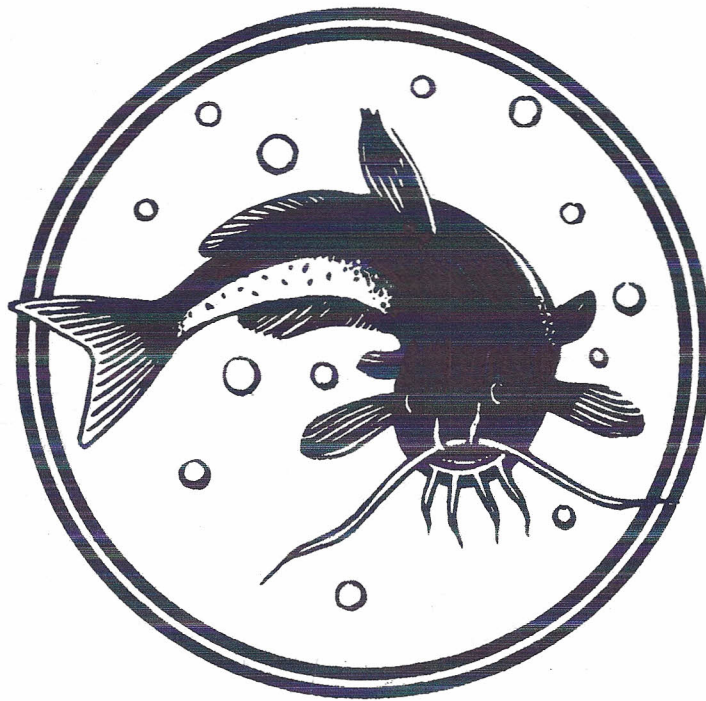


Catfish Activities



Thanks to:

Mississippi Ag in the Classroom
Oklahoma Ag in the Classroom

VOCABULARY

fingerling – young (baby) fish

trash fish – any fish that is not wanted in a pond

feed conversion – amount of feed needed to grow one pound of fish

dissolved oxygen – amount of oxygen in pond water

sounding – measuring the depth of water in a pond

surveying – measuring the surface area of a pond

stocking – putting fish in a pond

seine – a large net used to catch fish

producing – raising

hatchery – where newly hatched young are sold

barbels – whiskers of a catfish

offal – parts of catfish we do not eat

aerated trucks – trucks with thin layer of cooled air over the product

Useful Catfish Vocabulary

aerator - a pump that cools the pond water and increases the amount of available oxygen during hot weather.

algae - small plants that grow in fresh or salt water; algae take in carbon dioxide and produce oxygen for the fish.

feeding - catfish are fed a special feed purchased by the farmer. The soybean-based feed has corn, vitamins and other nutrients added to it. Some farmers use a floating food so they can check on their catfish when they come to the surface to eat. Catfish are only fed once weekly in winter because this is the time of year when growth is slower.

fingerlings - small catfish, several inches in length.

harvest - gather catfish together for sale. Catfish are frequently harvested in large, weighted nets called seines when they are about 18 months old and weigh 1-2 pounds.

pond - a body of standing water, usually smaller than a lake. Catfish ponds are most often built over clay soil and filled with fresh water pumped from underground wells. An average pond covers about 2-10 acres and is 4-6 feet in depth.

stock - to put young fish (fingerlings) into a pond.

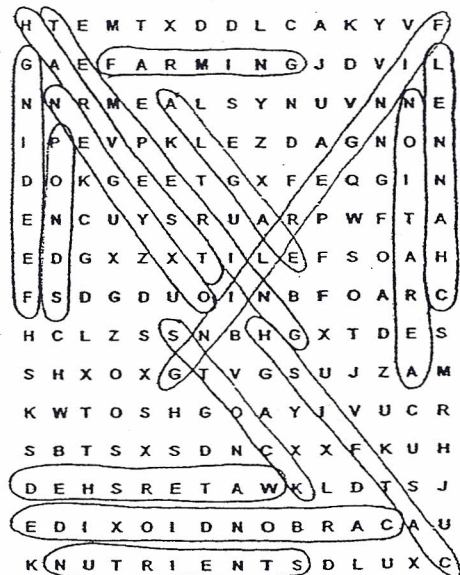
Interested in Raising Catfish
in your Classroom?

- ⇒ Looking for a different type of science experience for your students?
- ⇒ Do you have an old fish tank that's gathering dust?

Would you like more information about catfish?

Contact the Alabama Fish Farming Center
(334) 624-4016

CATFISH WORD SEARCH



CATFISH WORD SEARCH

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

Find and circle the following words.

AERATION
CATFISH
FEEDING
NUTRIENTS
STOCK

ALGAE
CHANNEL
FINGERLINGS
OXYGEN
TEMPERING

CARBON DIOXIDE
FARMING
HARVEST
PONDS
WATERSHED

HINT: They may appear up, down, forwards, backwards or across the diagonal.

Counting Catfish

1. Kevin and his brother, Matt, went fishing one Friday afternoon. Kevin caught 8 catfish and Matt caught 15. How many more catfish did Matt catch than Kevin?
2. Larry spent his spring break fishing. He caught 2 fish on Tuesday, 5 fish on Wednesday, 9 fish on Thursday and no fish on Friday. How many catfish did he catch in all?
3. Mr. Neal has 9 catfish ponds. He has 3 aerators in each pond. How many aerators does he have in all?
4. Two herons were on Jacob's catfish pond. They ate 18 catfish on Monday and 12 catfish on Tuesday. How many more catfish did they eat on Monday than on Tuesday?
5. Mrs. Williams had 1,700 pounds of fingerlings delivered to her farm. If she put 875 pounds into the first pond, how many pounds were put into her second pond?
6. Eight Great Blue Herons landed at Mr. Freeman's catfish farm. If each heron ate 6 fish, how many fish did they eat altogether?
7. Mr. Burk ordered 6 tons of floating feed for his catfish farm. How many pounds did he order?
8. Mrs. Jackson had 23,000 pounds of catfish. She sold $\frac{1}{2}$ of them. How many pounds does she have left?
9. Catfish Acres Farm had 6, 236 pounds of fingerlings delivered equally to his 4 ponds. How many pounds were put into each pond?
10. The fry pond on Mrs. Melton's catfish farm is 140 feet long and 90 feet wide. What is the perimeter of the pond?

