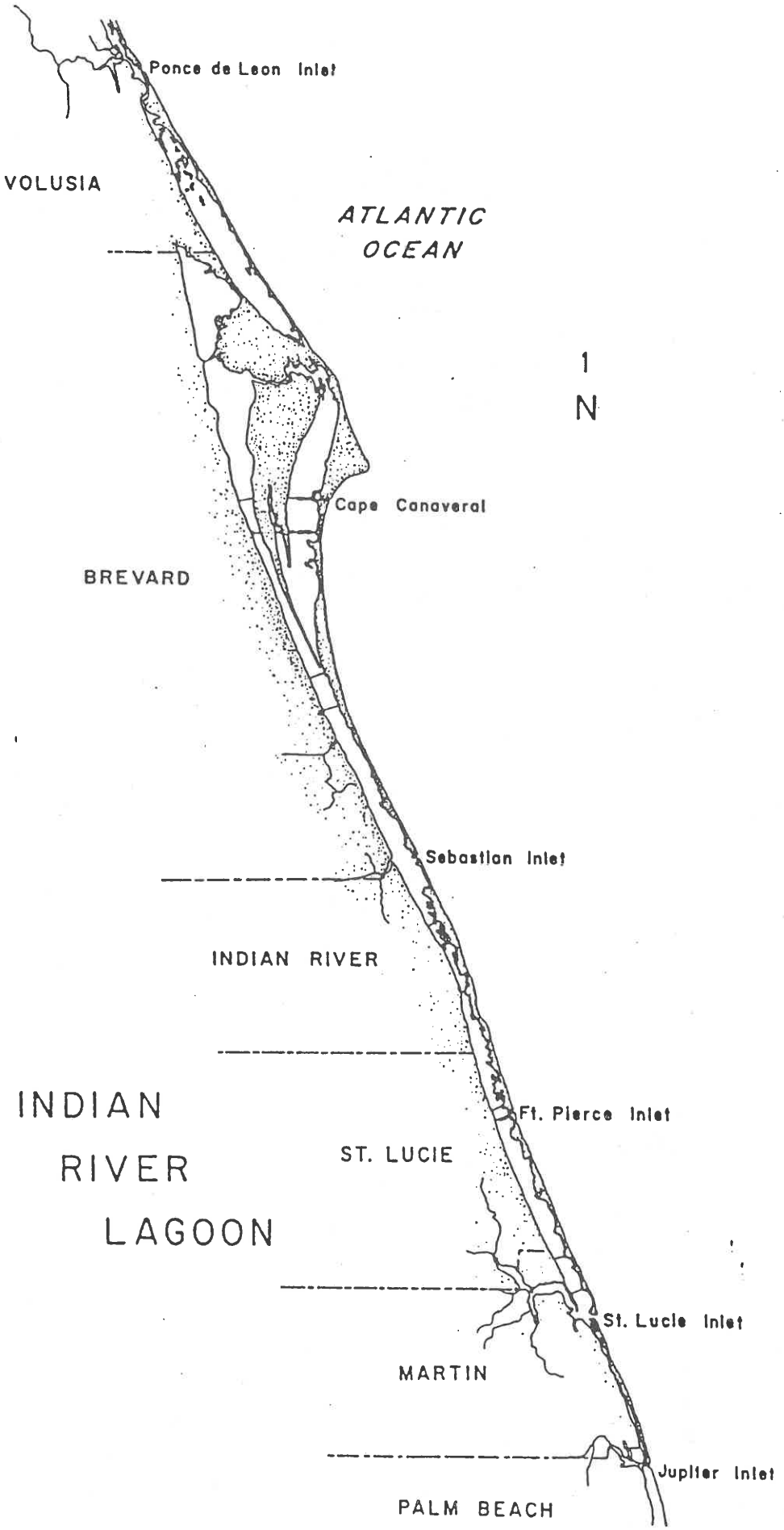
Activity Book



This activity book is being completed by_____

Written and
Illustrated by Diane Bentrup

Acknowledgement:
I would like to thank Paul S. Mikkelson for his assistance with all computer related aspects of the project. His patience and dedication is greatly appreciated.

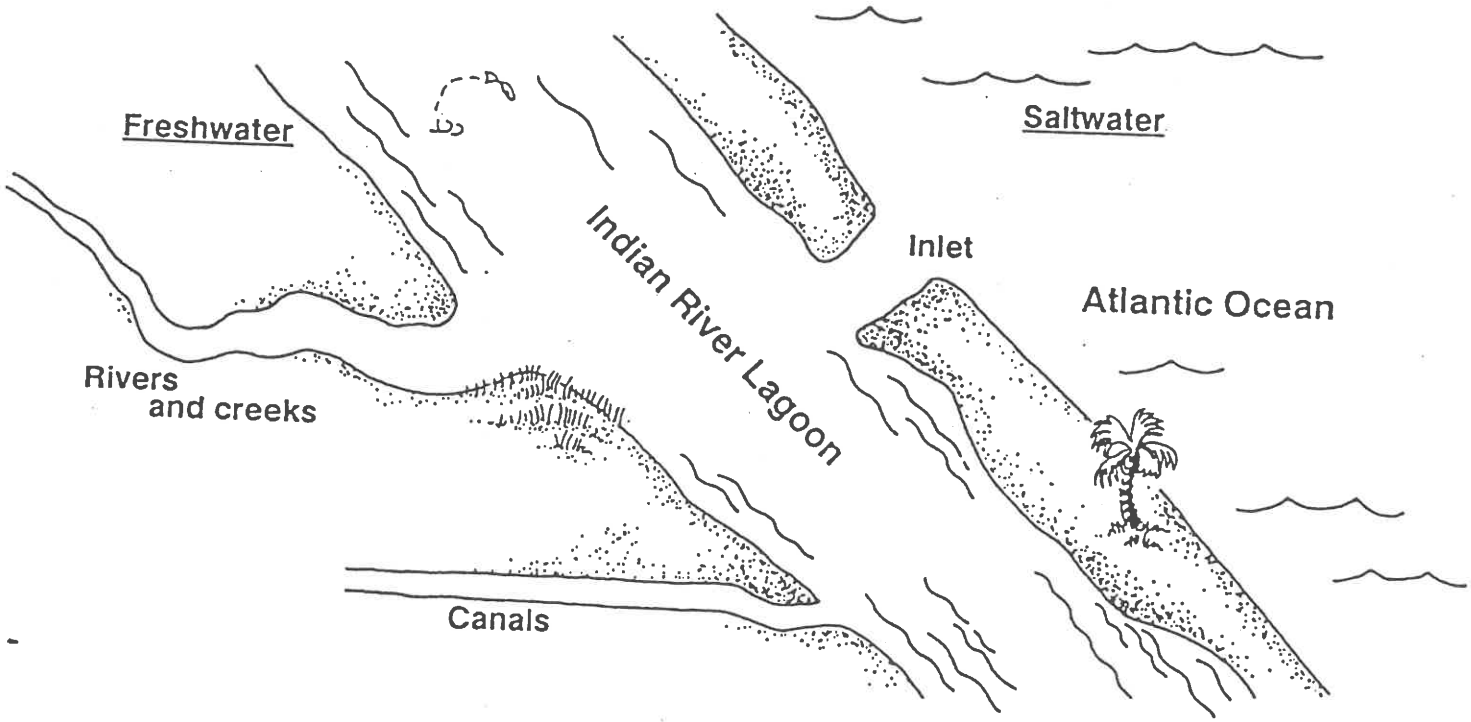

Ponce de Leon Inlet
VOLUSIA
ATLANTIC OCEAN
1
N
Cape Canaveral
BREVARD
Sebastian Inlet
INDIAN RIVER
INDIAN RIVER LAGOON
Ft. Pierce Inlet
ST. LUCIE
St. Lucie Inlet
MARTIN
Jupiter Inlet
PALM BEACH

Lesson 1

The Indian River - An Exceptional Lagoon

That is quite a title, but then the Indian River is quite a place. By studying this unit you will learn why the Indian River is exceptional and how you can preserve and protect this fragile coastal resource.

Is the Indian River really a river? The Indian River is actually a lagoon, a shallow body of water protected from the ocean by barrier islands.

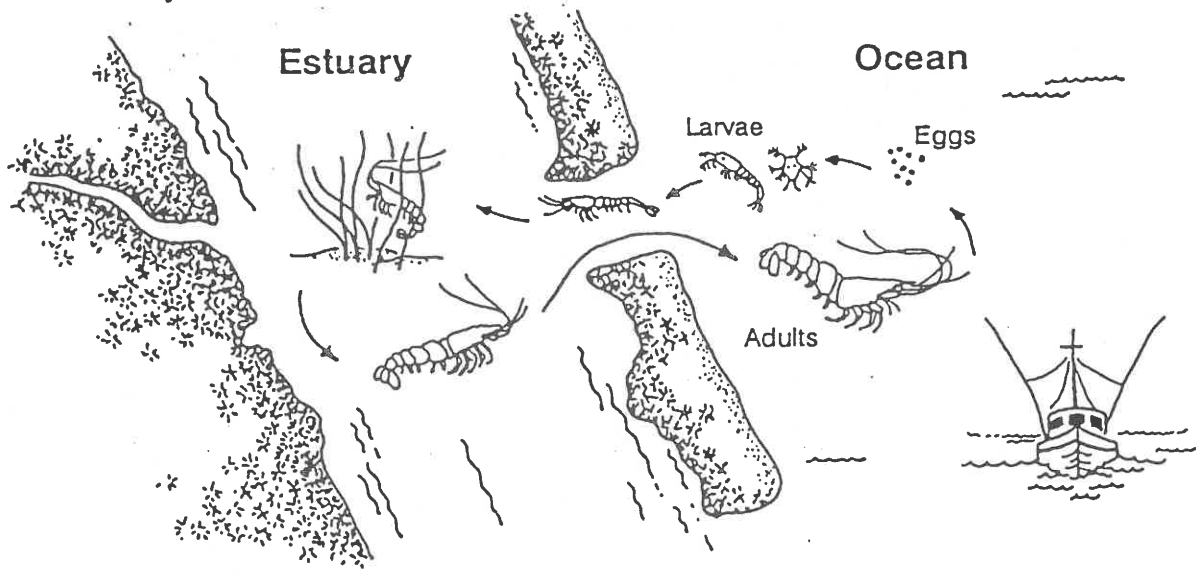


The Indian River Lagoon is an estuary. An **estuary** is a body of water where fresh and saltwater meet and mix. Freshwater enters the estuary through rivers, creeks and canals. Saltwater enters from the ocean through inlets.

Estuaries are full of life, and the Indian River Lagoon is no exception. The lagoon's mangroves, marsh grasses, and seagrasses provide food and shelter for a large variety of organisms. Over 4,315 species of plants and animals live in the Indian River Lagoon.

Many of the fish, shrimp, and shellfish (clams, oysters) that are important to Florida's economy must spend part or all of their lives in an estuary.

Shrimp, for example, spawn (produce eggs) offshore as adults. The eggs hatch in the ocean and the larvae move toward shore. The young shrimp that survive this hazardous journey from the sea enter the estuary and hide among the seagrasses and algae. As the shrimp become adults they leave the estuary and return to the sea, where the cycle begins again.

