

# Fish Need Nurseries Too!

## ACTIVITY DESCRIPTION:

*Learn basic biology of several types of coastal fish and why nursery areas are important.*

## OBJECTIVE:

- *To learn about the life cycles of several types of coastal fish (spot, croaker, flounder, and menhaden).*
- *To learn what a nursery area is and why it is important.*
- *To exercise skills in science, language arts, and art.*

## AGE GROUP:

*Grades 1-6*

## MATERIALS:

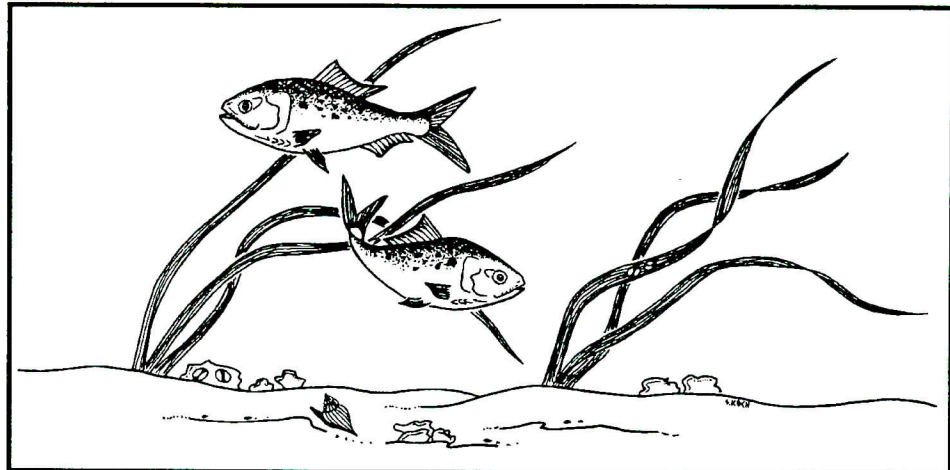
- *Paper*
- *Crayons or colored pencils*

## Introduction:

Fish are many things to many people. Some types of fish are important sources of food. Commercial fishermen and tourist-related businesses depend on fish. Most of us enjoy thinking that the Sounds and ocean are full of fish, even if we do not enjoy fishing or depend on fish for our jobs. Because fish are so important, we should learn about them so that our activities will not harm them.

Several common types of fish including flounder, spot, croaker, and menhaden depend on nursery areas within our sounds and rivers. These are places for tiny young fish and shellfish to mature and grow before they are large enough to be caught or have families of their own.

like a delivery room in a hospital, where you were probably born. After you were born, you were taken to a nursery. Currents take these tiny fish toward the coast where they travel through inlets in the outer banks such as Oregon Inlet, Hatteras Inlet, and Ocracoke Inlet.



During the cold winter months, flounder, spot, croaker, and menhaden travel in the ocean toward the Gulf Stream. The Gulf Stream is a large current of clear, warm water flowing up from the tropics. It is located approximately 25 to 50 miles off the North Carolina coast. Near the Gulf Stream, during the coldest time of year, the adult fish lay their eggs. The eggs are fertilized and drift in the ocean where they hatch. The ocean is like a big delivery room--much

After entering the sounds the tiny fish travel with the currents to coastal streams, rivers, bays, and grass beds. These places are called nursery areas because tiny fish and shrimp stay there while they are very young. Food and shelter are plentiful in these areas. They live in the nursery areas during the late winter, spring and early summer and grow very quickly. These nursery areas are filled with the food young fish need to grow and prosper.



From mid-summer to fall, the partially grown fish and fully grown shrimp leave the nursery areas and enter the open sounds and the ocean.

It is important to protect these nursery areas for fish and shrimp living in the Sounds and ocean. Several things we can all do to help include:

- Respect grass beds by not running your boat through them, which may damage their stems and leaves. These areas provide shelter and food for the young fish and shrimp.
- If you live on a sound or river, leave the edge of your yard in natural vegetation.
- Encourage farmers in your area to: use water control structures in their ditches; leave natural areas adjacent to streams and rivers; and use grassed terraces.