Answer Key: 1) 7 more catfish; 2) 16 catfish in all; 3) 27 aerators in all; 4) 6 more catfish; 5) 825 pounds; 6) 48 fish altogether 7) 12,000 pounds; 8) 11,500 pounds left; 9) 1,559 pounds; 10) P = 460 feet



Catfish Word Search



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

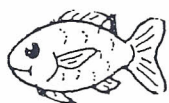
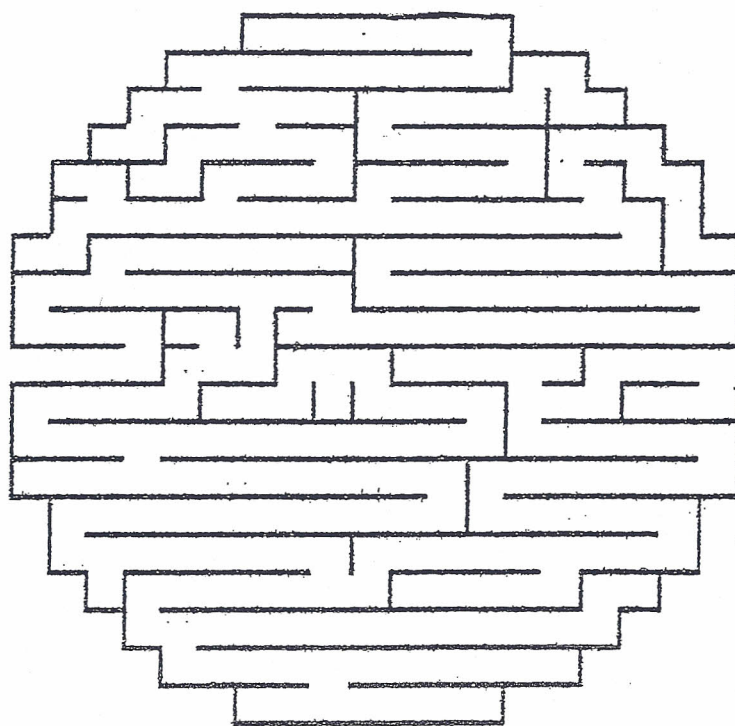
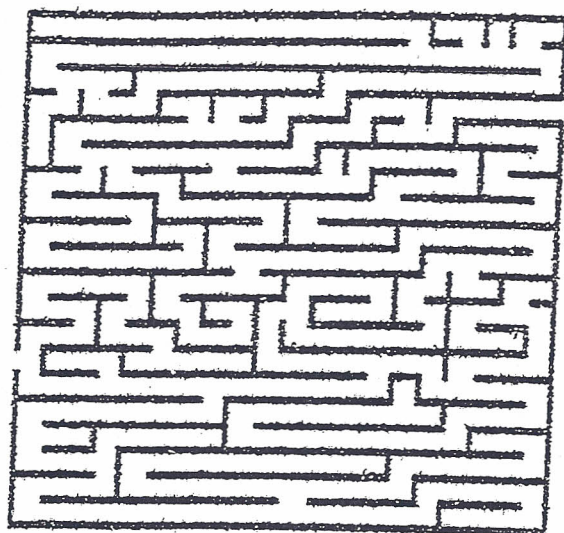
WORD LIST

AERATION
HATCHERY
RESTAURANT
BROOD
HUMPHREYS
SCALE
FEEDER

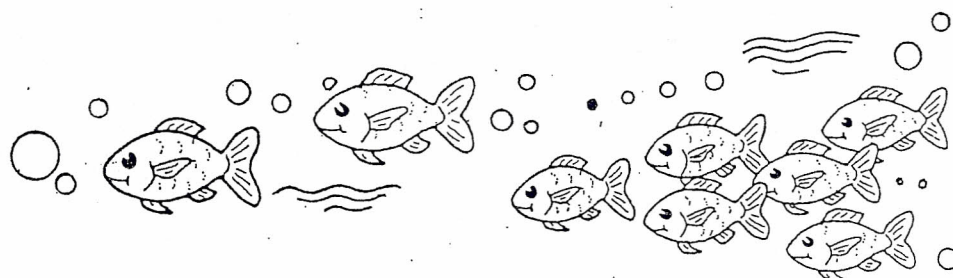
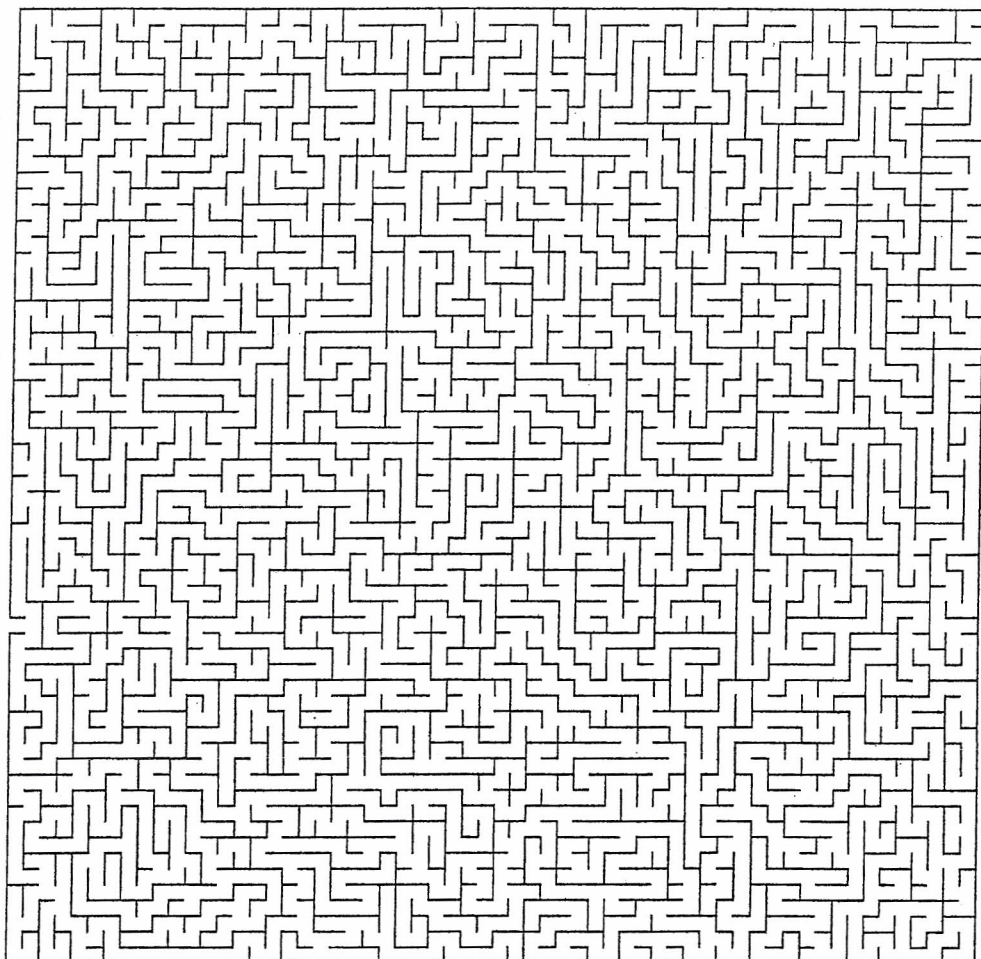
EGGS
OXYGEN
SUPERMARKET
FARM
PELLETS
TANK
HARVEST

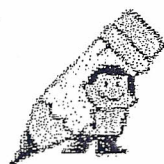
FINGERLING
POND
VAT
FRY
TRACTOR
CATFISH
SEINE