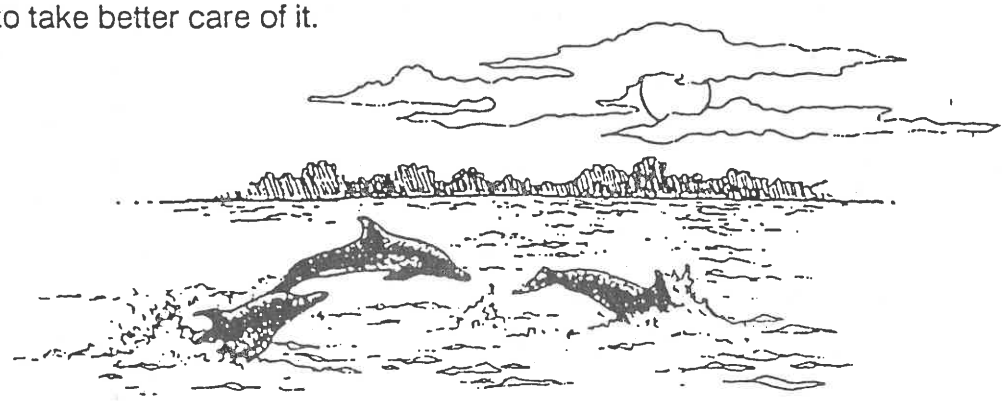


The striped mullet have a similar life cycle. The adults spawn offshore and the juveniles (young fish) move into the estuary. In the winter they gather in groups called schools and return to the ocean to spawn. During this journey they become food for birds and many ocean fish. Thus the benefits of estuaries are felt a long way from shore.

In fact, their value has been felt all the way to Washington,D.C. Congress has declared it is in our nation's best interest to protect and preserve this important but endangered resource: our estuaries.

We are fortunate indeed to live so close to a beautiful estuary like the Indian River Lagoon. There are many different ways we can enjoy the lagoon such as boating, fishing, bird watching, and viewing a quiet sunset.

Let's take this opportunity to learn more about the Indian River Lagoon and its inhabitants, so we will be able to take better care of it.

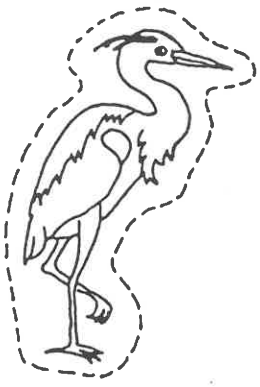


Lesson 1

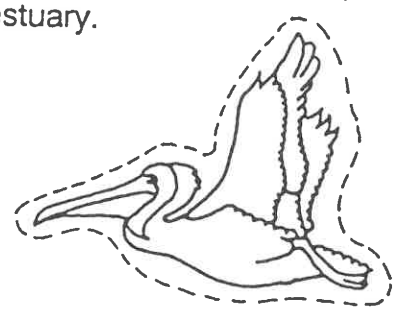
Make Your Own Estuary

Materials needed: A pair of scissors, glue, and crayons.

Directions: Cut this page out of the book. Cut out each plant, animal, or habitat. Glue each picture on the next page. Color your estuary.