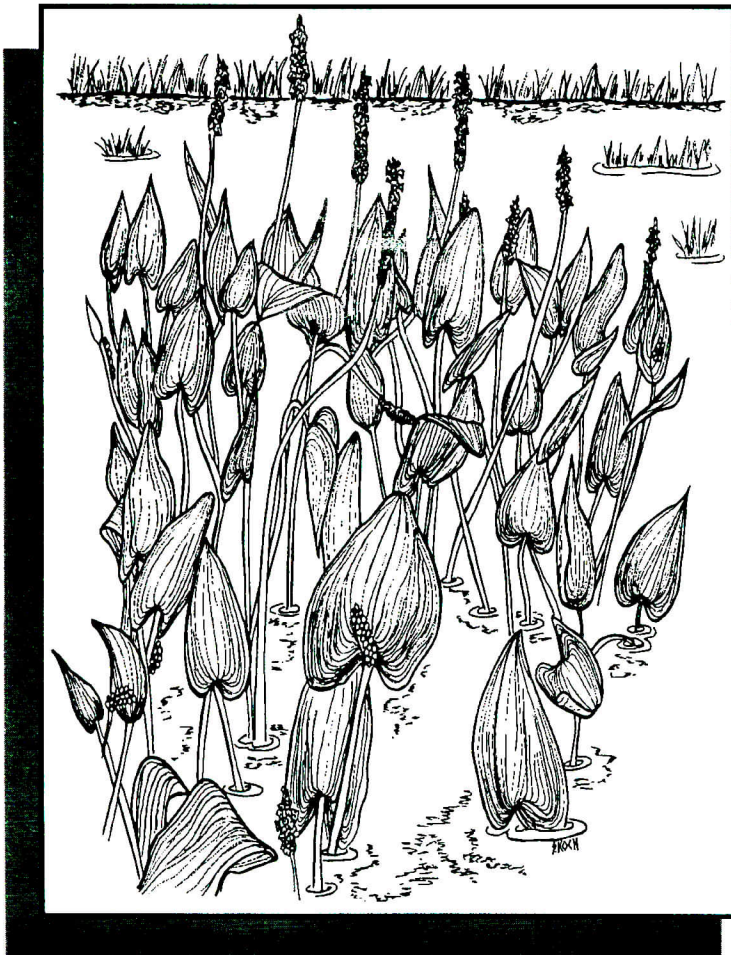
- If you live in a town, visit your sewage treatment plant and look at the treated wastewater as it is discharged into the river or stream. Is it clear? Does it smell? Do you think your town is being a good neighbor to those of us that fish and swim? Some wastewater treatment plants do excellent jobs of cleaning wastewater and some do very poor jobs.

### Activity Text:

Have the children close their eyes, sit back in their chairs, and relax.

#### *Slowly read the following:*

Breath deeply and imagine that you are a tiny fish. Pretend the air you are breathing is cool, clear water going through your gills. Wiggle your feet and imagine they are fins. Slowly move your arms up and down, up and down; now your arms are fins. You can swim but you don't have to because you are in a deep sea of clear, blue ocean water. The current is gently taking you towards the coast. The water is filled with tiny, beautiful fish just like you, all moving together. Imagine the gentle rocking of the waves as you approach the coastline and the sandy white beaches near the inlets. Imagine looking up--it's night and you can see a million twinkling stars and a bright full moon. The waves are still rocking you gently. The current slows and you see even more beautiful little fish. Some of them are a little larger than you. You are in a grass bed full of food, and you are glad because you are hungry from having traveled so far. You have reached the nursery area. Wiggle your fins and pretend they are turning back into feet and arms. Breath deeply and imagine your gills are turning back into lungs. Slowly open your eyes. Think about what you saw and how you felt during your journey. Draw a picture of what you saw along the way. Explain to the class what each part of your drawing represents.



*Illustrations by Sandra Koch*