Catch the Catfish

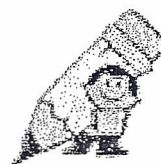


Catch the Catfish





Catfish Word Search



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



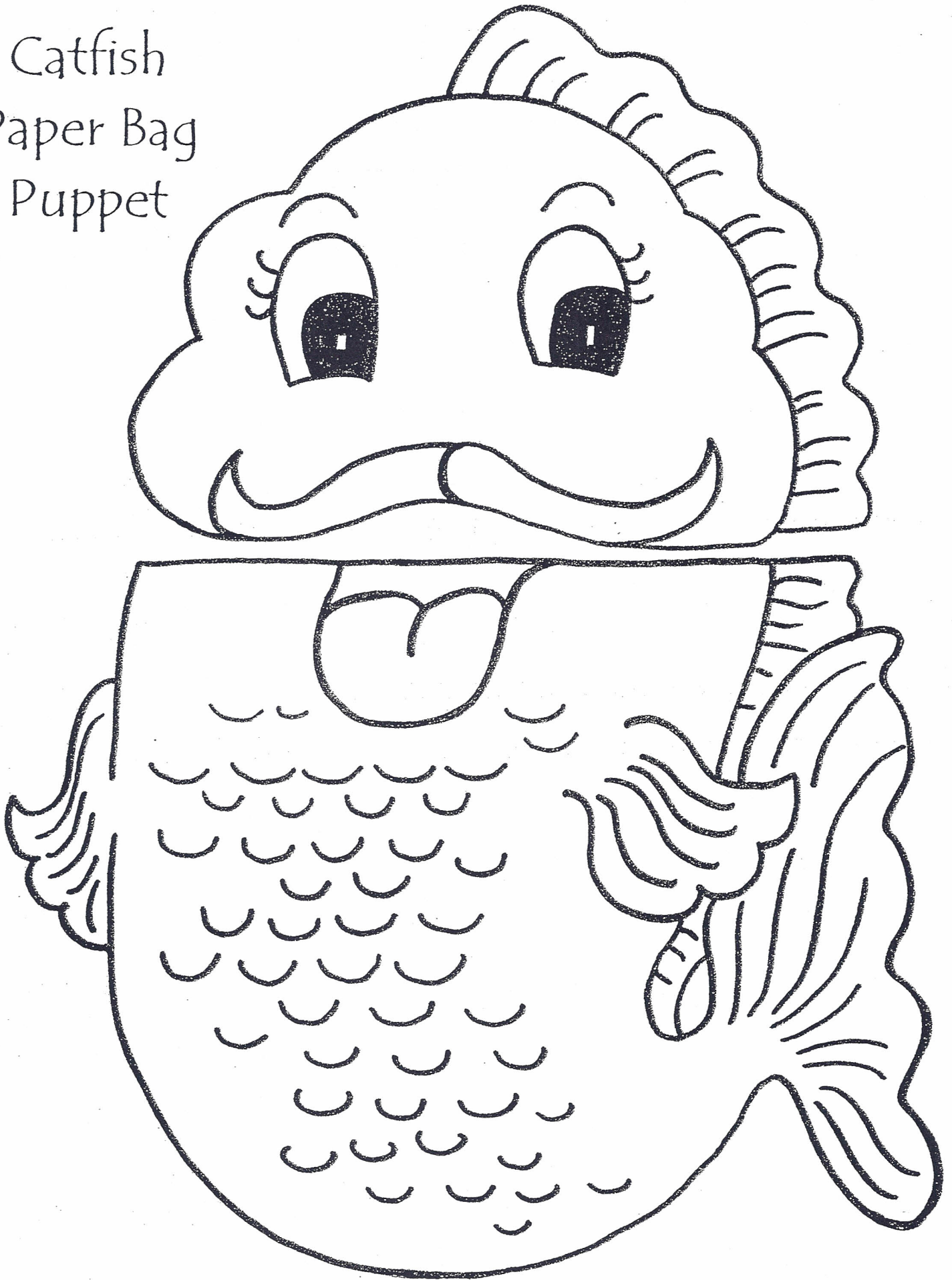
WORD LIST

AIR
TANK
PLANT
FEED

EGGS
BROOD
TRACTOR
POND

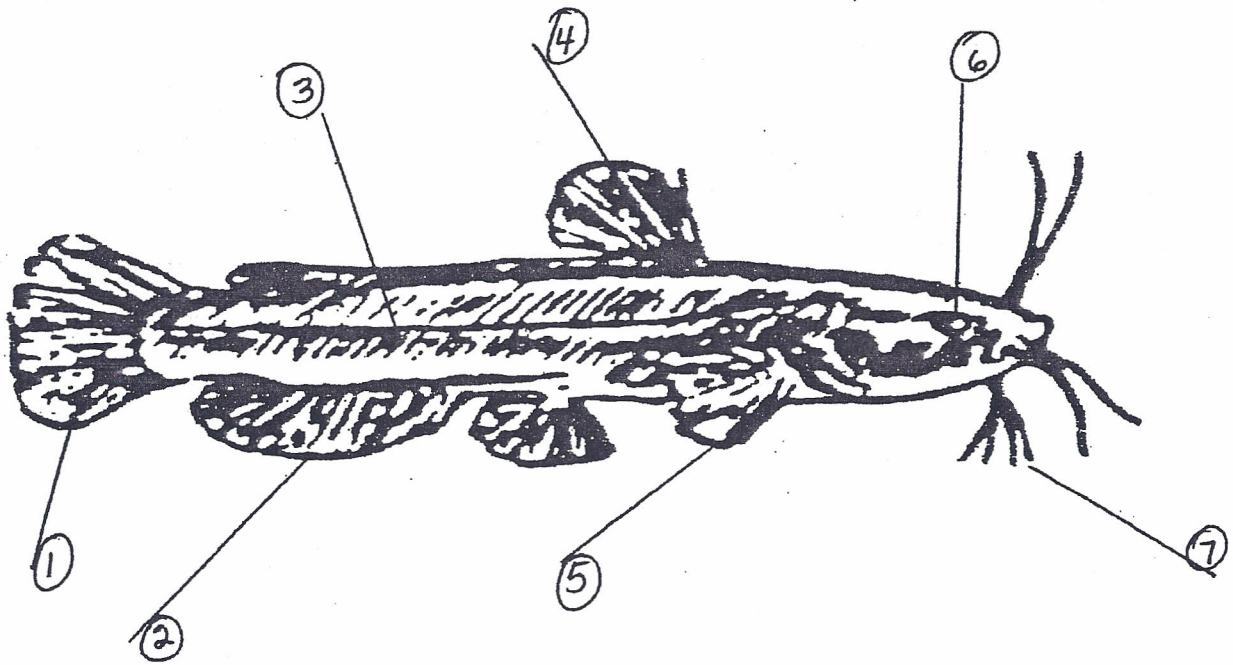
NET
FARM
CATFISH
VAT

Catfish
Paper Bag
Puppet



Name _____

Label the Parts

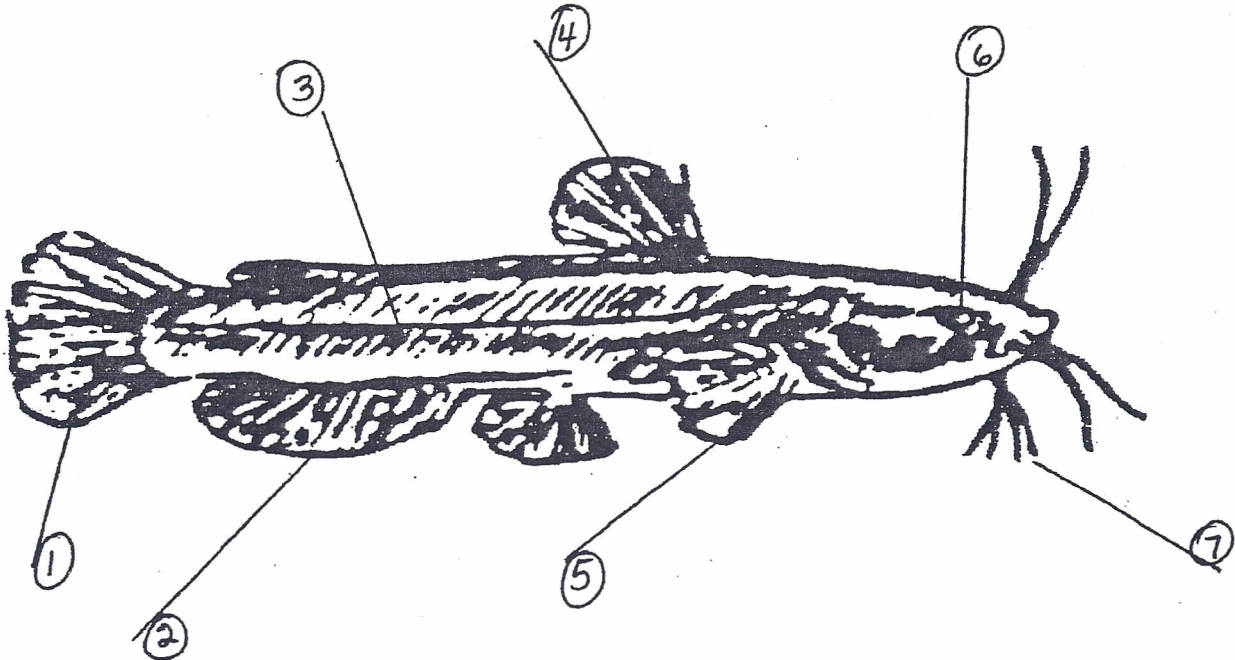


CATFISH

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Name _____

Label the Parts
Answer Key



CATFISH

1. Caudal Fin
2. Anal Fin
3. Lateral Line
4. Dorsal Fin
5. Ventral Fin
6. Eye
7. Barbels



DO FISH HEAR?



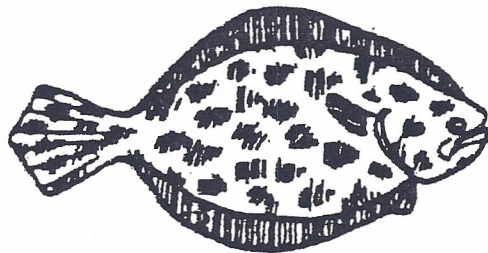
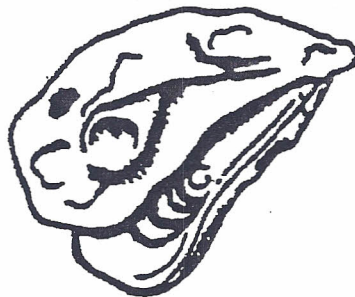
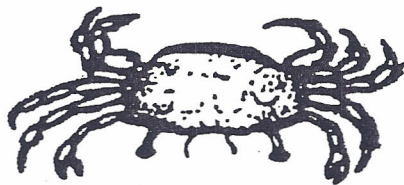
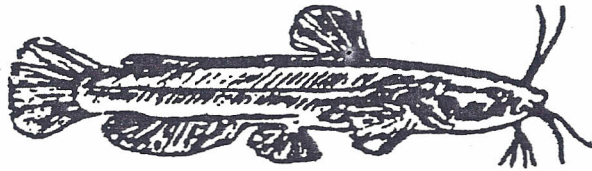