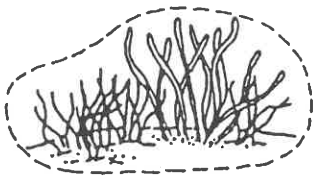


great blue heron

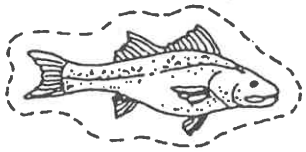


pelican

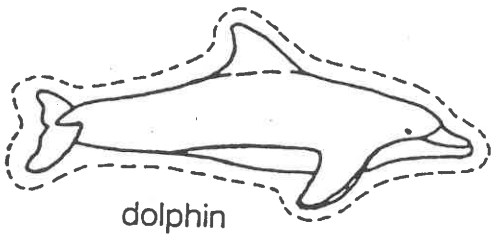
algae



seagrass

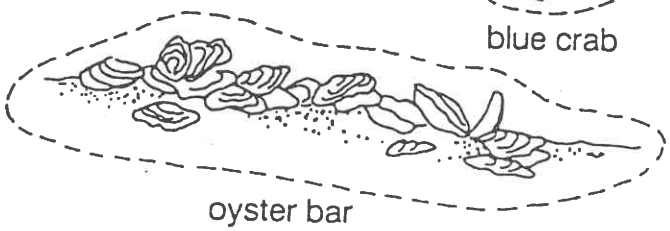


snook

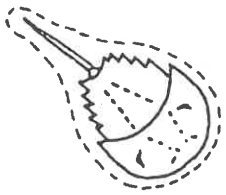


dolphin

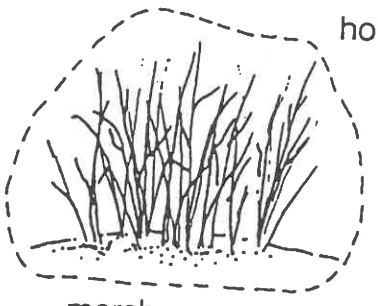
blue crab



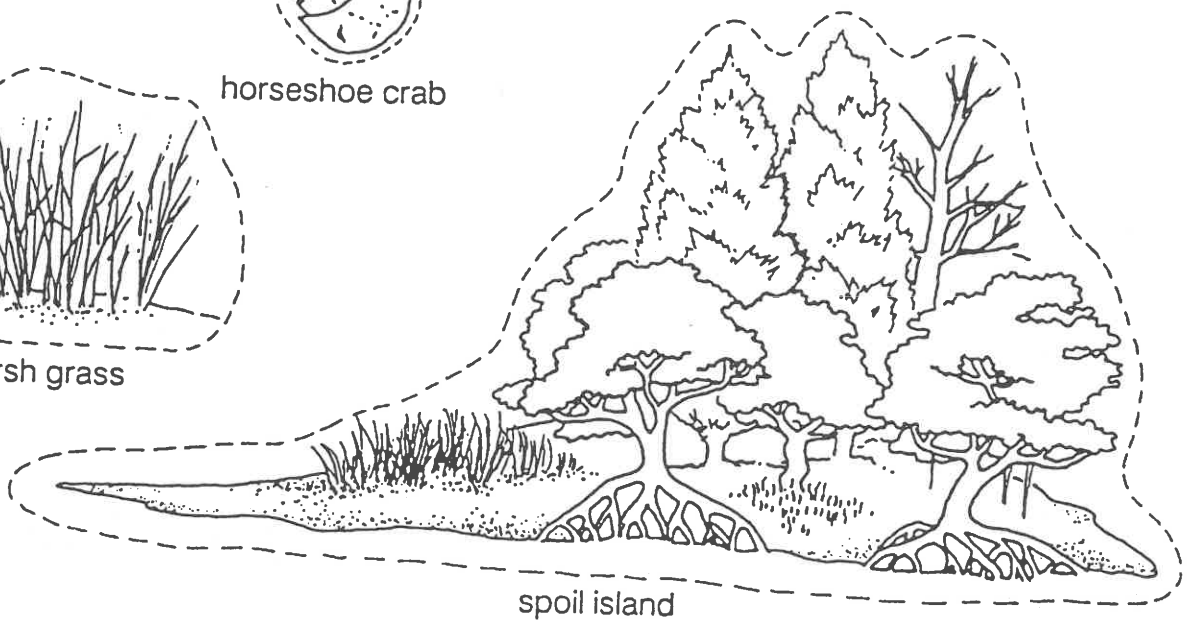
oyster bar



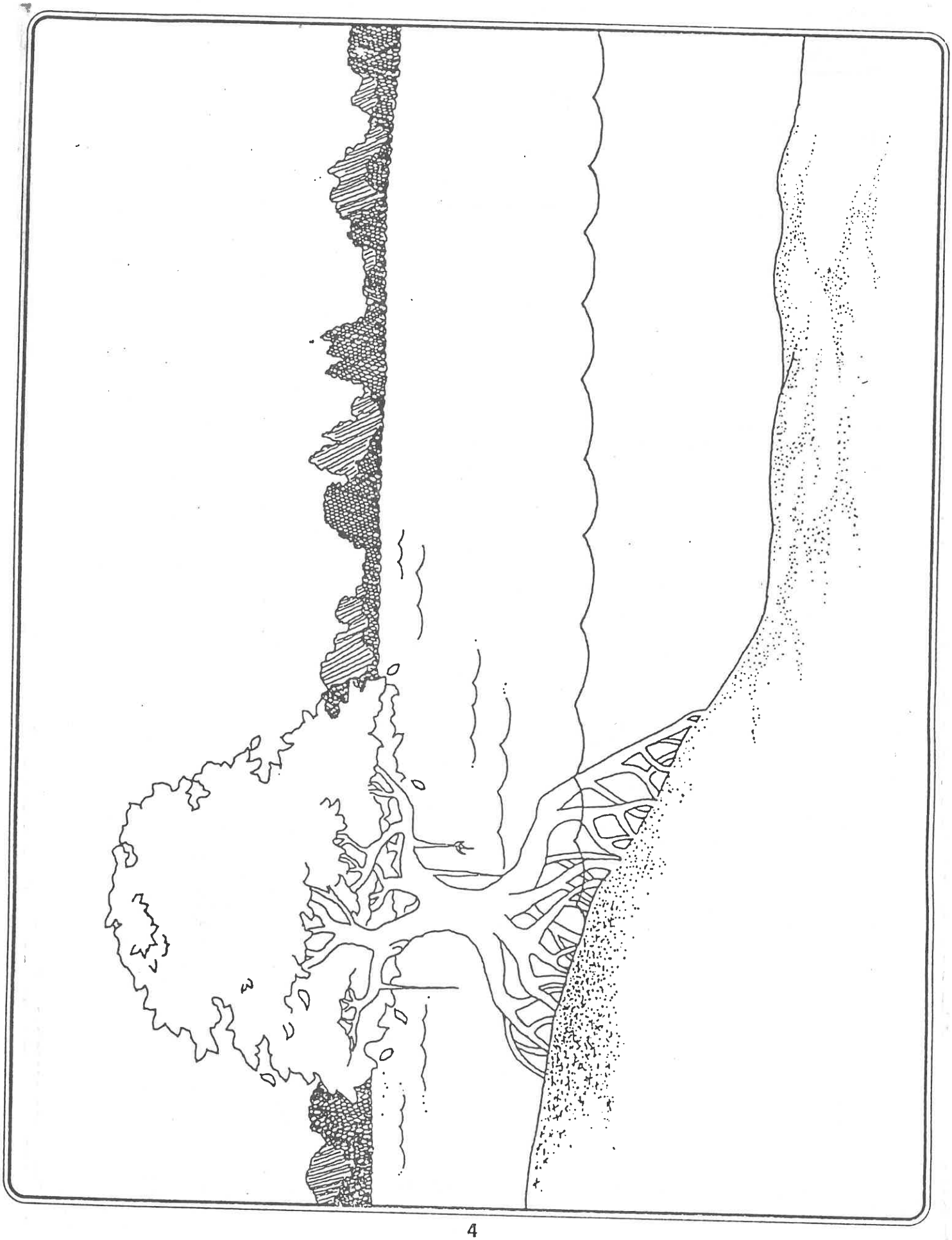
horseshoe crab



marsh grass



spoil island



Lesson 2

Habitat Sweet Habitat

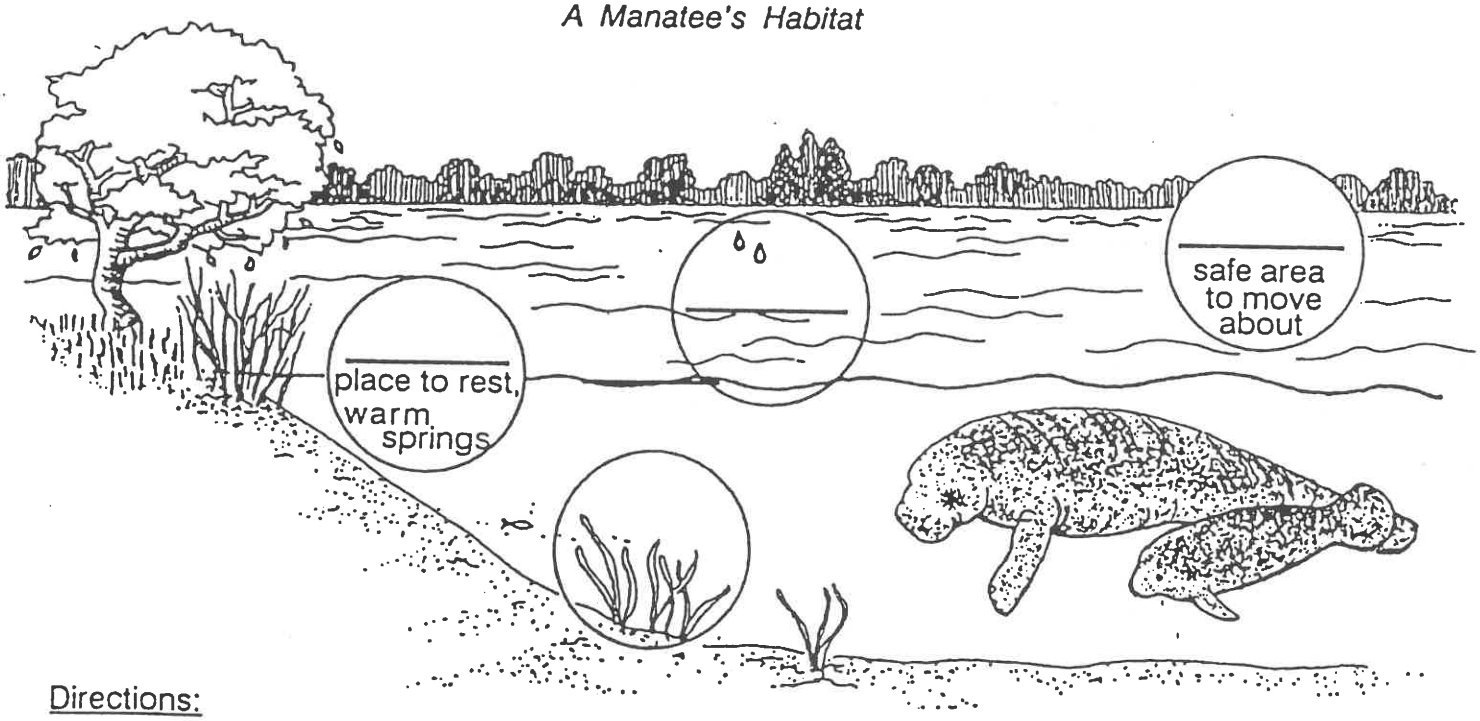
We all require certain basic things in order to live. Write down what you think these are.

NEED	WHERE YOU FIND IT
Example: Water	Well, lake, river

Other organisms have many of the same requirements. Plants and animals find what they need in their habitat. A **habitat** is the area where an organism is supplied with food, water, shelter, and space.

The picture below shows what a manatee needs in its habitat. If one of the parts in missing the manatee can not survive. To help animals and plants we need to first protect their home - their habitat.

A Manatee's Habitat



Directions:

Fill in the blank in each circle by matching each drawing or definition with the following words: **food, water, shelter, space.**

What If?

Directions: What would happen to manatees if different parts of their habitat were affected? Write down your ideas and then discuss them as a class.

1) What if .....people were always trying to approach manatees? (shelter)

---

2) What if.....the seagrass died because the water was cloudy? (food)

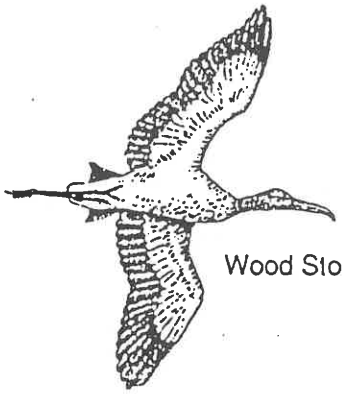
---

3) What if.....the water became polluted with pesticides, herbicides, or other chemicals? (water)

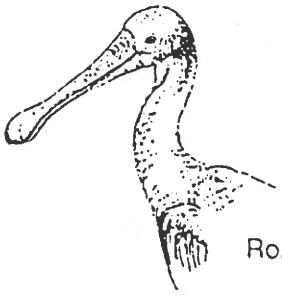
---

4) What if.....there was no place for manatees to avoid fast power boats? (space)

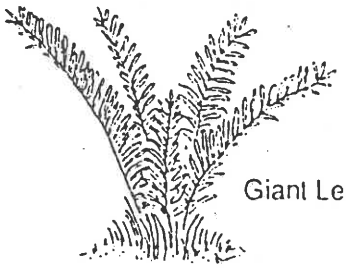
These are a few of the plants and animals in Florida that are listed as endangered or threatened. This means there are not many of them left. They are threatened by extinction.



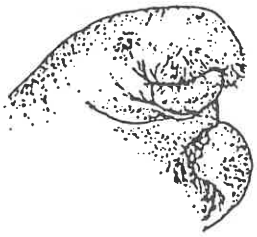
Wood Stork



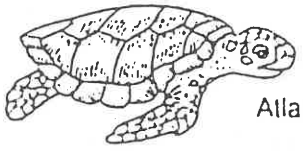
Roseate Spoonbill



Giant Leather Fern



West Indian Manatee



Atlantic Loggerhead

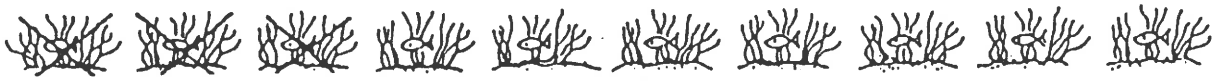
The state of Florida has the second highest number of endangered and threatened animals and plants (California has the most). The main reason is loss of habitat.

Lesson 2

Habitat is rapidly disappearing in Florida. Much of the loss happens when land is cleared for industry and houses.

Two important habitats in the Indian River Lagoon are declining. The Department of Environmenta Protection has estimated that the lagoon has lost approximatley 80% of its mangroves--

and 30% of its seagrass beds--

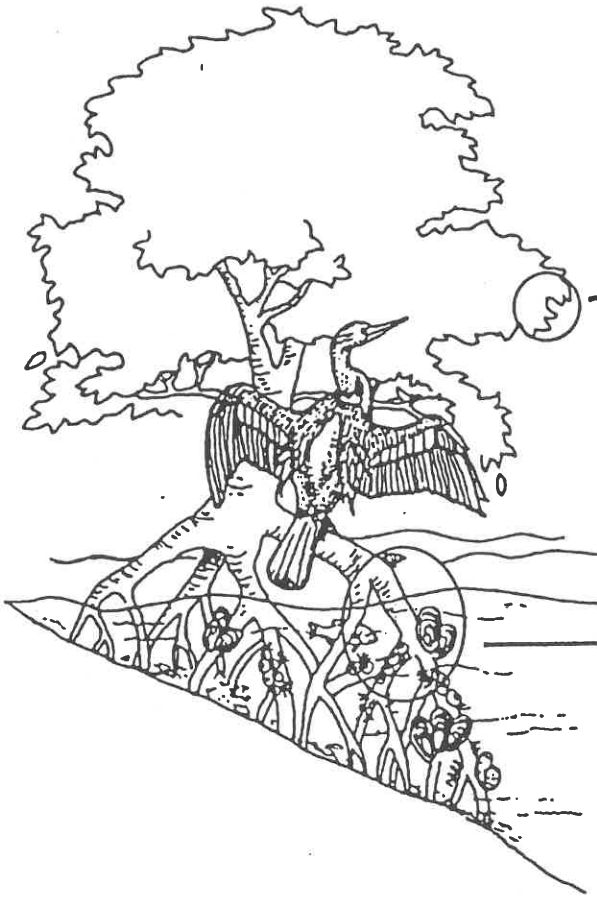


By learning more about the lagoon's habitats, how they are important and what affects them, we will be better equipped to protect them.

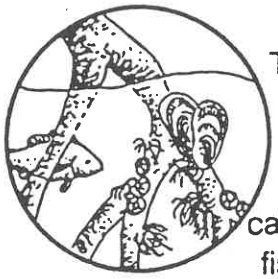
The Marvelous Mangrove

Mangroves grow along the shore of the lagoon and provide valuable habitat for many animals.

Birds nest in the branches or use the trees as a roost to rest.



Mangrove leaves are tough. Not many animals will eat them while the leaves are still on the tree. After the leaves fall into the water they start to decay. Decaying mangrove leaves are an important food source for the small critters in the lagoon.



The prop roots of the red mangrove provide a nursery area to young fish, a place where they can find shelter from larger fish and find food as well . The prop roots also provide a place for oysters and barnacles to attach. A mangrove tree is a very busy place!

Find out more about seagrass by doing the 'Seagrass Search' on the next page.

Seagrass Search

Lesson 2

Follow these directions until you reach the manatee munching on seagrass.

1. Are seagrasses the same as seaweeds? ___Yes. Go to #12 ___No. Go to #9

2. **False.** Seagrasses are important for animals and people. Now go to #11

3. **True.** The beds of seagrass slow the waves and allow the sediments to sink to the lagoon's bottom. Are these thick seagrass beds avoided by juvenile fish and other young aquatic animals? ___Yes. Go to #6 ___No. Go to #8

4. **False.** In shallow water boats can be a problem. Now go to #5

5. **True.** In shallow water the propeller from a boat's motor can dig the seagrasses up and shred them. It is important to avoid shallow seagrass beds. If you cannot avoid them, then drive very slowly and lift the motor. Are seagrass beds important to people? ___Yes. Go to #11 ___No. Go to #2

6. **False.** The seagrass beds provide a nursery for the young animals. Now go to #8

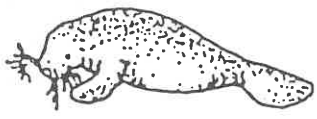
7. **False.** Seagrasses can help keep the water clear. Now go to #3

8. **True.** The seagrass beds provide hiding places for the juveniles from larger animals. The seagrasses also provide food. Many people use the lagoon along with the animals. Can boats be a problem for seagrasses? ___Yes. Go to #5 ___No. Go to #4

9. **True.** Seagrasses are flowering plants unlike seaweeds which are algae. Seagrasses grow in the brackish (salty) waters of the Indian River Lagoon. Rainwater that runs too quickly off of farms, roads, and towns carries a lot of sediments (soil and other particles) into the Indian River Lagoon. These sediments make the water turbid, or cloudy. When the water is turbid, is this good for the seagrass? ___Yes. Go to #10 ___No. Go to #13

10. **False.** If the water is very turbid it can kill the seagrass. Now go to #13

11. **True.** Most of the fish. clams, oysters, and crustaceans that people catch for food need the seagrasses at some time in their lives. Seagrasses also help to keep the Indian River Lagoon clear and healthy.



12. **False.** Seaweeds are algae. Now go to #9

13. **True.** The turbidity prevents sunlight from shining through the water to the seagrasses. Seagrasses need the sun's energy to produce food. Do seagrasses help to keep the water clear? ___Yes. Go to #3 ___No. Go to #7

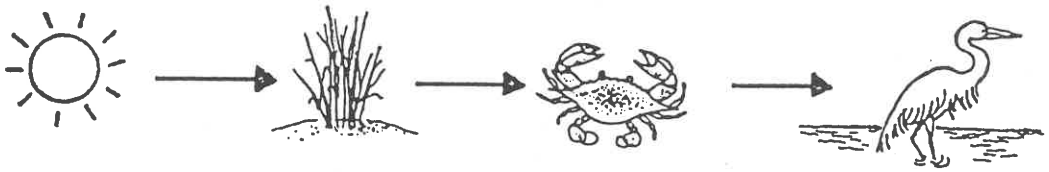
Lesson 3

What's For Supper?

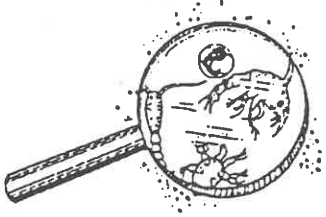
All organisms need food in some form or another, but only plants can use the energy of the sun to make food. They use sunlight and nutrients to manufacture food and oxygen. Plants are called **primary producers** because they provide food for all animals.

Animals are called **consumers** because they cannot make their own food like primary producers. Consumers must get their energy in the form of food from either plants or other animals.

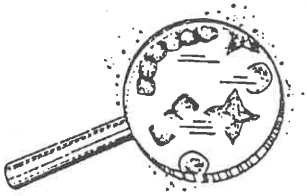
This flow of energy from: the sun to plants → plant eaters → meat eaters
is called a **food chain.**



Primary producers in the Indian River Lagoon are mangroves, marsh grasses, seagrasses, and algae. There are even primary producers floating in the water that are too small for you to see without a microscope. These microscopic plants, called phytoplankton, provide food for microscopic animals called zooplankton as well as for larger animals like clams and oysters.



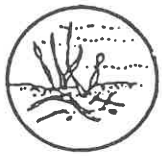
zooplankton



phytoplankton

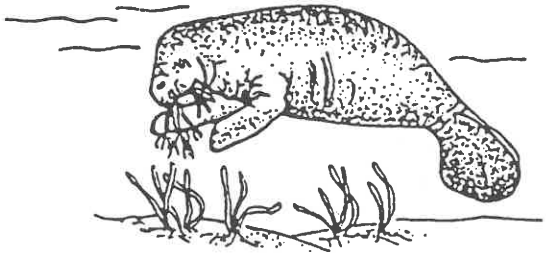
Let's take a closer look at an example of a food chain. Plants are the first link in the food chain because they get their energy from the sun. In the previous lesson we studied about seagrass. It is an important primary producer in the Indian River Lagoon.

1



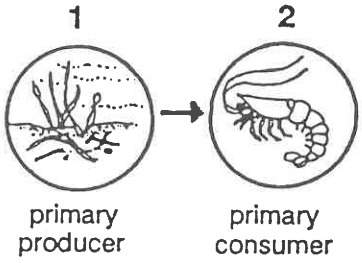
primary producer

There are three ways that seagrass provides food for animals in the lagoon. Some animals,such as manatees, eat the seagrass.



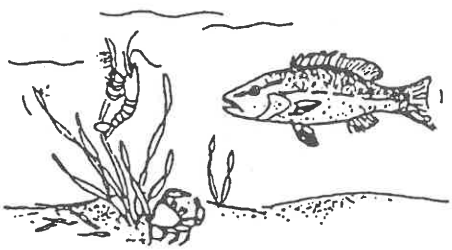
Other animals, such as shrimp and snails, eat algae that grows on the blades of seagrass.

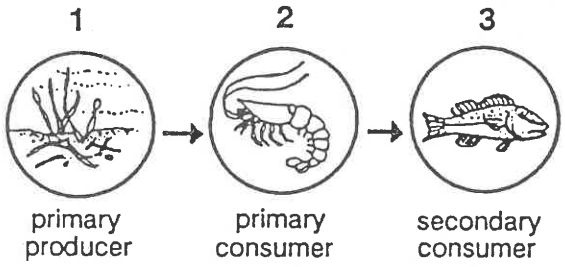
As seagrass grows, old leaves die and settle to the bottom of the lagoon. There they become covered with microorganisms (tiny plants and animals). These microorganisms are called **decomposers** because they cause dead plants and animals to decay. This mixture of decaying dead leaves covered with microorganisms is called detritus. This is the third way that seagrass provides food. Crabs, clams, and shrimp are a few of the animals which feed on detritus in the Indian River Lagoon.



Animals that eat plants are called **primary consumers**. They are the second link in the food chain.

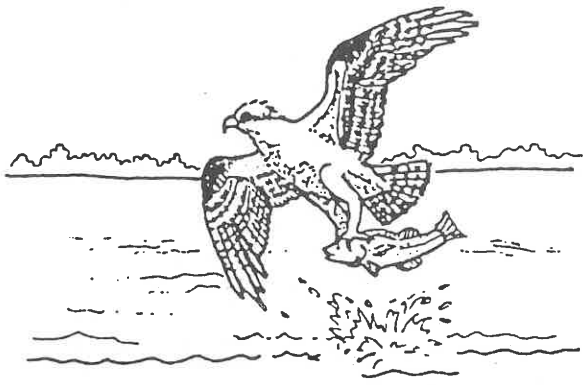
Animals that eat the primary consumers are called **secondary consumers**. In the lagoon, a snapper would feed on shrimp and crabs.

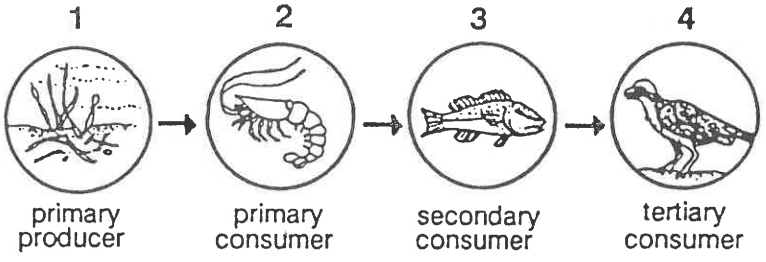




This is the third link in the food chain.

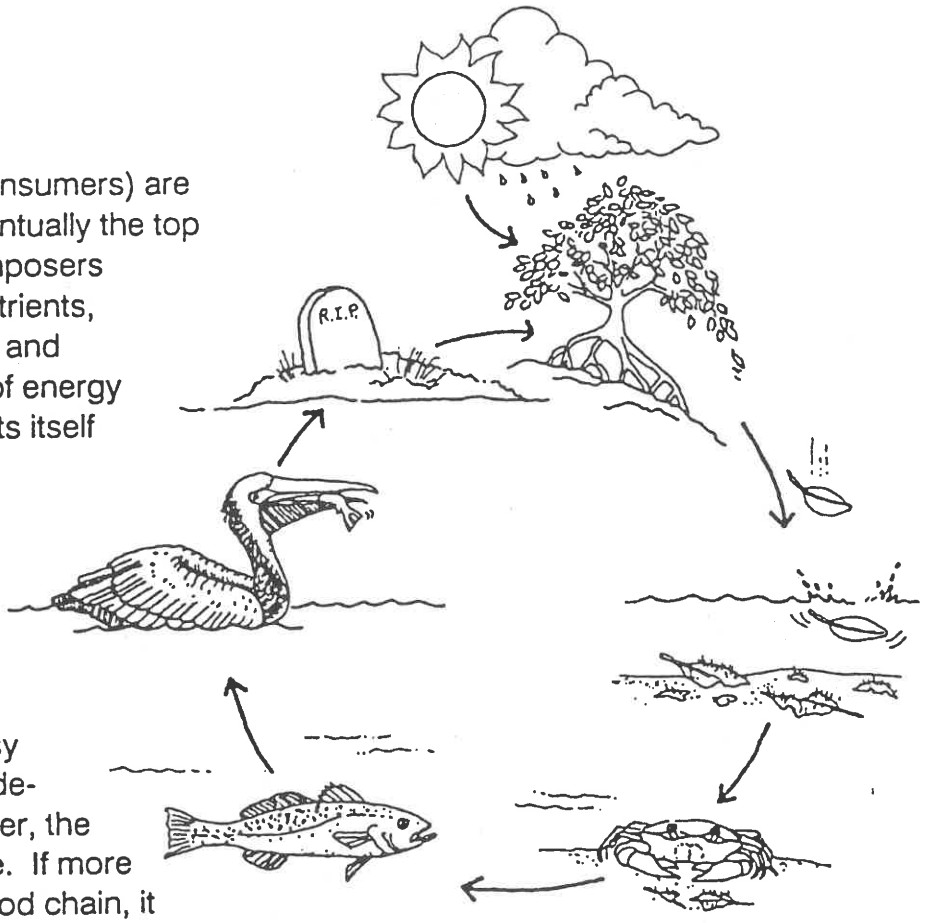
Animals that eat secondary consumers are called **tertiary consumers**.





An osprey becomes the fourth link in the food chain as it snatches the grey snapper out of the water.

Lesson 3

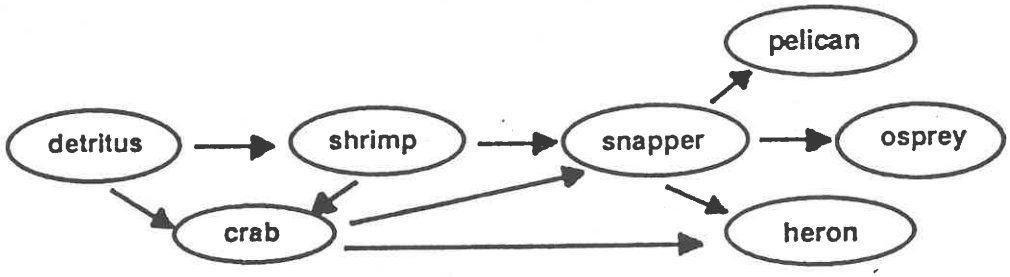


Only **top predators** (tertiary consumers) are safe from being eaten. But eventually the top predators die. Then the decomposers break the dead material into nutrients, which plants use again to grow and produce more food. The flow of energy completes a circle which repeats itself over and over.

Studying a food chain is an easy way of seeing how organisms depend upon each other. However, the process isn't always this simple. If more consumers are added to the food chain, it becomes more complex.