How do creatures without external ears, like fish, hear? Fish have a lateral line that runs down the side of their body. It is believed that this line of nerve receptors detects pressure and sound that travel through water.

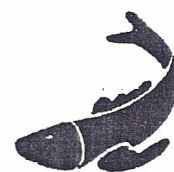
Complete the following to prove this theory.

Demonstrate the movement of waves through water by pouring 1 inch of water into a rectangular glass baking dish. Place the dish under a desk lamp and gently touch the surface of the water. Observe and record the movement of the water. Tap on the side of the dish, and determine if the sound is transmitted through the water.

Name _____

Measure each of the following in inches and centimeters.

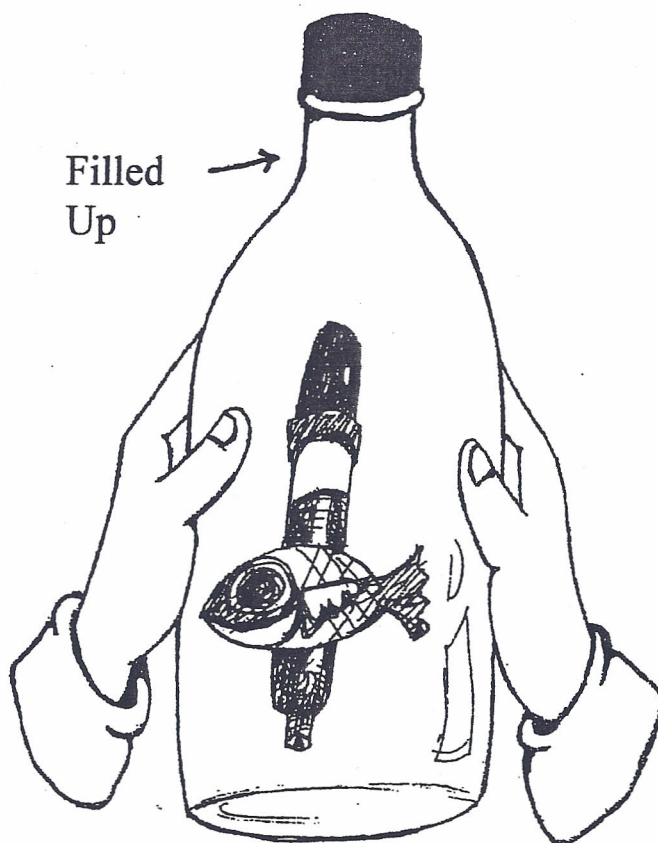




HOW DO FISH MOVE?

Demonstrate how the amount of air in a fish's swim bladder causes the fish to move up and down in water.