We can start out with a simple food chain like this:

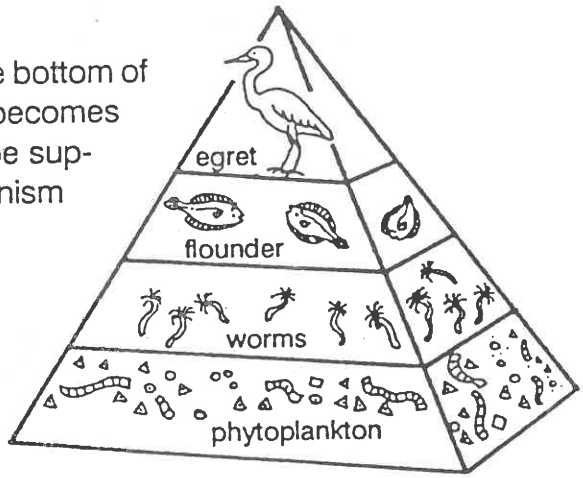
but when we add a crab, pelican, and heron, it begins to look more like a web than a chain.



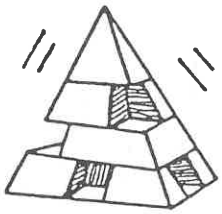
A **food web** is a more realistic way to view the flow of energy among organisms. In addition to understanding how energy flows through food chains and webs, it's important to realize what happens to the energy.

Plants and animals need to use some of the energy they obtain. Animals need energy to grow, move about, and reproduce. When one animal eats another, it stores part of the original energy and uses the rest. Only a small part of the original energy gets to the top of the chain. This idea is best illustrated by a **pyramid of energy.**

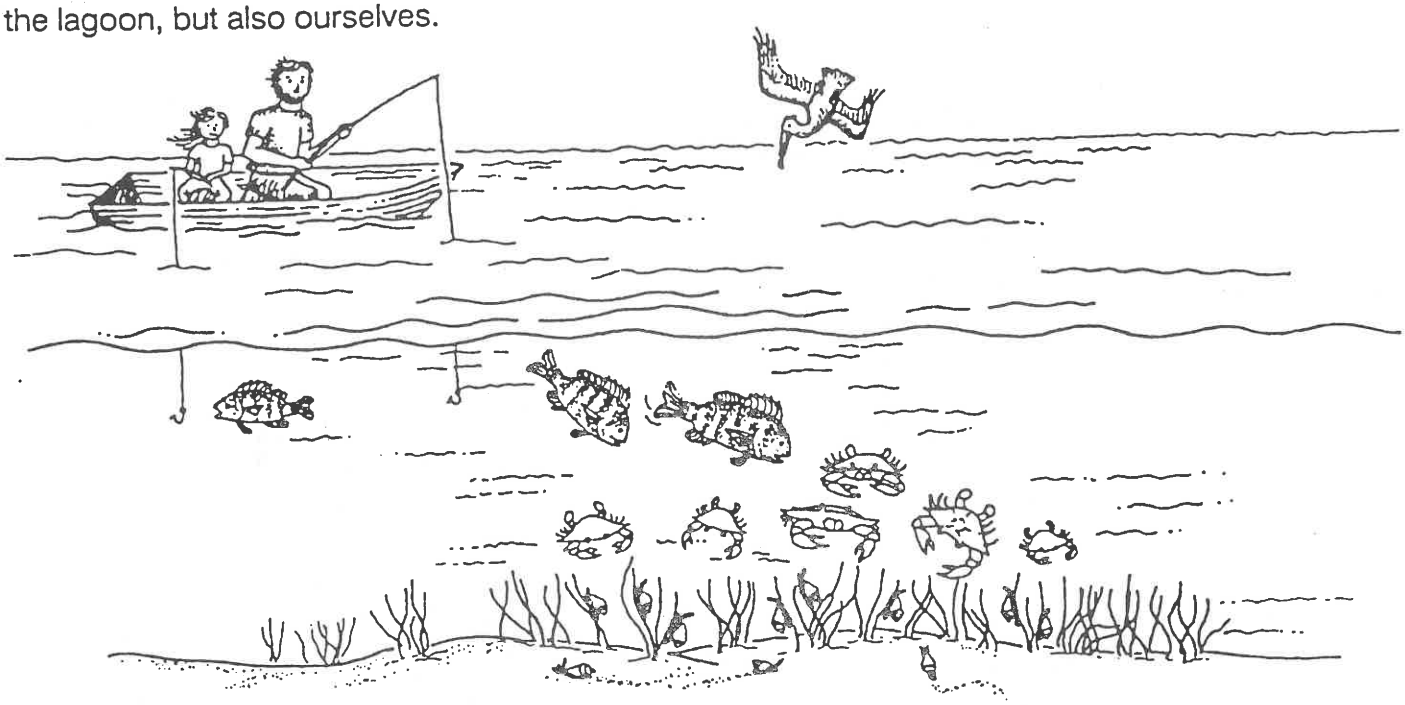
There are many organisms (primary producers) at the bottom of the pyramid. The amount of energy passed upward becomes smaller and smaller until only a few organisms can be supported at the top. In order to sustain life, every organism depends on each other.



If we remove too much of the pyramid by destroying habitat, pollution or over-fishing, what will happen?



Humans are also a part of the food chain. Fish, clams, oysters, and shrimp are some of the benefits we receive from the Indian River Lagoon. When we disrupt the delicate balance, we affect not only the lagoon, but also ourselves.



Lesson 3

Fast Food Chains

This does not refer to hamburgers or hot dogs. This refers to an activity where you will see how many food chains you can make using a list of plants and animals of the Indian River Lagoon.

Materials needed: Several sheets of blank paper, a pair of scissors, tape or glue, and a pencil.

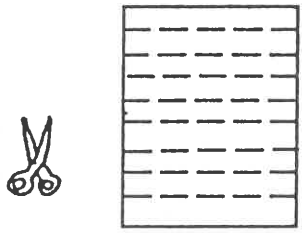
Directions:

1. Work together in groups of four or five. On a sheet of paper, write down a food chain using the list of plants and animals on the next page.

   Example: **phytoplankton ⟶ barnacle ⟶ snapper ⟶ pelican**

   (Hint: It may be easiest to start with a top predator (such as a pelican or raccoon), and work backwards.)

2. Cut a blank sheet of paper into strips about an inch wide.



3. Taking one strip of paper write the producer on it.

phytoplankton

Make a link by taping or glueing the ends of the strip together.

4. On another strip, write the consumer that will eat that producer.

barnacle

Add this link to your chain.

5. On the next strip write the consumer that will eat the first consumer.

snapper

Add this link to your chain.

6. Keep adding links until you reach a top predator.

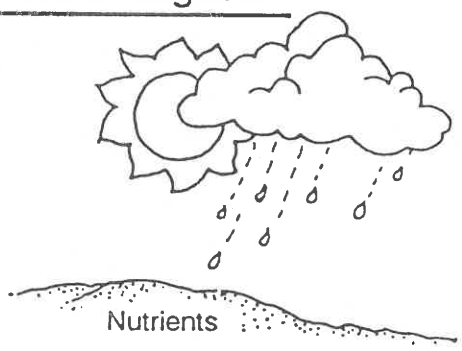
pelican

Add this link to your chain.

7. Write down more food chains using the list of plants and animals. Make as many different food chains out of paper as you can in the time limit set by your teacher.

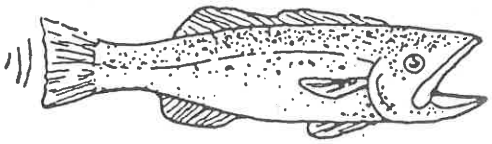
Plants and Animals of the Indian River Lagoon

Primary Producers (Plants)



seagrass
marsh grass - dead grass becomes detritus
mangroves - fallen leaves become detritus
algae
phytoplankton (plant plankton)

Consumers (Animals)



What They Eat

zooplankton (animal plankton)	phytoplankton
clam	detritus, zooplankton, phytoplankton
worm	detritus, zooplankton, phytoplankton
barnacle	detritus, zooplankton, phytoplankton
snail	algae, clams
shrimp	detritus, fish, algae
blue crab **fiddler crab** **hermit crab**	Crabs are scanvengers and eat about anything they can find, such as marsh grass, fish, detritus, worms and shrimp.
flounder	worms, fish, crabs, snails
mullet	plants, detritus
pipefish	zooplankton, tiny shrimp
sheepshead	clams, crabs
snapper	barnacles,crabs,fish, shrimp
stingray	worms,clams,crabs, fish
seagull	any plant and animal small enough for it to eat - dead or alive
heron & egret	fish, crabs
pelican	fish
osprey	fish
manatee	seagrass
raccoon	clams, crabs, fish
human	fish, crabs, shrimp. clams

Lesson 4

People and the Lagoon

To better understand how people affect the lagoon, start by studying the map on the next page.

Materials needed: A pencil, and a blue, green, orange, and yellow crayon.

1. What is the name of your state? _____
   Using a regular pencil, write it on the map.

2. What county do you live in? _____
   Using a regular pencil, write it on the map.

3. What is the name of the town you live in? _____
   Locate it on the map and draw an orange circle around it.

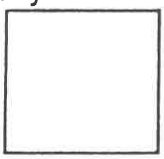
4. The Indian River Lagoon is an _____, that is a body of water where fresh and saltwater meet and mix.

5. The freshwater enters through _____, _____ and _____.

   How many can you find on the map? _____ Color them blue.

6. The saltwater from the ocean enters the lagoon through _____.

   How many are there in Brevard County? _____
   Color the ocean and the inlet yellow.

7. Color blue in this square. 

   Now color yellow over the blue. What color do you get when the two colors are combined?

8. On your map you colored freshwater blue and saltwater yellow. These combine in the Indian River Lagoon, so color the lagoon green.

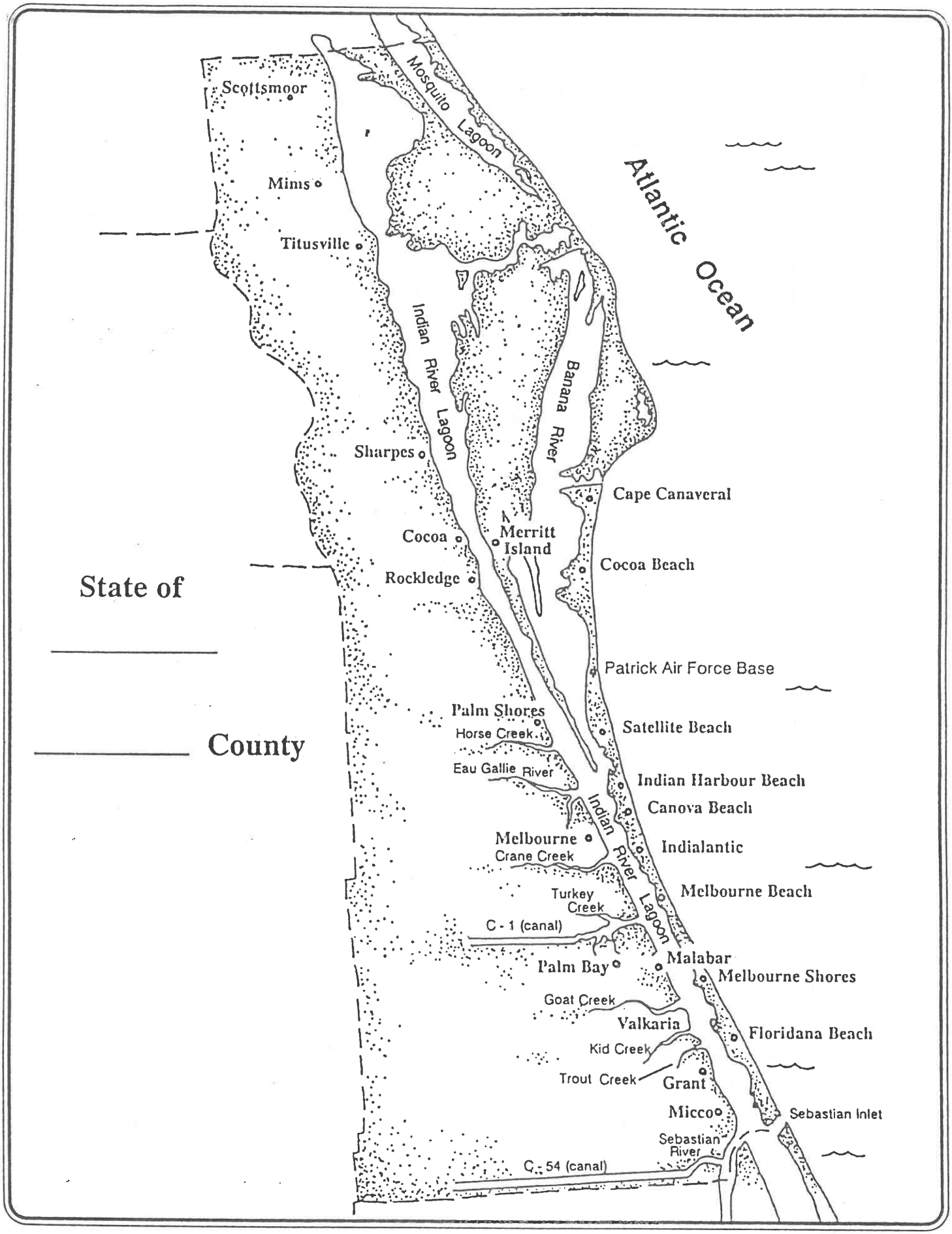
9. The Banana River and Mosquito Lagoon are estuaries too. Color them green.

All over the world people like to live near estuaries. Why do you think this is so?

_____

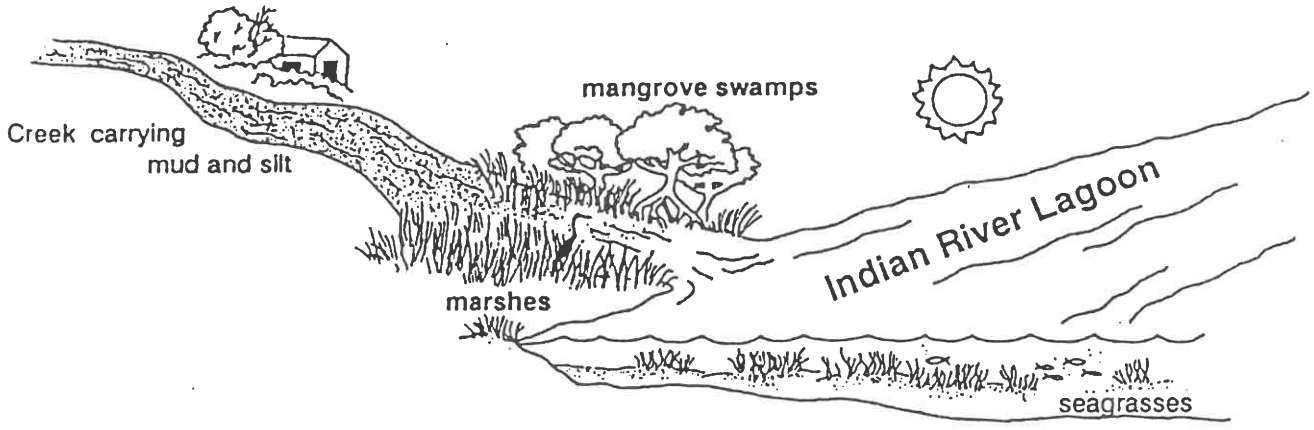
Notice how many towns in Brevard County are built along the Indian River Lagoon.

Many people are moving into this area every year. The increasing number of people is causing some problems for the lagoon.


State of
County
Scottsmoor
Mims
Titusville
Sharpes
Cocoa
Rockledge
Mosquito Lagoon
Indian River Lagoon
Banana River
Atlantic Ocean
Cape Canaveral
Merritt Island
Cocoa Beach
Patrick Air Force Base
Satellite Beach
Indian Harbour Beach
Canova Beach
Indialantic
Melbourne Beach
Malabar
Melbourne Shores
Floridana Beach
Sebastian Inlet
Palm Shores
Horse Creek
Eau Gallie River
Melbourne
Crane Creek
Turkey Creek
C - 1 (canal)
Palm Bay
Goat Creek
Valkaria
Kid Creek
Trout Creek
Grant
Micco
Sebastian River
C - 54 (canal)

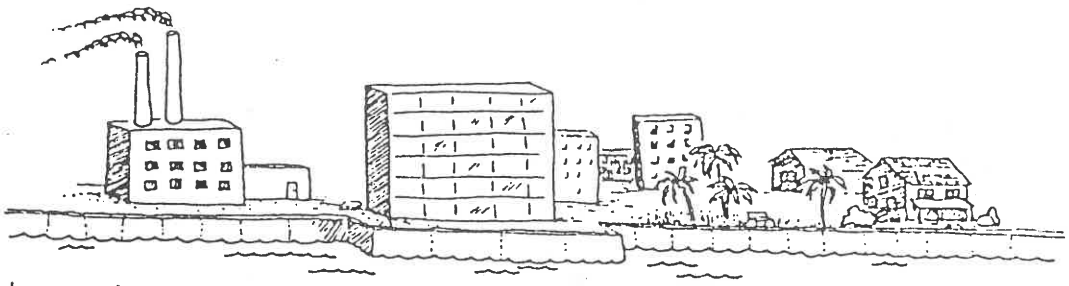
Lesson 4

The plants growing along the lagoon's shore are very important to its health. Mangrove swamps and salt marshes cleanse the water flowing through them before it reaches the Indian River Lagoon.

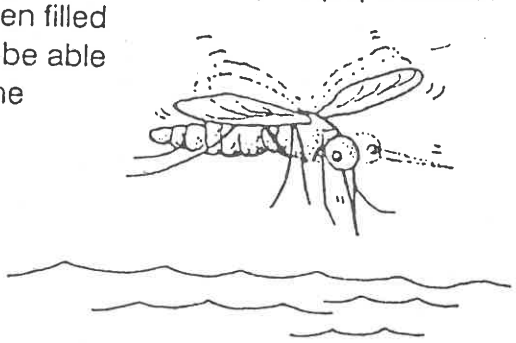


As water slowly passes through the swamps and marshes, mud and silt can settle out. The fast-growing marsh plants absorb excess nutrients that could cause problems for the Indian River Lagoon. Mangroves and salt marshes also provide a nursery area for young organisms and a food source for many of the animals that live in the lagoon.

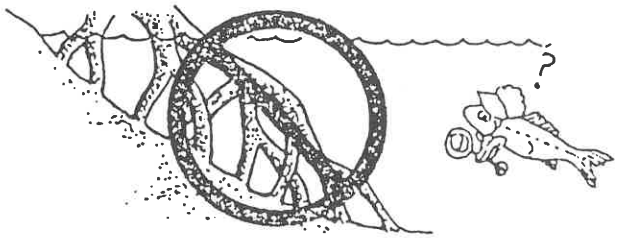
These important habitats are disappearing.

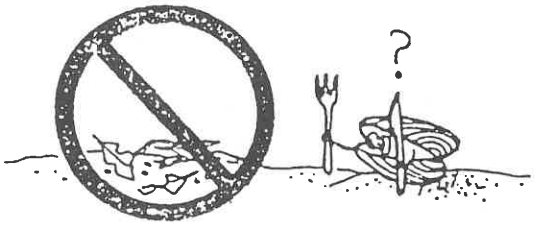


Marshes and swamps are shallow and many have been filled with soil to make new land for houses and industry. Thousands of acres of black mangroves were lost by the construction of mosquito impoundments. This was a method used to control mosquito populations. Dikes were built around high mangrove marshes and then filled with water so that the female mosquito would not be able to find any moist soil on which to lay her eggs. The roots of the black mangroves were covered with water and the trees suffocated.



The loss of mangroves and marsh grass removes some important producers from the lagoon's food chains and reduces the estuary's ability to function as a nursery. How would this affect the fish that live in the lagoon?..... the clams?..... Would it affect all of the animals?.....

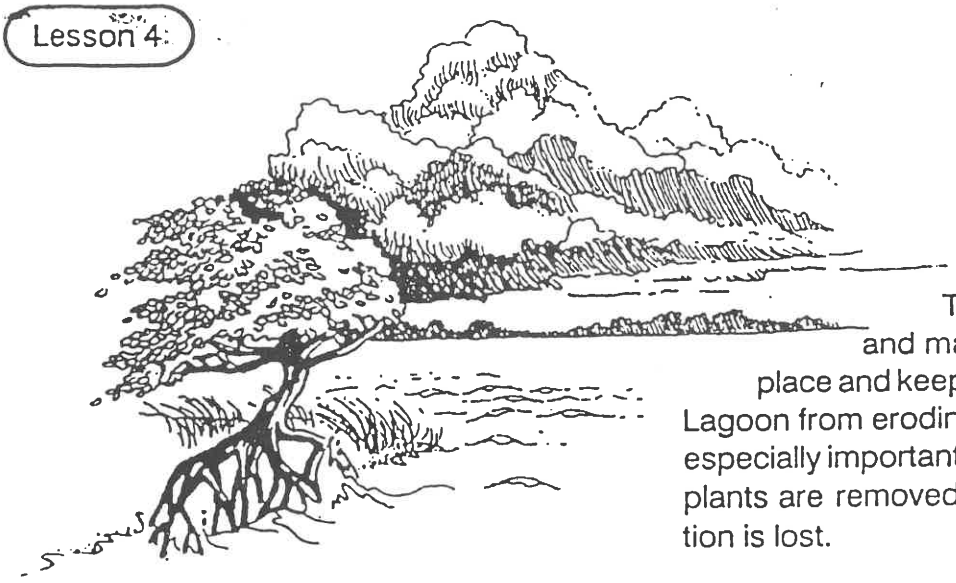




When these marshes and swamps are gone, turbid (cloudy) water flows directly into the lagoon. What does this do to the seagrass?.....

If the seagrass dies, who will be affected?.....