Fill a plastic soft-drink bottle with water until it overflows. Partially fill a glass eyedropper with water and drop the eyedropper into the bottle of water. If the eyedropper sinks, remove it, squeeze some of the water out and put it back in the bottle of water. Put the cap on the bottle, and squeeze the sides of the bottle with your hands. Release the bottle. The moving of the water in and out of the dropper changes the volume of air inside the eyedropper and thus causes the dropper to rise and fall in the water. Attach a cardboard cutout of a fish to the eyedropper and display the bottle with your project.



CATFISH FARMING VOCABULARY

aeration	food fish	gills	nets	seine
broodfish	floating pellets	grading	paddlewheel	
fingerlings	fry	harvest	processing	

1. A _____ is a large fishing net with floats along the top and has weights on the bottom that is used to harvest fish.
2. _____ are aeration equipment used to make oxygen for fish.
3. _____ are large fish that lay and protect the fish eggs.
4. _____ is getting fish ready to sell by catching, cleaning, and packaging them.
5. _____ are traps made of heavy string that are used to catch fish.
6. _____ is used to make oxygen for fish.
7. _____ is the gathering of fish.
8. _____ are fish that have just hatched.
9. _____ are the small balls of fish food that float on top of the water.
10. _____ is grouping the same size fish together.
11. A _____ is a place where fish eggs are brought to hatch into baby fish.
12. _____ are small, young fish.
13. _____ are fish lungs.
14. _____ are the catching and eating size fish.

Fish in a Bottle

Skills: Language Arts, Science

Objective: Students will build fish ecosystems, observe and write about changes they observe.

Background

There are many kinds of fish. Some have bones, but others have only cartilage. Some fish can only live in oceans (salt water), and some can only live in fresh water. In Oklahoma we have no bodies of salt water but we have plenty of fresh water lakes and rivers. In fact, Oklahoma has more man-made lakes than any other state. We have over 1 million surface acres of water and 2,000 more miles of shoreline than the Atlantic and Gulf coasts combined.

Most fish grow in natural conditions like rivers and lakes, but in some places there are actually fish farms. Fish farming is called "aquaculture." The increasing cost of fishing natural waters and the rising demand for fish has contributed to an interest in aquaculture. It is one of the fastest growing segments of US agriculture.

Aquaculture has been around for centuries. It may have been practiced in China as early as 2000 BC. The Romans built fish ponds during the 1st Century AD and during the Middle Ages fish pond building, by religious men, was widespread throughout Europe.

The channel catfish is the primary species of farm-raised fish in the US. The top commercial catfish-producing states are Mississippi, Arkansas, Alabama, and Louisiana. Catfish farming is a very small part of total agricultural production in Oklahoma, even though the grandparents of most of the channel catfish raised in the US are probably from Oklahoma.

Any body of water that can be confined or controlled is a potential fish farm. Some land that is unsuitable for other food production purposes may be adaptable to fish farming.

Channel catfish can be classified in one of four groups while at the farm: brood fish—the fish that produce offspring; fry—the newly hatched fish; fingerlings—young catfish; and marketable fish. Catfish are usually marketed when they are about 18 months old, after they have reached between 1 and 1 1/2 pounds.

The life of a farm-raised catfish begins with the careful selection and mating of two genetically superior catfish. Once eggs are laid and fertilized they are placed in controlled hatching tanks. Their water and food are monitored around the clock.

After 18 days the baby catfish are strong enough to be transferred to the outdoor ponds. Varying in size from five to 20 acres, these ponds are four to

P.A.S.S.

GRADE 1

Writing—4.1,3; 6.3c

Science Process—3.2; 4.3

GRADE 2

Reading—3.1

Science Process—3.2; 4.3

GRADE 3

Science Process—3.2; 4.3

Life Science—2.1,2

Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, 4-H Youth Development, in cooperation with the Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma State Department of Education.

Oklahoma Ag in the Classroom
Oklahoma 4-H Programs
205 4-H Youth Development
Oklahoma State University
Stillwater, OK 74078
405-744-8889 <http://www.agclassroom.org/ok>



<http://www.agclassroom.org/ok>

Materials

red pencils

blue pencils

(for each group)

two 2-liter soda bottles

dechlorinated water

goldfish or guppies

aquatic plants—elodea,
duckweed

water snails

sand

Edible Aquarium

Make blueberry gelatin by adding 1 1/4 cups of cold water with ice cubes to a package of powdered mixture. Stir until thickened, and add gummy fish and fruit cocktail. Serve in individual clear cups.

Community Involvement

Visit a fish hatchery, if you have one in your area.

five feet deep and are fed by a flow of cool water.

The young fish are fed twice daily. Their food is made from soybeans, corn, wheat and fish meal.

When they are ready for harvest, the catfish are seined out of ponds (caught with nets) and placed in aerated tank trucks for live shipment to the processing plant.

The channel catfish does not have scales. Its color depends on the color of the water where it lives. In clear water it may look almost black. In muddy water it may be a light yellow.

Catfish move around mostly at night— just after sunset and just before sunrise. During the daytime they hide. Like other animals, channel catfish need oxygen to live. They use oxygen for energy production and to help build all the various parts of the body. In water there is only about 25 percent as much oxygen as there is in the air. To get oxygen, fish must use more energy than those of us who breathe air. For this reason, fish have well-developed breathing organs called gills. Gills work kind of like our lungs. They take oxygen from the external environment and get rid of toxic gaseous waste—carbon dioxide. Water passes over the gill surface where oxygen diffuses into the blood and carbon dioxide diffuses out. Fish that are stressed or are pursued by a predator need more oxygen than fish at rest.

Like other food animals, fish provide us with protein, which our bodies need.

Language Arts

1. Read and discuss background.
 - Ask students to share what they know about catfish.
 - Have students use their red pencils to cluster this information.
 - As you share background information, write some statements containing new information on the chalkboard, and have students cluster this information with the blue pencils.
2. Discuss vocabulary words, and have students work the crossword puzzle included with this lesson. Answers: Down— 1.farm; 6. crawfish; 7. gills; 8. eggs. Across— 1.fin; 2.mother; 3.school; 4.scales; 5.fry.
3. Using chalk, crayons or colored pencils, have students draw pictures of the fish ecosystem in the aquarium and write about the activity. Possible subjects include:
 - Did the fish live or die?
 - Did the plants live, die or change color?
 - Did the fish eat the plants?
 - What kinds of fish lived in the ecosystem?
 - What kinds of food did the fish eat?

Science

1. Hand out Student Worksheet A, and have students fill in the blanks to identify the parts of a catfish.
2. Divide students into groups of four or five. Enlist the help of parents or

older students to help each group build a fish ecosystem.

—Cut the top off one pop bottle at the shoulder (where it tapers).

—Cut the base off another bottle, and score it with holes. This is the cover.

—Pour sand two inches deep into the bottom of the first bottle. Slowly add water (to minimize sand displacement).

—Root three elodea stalks in the sand, and sprinkle a small amount of duckweed onto the water's surface.

—Let the sand settle overnight. Next day, add two guppies and two snails.