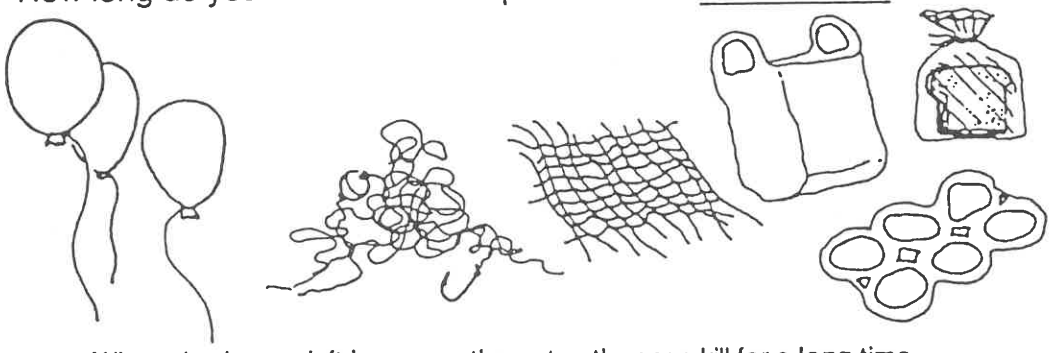
Lesson 4



The roots of the mangroves and marsh grasses hold the soil in place and keep the shore of the Indian River Lagoon from eroding, or washing away. This is especially important during storms. When these plants are removed, valuable shoreline protection is lost.

Litter is a problem on the spoil islands and throughout the lagoon. To many animals, litter looks like food. A floating plastic bag looks like a jellyfish to a hungry sea turtle. If large pieces of plastic are eaten, the animal's stomach becomes lined with it. This prevents digestion, and the animal will starve. Another type of litter which can be deadly to animals is discarded fishing line and nets. Animals can become trapped which may result in death from drowning, starvation, or strangulation.

How long do you think it takes for plastic to rot? _____



When plastics are left in or near the water, they can kill for a **long** time.

With the increasing numbers of people using the Indian River Lagoon and its resources there is a need for conservation. **Conservation** is the protection and sensible use of our natural resources, such as forests, animals, and estuaries. In order to protect the Indian River Lagoon we need to understand how it works, how the lagoon's plants and animals are dependent on each other. We also need to know how people affect the lagoon through their activities. This information is collected through scientific research. After the information is collected it needs to be shared with people through education.

How can information about the Indian River Lagoon be shared? List at least three ways.

1. _____ 3. _____

2. _____ 4. _____

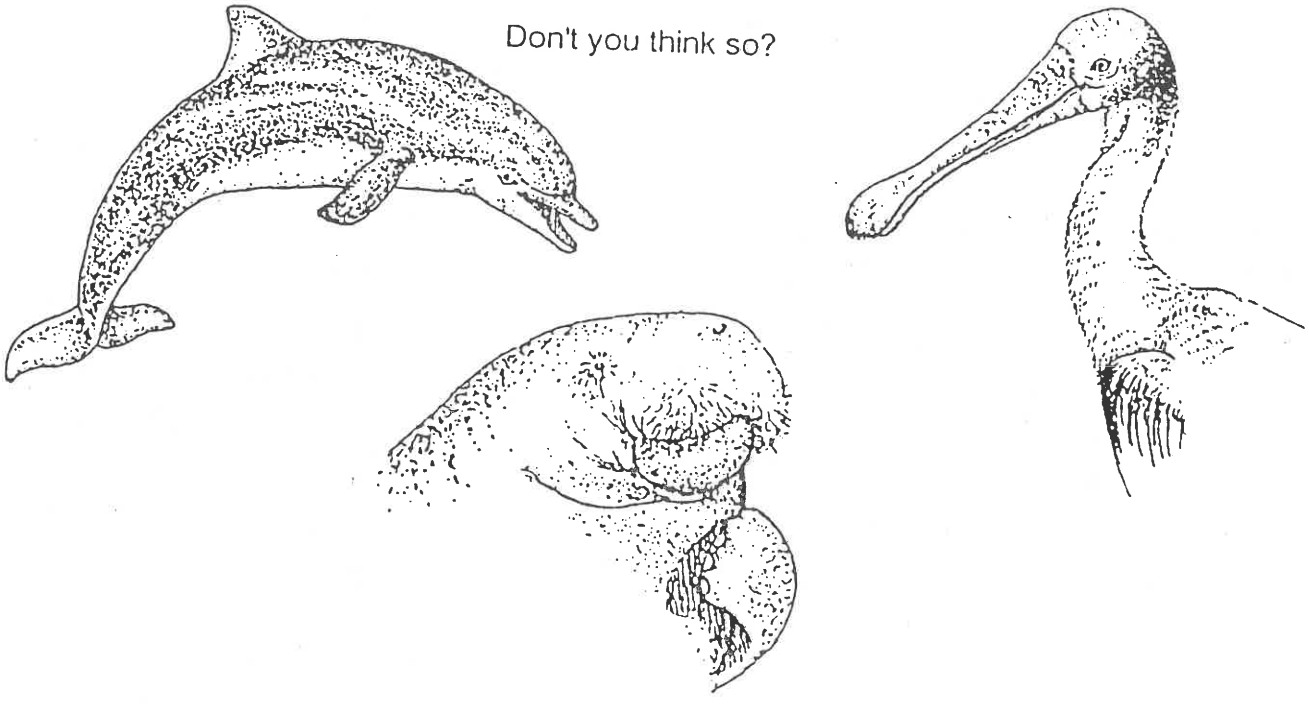
Will you help spread the news?

Gaining more knowledge about our natural resources can help us to conserve them better. An example of this is the establishment of the Florida Aquatic Preserve Program. As people realized the importance of estuaries they felt these special areas deserved better protection. As a result of this concern much of the Indian River Lagoon, Banana River and Mosquito Lagoon have been designated as aquatic preserves.

Aquatic preserves are exceptional (special) areas of submerged (underwater) lands and associated waters to be maintained in their natural condition. The aquatic preserves are managed by the Florida Department of Environmental Protection for the people of Florida. The Florida DEP has special rules to protect the mangroves, seagrasses, and other plants and animals that live in the aquatic preserves.

In order for us to assure the Indian River Lagoon and its inhabitants a place in Florida's future, we may have to refrain from doing certain things. There may be many areas where we have to reduce our boat speed to save the manatee, or places where we can't build a dock or dredge in order to protect seagrasses. When we take care of the lagoon and its plants and animals by giving a little, we receive much in return.

Don't you think so?



Lesson 4

What's Wrong?

Study the picture on the next page. Name at least 5 things wrong with this picture.

1._____ 5._____

2._____ 6._____

3._____ 7._____

4._____ 8._____

What Can We Do?

Along with the privilege of enjoying the Indian River Lagoon comes the responsibility of taking care of it Write down ways people can make the Indian River Lagoon a better place for plants and animals to live and for people to enjoy.

1._____

2._____

3._____

What are some things you can do?

1._____

2._____

3._____

(Take these home and share them with your family.)

Help others to learn about the Indian River Lagoon. Share this activity book with your friends and family. After they read it let them sign below.

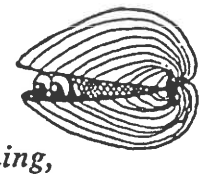
1._____

2._____

3._____

"What can I do???
I am only one,
But I am one.
I cannot do everything,
But I can do something."

- Anonymous



Glossary

aquatic: growing or living in water.

brackish: a mixture of freshwater and saltwater.

coastal: near the ocean.

conservation: the protection and sensible use of our natural resources, such as forests, animals, and estuaries.

consumer: an organism that obtains its food from eating plants or other animals.

crustaceans: a large class of animals, usually living in or near the water, that have a hard crustlike shell (exoskeleton). This group includes lobsters, crabs, and shrimp.

decomposers: organisms that break down dead plant and animal material.

detritus: a mixture of decaying plant and animal remains covered with microorganisms.

endangered: an organism that's in immediate danger of becoming extinct.

estuary: a body of water where fresh and saltwater meet and mix.

extinction: when a species of animal or plant no longer exists. It has been lost forever.

food chain: the flow of energy from: the sun to plants→plant eaters→meat eaters.

food web: an interlocking group of food chains.

habitat: the area where an organism is supplied with food, water, shelter, and space.

herbicide: a substance used to kill plants.

invertebrate: an animal without a backbone.

juvenile: an immature (young) organism.

lagoon: a shallow body of water protected from the ocean by barrier islands.

larvae: the early stages of any animal that differs in form and appearance from the adult.

life cycle: the continuous sequence of physical changes that an organism passes through, from a fertilized egg to an adult that can reproduce.

nursery: a place where young animals can find food and hide from predators.

nutrients: elements necessary for life and growth.

organism: a living person, animal, or plant.

plankton: microscopic plants and animals that float in the water.

pesticides: a chemical used to kill pests, usually insects and rodents.

predator: an animal that captures and eats other animals.

prey: an animal hunted and killed by another animal for food.

primary producers: green plants that use sunlight, water, and nutrients to manufacture food.

scavengers: organisms that feed on whatever food they can find; live or dead animals and plants.

secondary consumers: animals that eat the primary consumers. They are the third level of the food chain.

sediments: fine particles such as sand, silt and clay.

shellfish: an aquatic animal such as a clam or oyster, having a shell or shell-like covering (exoskeleton).

spawn: to produce or deposit eggs.

species: a category given to a population of individuals that are more or less alike, and that are able to breed and produce fertile offspring.

spoil islands: islands that were formed when the intracoastal waterway was dug; soil was removed from the bottom of the lagoon and placed next to the channel.

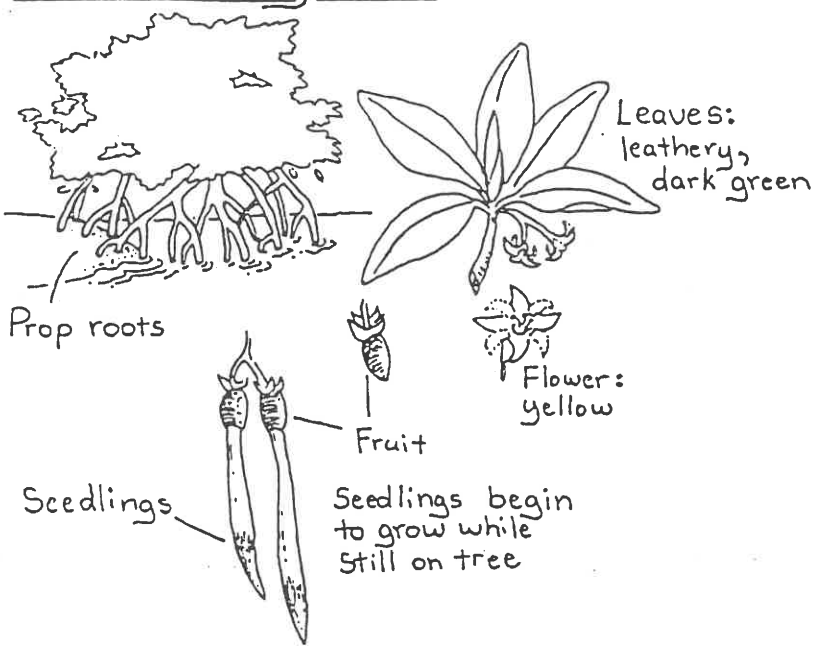
top predators: consumers that are at the top of the food chain that are not hunted by other animals. Most top predators have only one enemy - People. We may not eat all top predators, but we can kill or harm them by polluting or destroying their habitat.

tertiary consumers: animals that eat the secondary consumers. They are sometimes called the top predators.