—Over the period of a week, have students record daily what they see. Has there been any population change? Plant growth? Color or changes in the water?

—At the end of the week, have the groups report on changes in their ecosystems.

3. If you have a classroom aquarium, add a catfish (if you don't already have one). Give the catfish a few days to adjust to its new environment, and then have students observe and record its behavior and movements. Have students answer the following questions:

Does the catfish swim alone or with other fish?

Does the catfish eat alone or with other fish?

Does the catfish move around or stay in one place?

If it stays in one place, where does it like to stay?

4. Ask students to name characteristics of fish that make them different from humans and some that make them the same. Write the answers on the chalkboard. Have students make Venn diagrams showing the similarities and differences.
5. Produce algae, and study its growth.
- Fill a clean, well-rinsed jar with water from a river or pond.
- Cover the jar by carefully taping black paper with a one-inch square hole cut in it or paint it black, leaving a one-inch square hole.
- Leave the jar in bright sunlight or shine a bright light on the side with the open space.
- In 2-3 days remove the algae that has grown toward the light using an eye dropper and examine it under a microscope.
6. Create a simple indoor water garden in a large plastic container or galvanized tub (or anything that will hold water).
- Place the water garden in a sunny area, and purchase aquatic plants from a garden center.
- You will need grasses under the surface, floating plants on the surface, fish and aquatic snails, which work as a cleaning crew to remove algae from the water.
- To keep algae growth down, make sure 70 percent of the water is covered by plants, which deprive algae of the sunlight it needs to grow.
- Place concrete blocks or bricks in the bottom of the container to raise aquatic plants to the correct height.
- Add water.

Vocabulary

aerate—to expose to or supply or fill to the limit with air

aquaculture—the cultivation of living things (as fish or shellfish) naturally occurring in water

aquatic—growing or living in or often found in water

bone—a hard material which is largely calcium phosphate and of which the skeleton of most vertebrate animals is formed

brood fish—young fish, hatched or cared for at one time

cartilage—an elastic tissue which composes most of the skeleton of the vertebrate embryo and much of which is changed to bone later in life

fingerling—a small fish especially up to one year of age

fry—recently hatched fish,

gill—an organ (as of a fish) of thin plates or threadlike processes for obtaining oxygen from water

import—to bring (as goods) into a country from another country usually for selling

oxygen—a reactive element that is found in water, rocks, and free as a colorless tasteless odorless gas which forms about 21 percent of the atmosphere, that is capable of combining with almost all elements, and that is necessary for life

Vocabulary (Cont.)

seine—a large fishing net kept hanging in the water by weights and floats

stock—to provide with livestock (or fish)

- Before adding plants, allow the water to stand overnight so the chlorine will dissipate.
- Set plants, in their pots, on the bricks so the tops of their containers are under the surface of the water.
- Add submerged grasses after placing the container plants.
- Once the pond has mellowed for a week, add snails and a few fish.
- Keep the water level topped off.
- If the miniature ecosystem is working properly, there should be no need to remove the water for cleaning.
- Have students observe the water garden and record their observations.
- Try different variables to see what happens (changes in light, adding or removing fish, plants, etc.)

Extra Reading

Ehlert, Lois, *Fish Eyes: A Book You Can Count On*, Harcourt Brace, 2001.

Ling, Mary, and Jerry Young, *Amazing Fish* (Eyewitness Juniors, No. 11), Knopf, 1991.

Littledale, Freya, and Winslow Pinney Pels, *Magic Fish*, Econo-Clad, 1999.

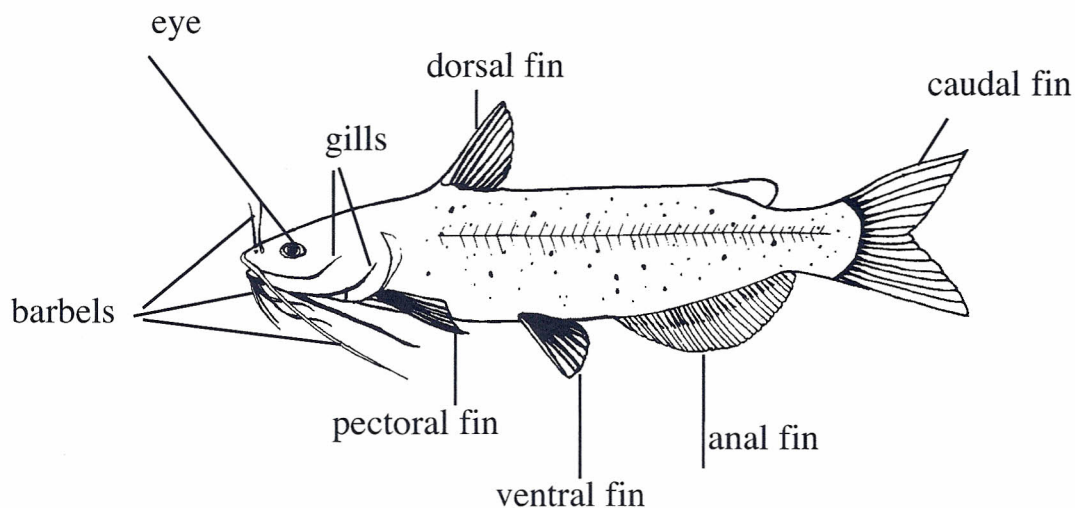
Pfister, Marcus Pfister, and J. Alison James, *The Rainbow Fish*, North South, 1996.

Wright, Catherine, and Howard Fine, *Steamboat Annie and the Thousand-Pound Catfish*, Philomel, 2001.

Name _____

Fish in a Bottle

Catfish Anatomy



Fill in the blanks.

p _ c _ _ _ a _ fins

1. Sight organs located on the head.

_ y _ _

6. Each of the paired fins on the lower side of the body, near the head.

v _ _ _ a _ fins

2. Slender, whiskerlike sensory organs on the head.

b _ r _ _ _ s

7. The tail fin.

c _ _ d _ _ fin

3. The fin on the upper side of the body.

d _ _ s _ _ fin

8. Fin on the lower side of the body, near the tail.

_ n _ _ fin

4. Fleshy organs used for breathing.

_ _ l _ _

5. Each of the paired fins on either side of the body, near the head.

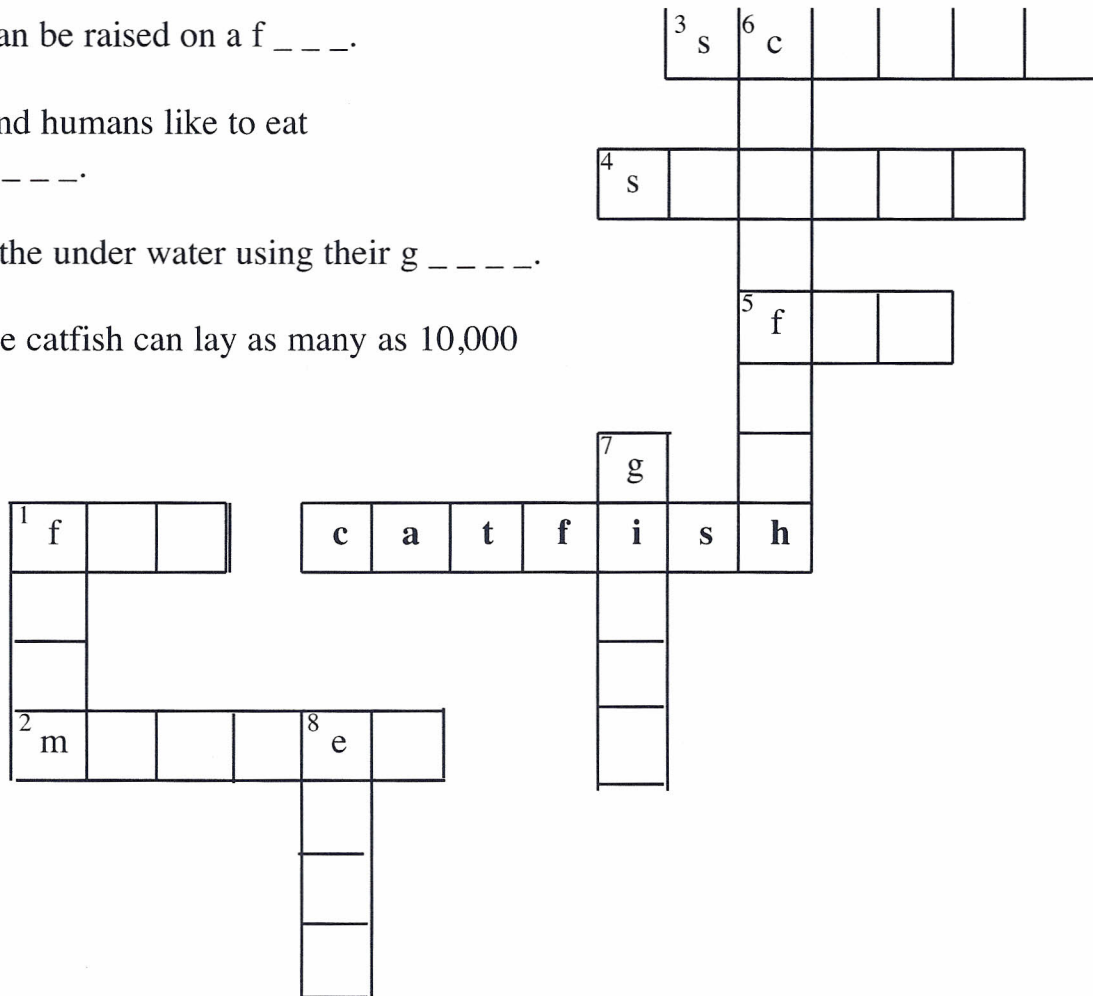


Name _____

Fish in a Bottle

Down

1. Catfish can be raised on a f _ _ _.
6. Catfish and humans like to eat
c _ _ _ _ _ _.
7. Fish breathe under water using their g _ _ _ _.
8. the female catfish can lay as many as 10,000
e _ _ _.



Across

1. The f _ _ sticks out of the fish's body. It helps the fish swim.
2. The m _ _ _ _ catfish protects the eggs from danger.
3. Young catfish swim together in a s _ _ _ _.
4. Fish s _ _ _ _ are hard, thin, overlapping structures that do not cover the body of the catfish.
5. Young catfish are called f _ _.



EDIBLE AQUARIUM

1. Make blueberry gelatin by adding water with ice cubes to the powdered mixture.
2. Stir until thickened, and add the gummy fish and fruit cocktail.
3. Place jelly beans in the bottom of the goldfish bowl or cups to look like gravel. Pour the gelatin mixture over a knife to keep from disturbing the gravel in the cups or goldfish bowl.
4. If desired, place parsley into the gravel to serve as aquatic plants.

MATERIALS

jelly beans

powdered
blueberry gelatin
mixture

gummy fish

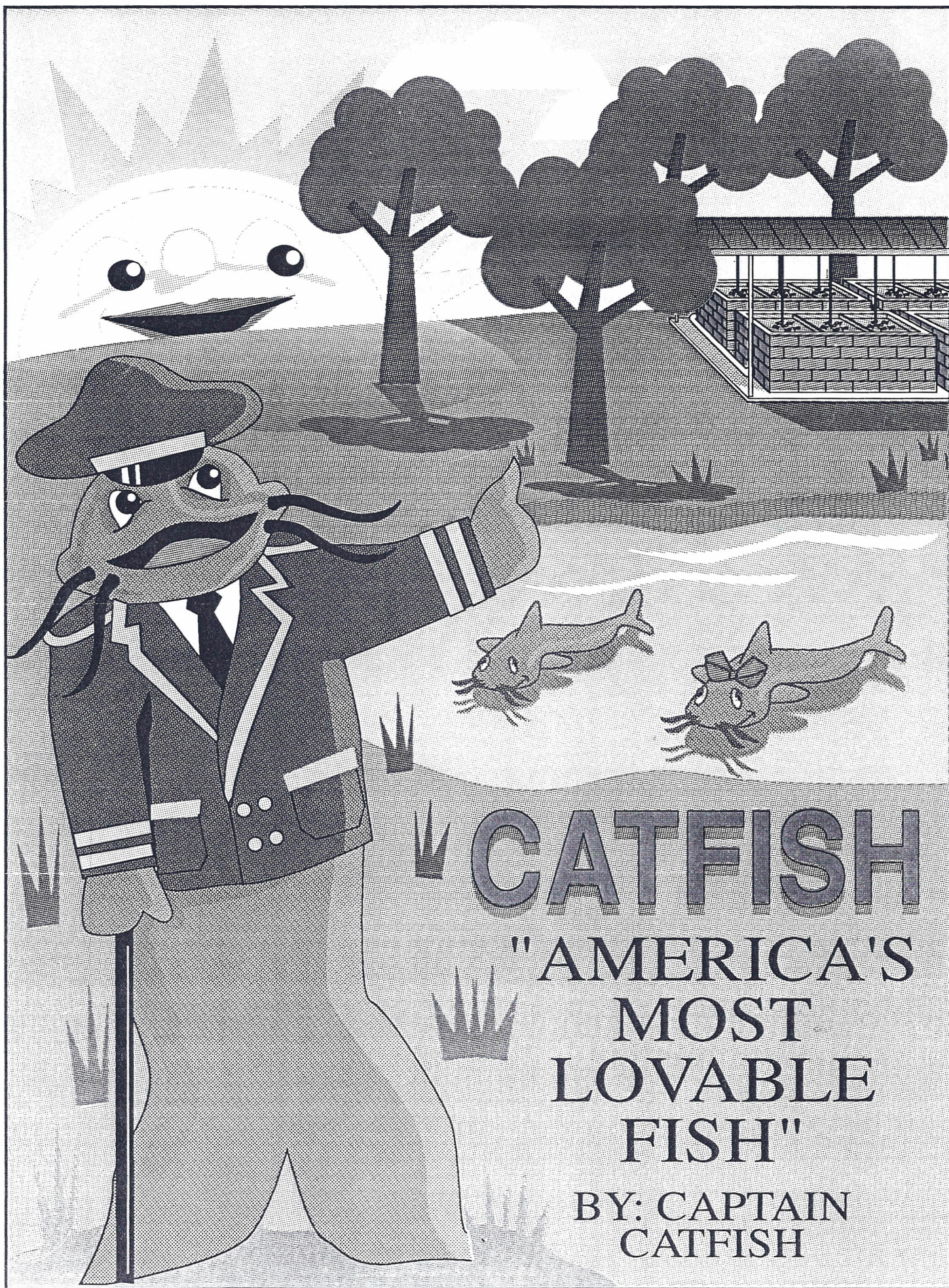
fruit cocktail

parsley sprigs
(optional)