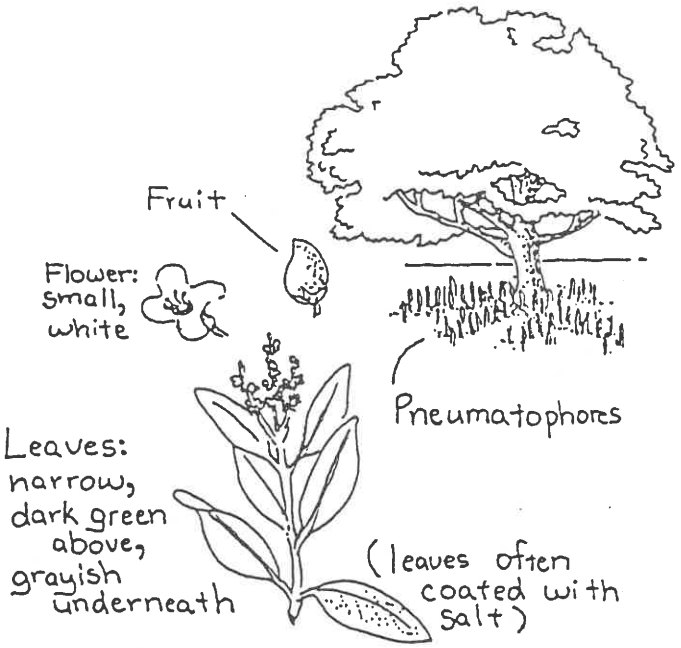
turbidity: a clouding of water caused by sediments.

Field Notes

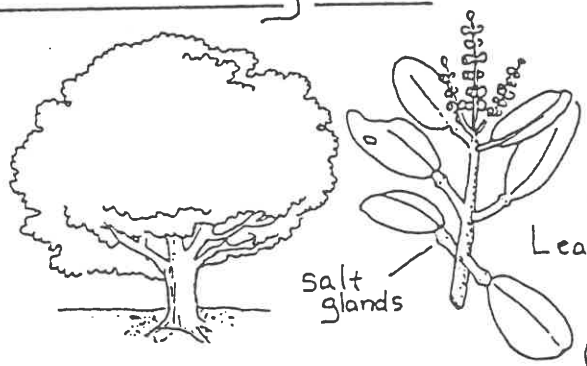
Red Mangrove



Black Mangrove



White Mangrove

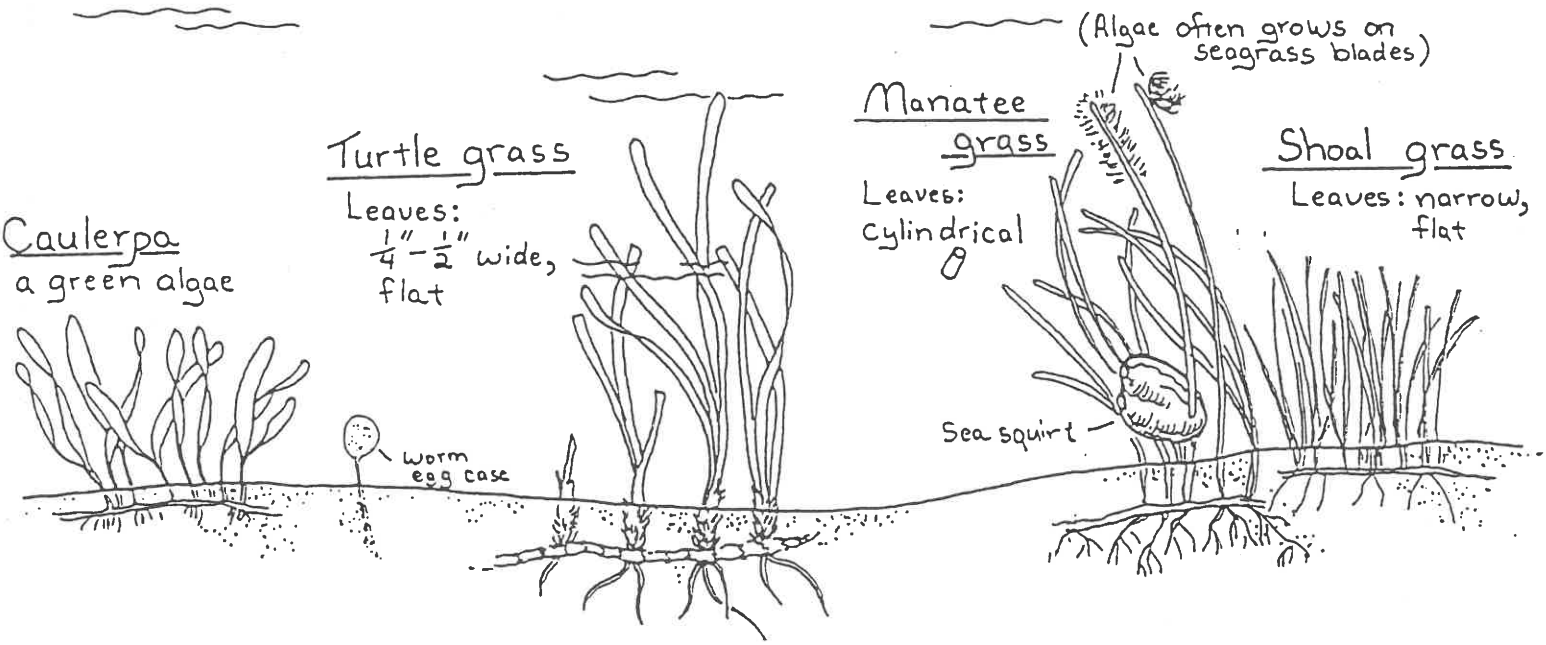


Flower: very small, greenish white

Fruit

Leaves: thick, oval, yellow-green

(most leaves have small notch at tip)



A Few Of TheAnimals And Plants Commonly Found In The Habitats Of the Indian River Lagoon

MAMMALS
marsh rabbit
raccoon
otter
manatee
Atlantic bottle -nose dolphin

REPTILES
American alligator
diamond-back terrapin
common garter snake

FISHES
grouper
anchovy
catfish (sea, gafftopsail)
sheepshead
snook
snapper
mojarra
mullet
pipefish
seahorse
puffer
flounder
seatrout
pinfish
stingray
catfish (sea, gafftopsail)

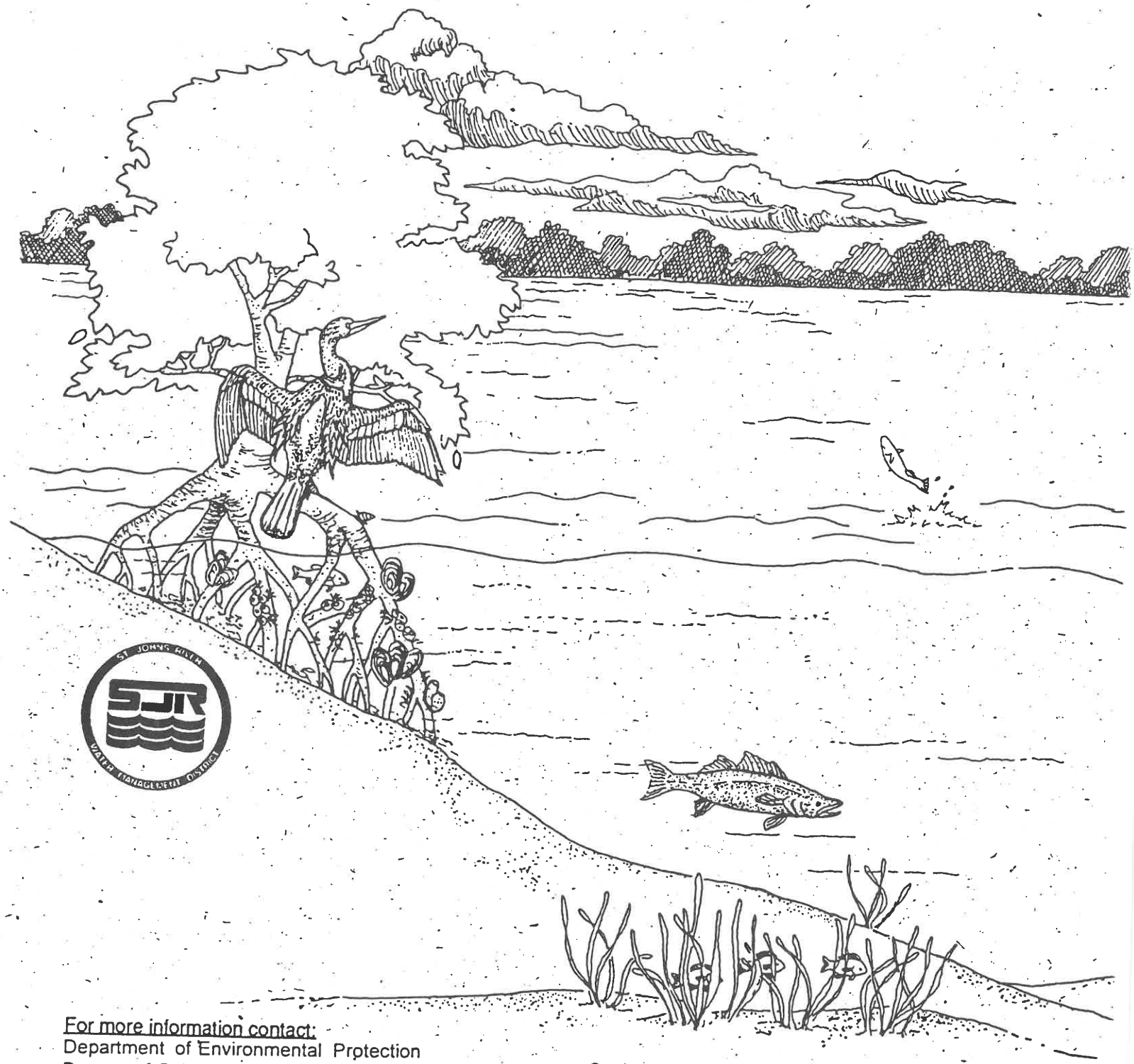
TREES
black mangrove
red mangrove
white mangrove
buttonwood
cabbage palm
Australian pine (exotic)
Brazilian pepper (exotic)

BIRDS
brown pelican
great blue heron
egrets (great, snowy, American, cattle)
osprey
white ibis
wood stork
roseate spoonbill
gulls (herring, ring-billed, laughing)
fish crow
double-crested cormorant

INVERTEBRATES
mangrove tree crab
fiddler crabs
blue crab
spider crabs
oysters
shrimps (arrow, broken-back, pink)
snails
clams
acorn barnacles

SEAGRASSES
manatee grass
shoal grass
turtle grass
star grass
Johnson's grass
paddle grass
widgeon grass

ALGAE
brown algae
green algae
red algae



For more information contact:
Department of Environmental Protection
Bureau of Submerged Lands and Preserves
13 E. Melbourne Ave., Suite A
Melbourne, Florida 32901 (407)984-4808

St. Johns River Water Management District
2133 N. Wickham Road
Melbourne, FL 32935 (407)254-1761