clear plastic cups
or new goldfish
bowl

ice cubes

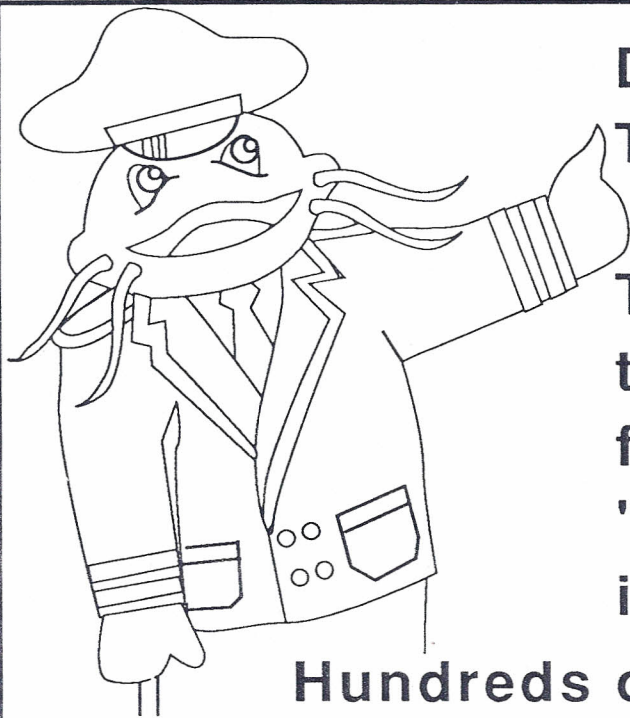
cold water



CATFISH

"AMERICA'S
MOST
LOVABLE
FISH"

BY: CAPTAIN
CATFISH



**Dear Students,
Teachers, and Parents,**

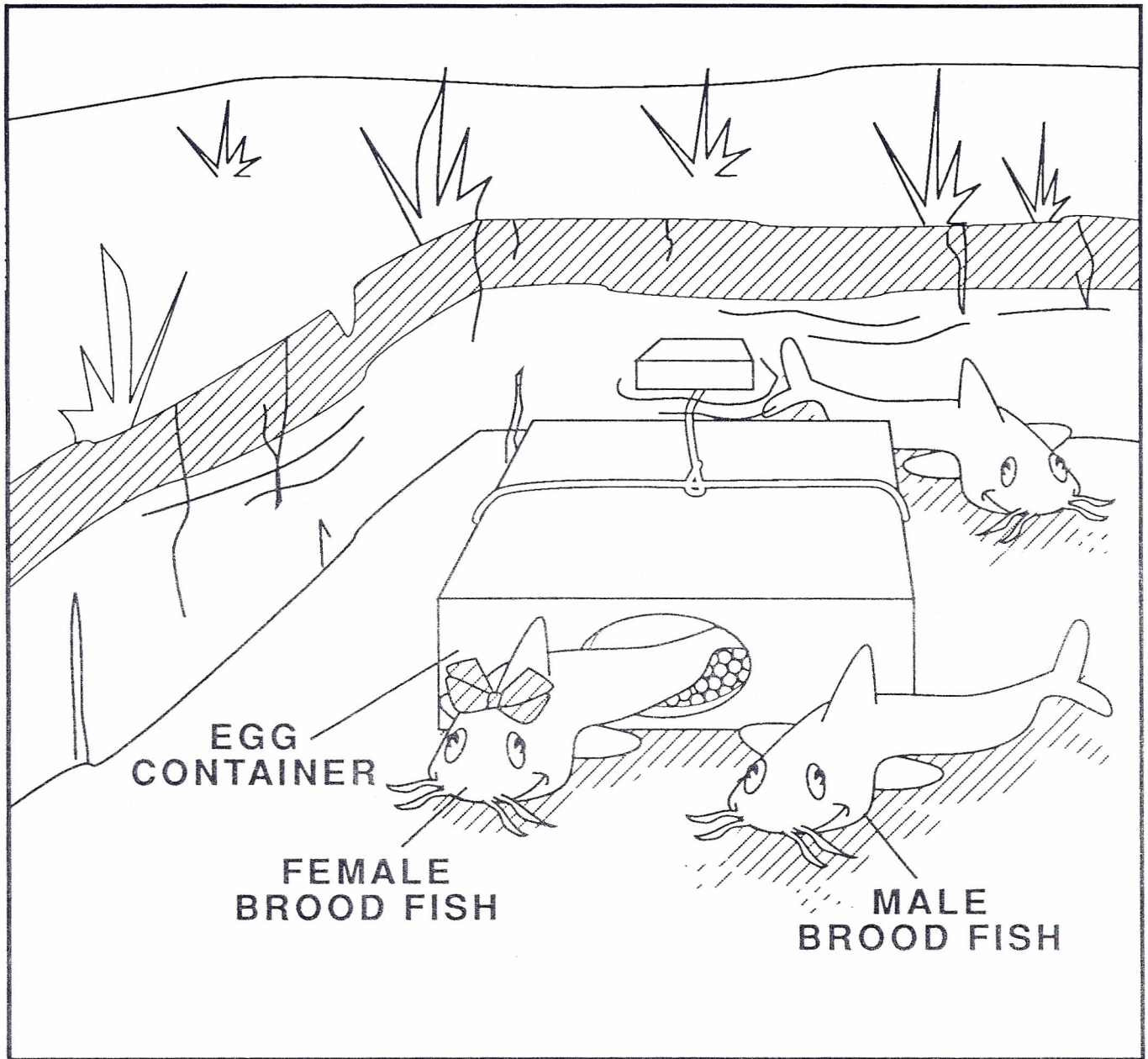
**Thanks for taking the
time to learn about
farm-raised catfish,
"the most lovable fish
in America!"**

**Hundreds of millions of pounds
of farm raised catfish are grown in the
U.S.A. each year. The demand for such a
clean, nutritious, delicious, and
available food increases almost as
quickly as people like you discover how
good farm raised catfish taste.**

**The Catfish Women of America hope
that you find my story about how farm
raised catfish are grown both
educational and entertaining, and that
you will "eat more catfish." I promise, it
will make your mouth water!**

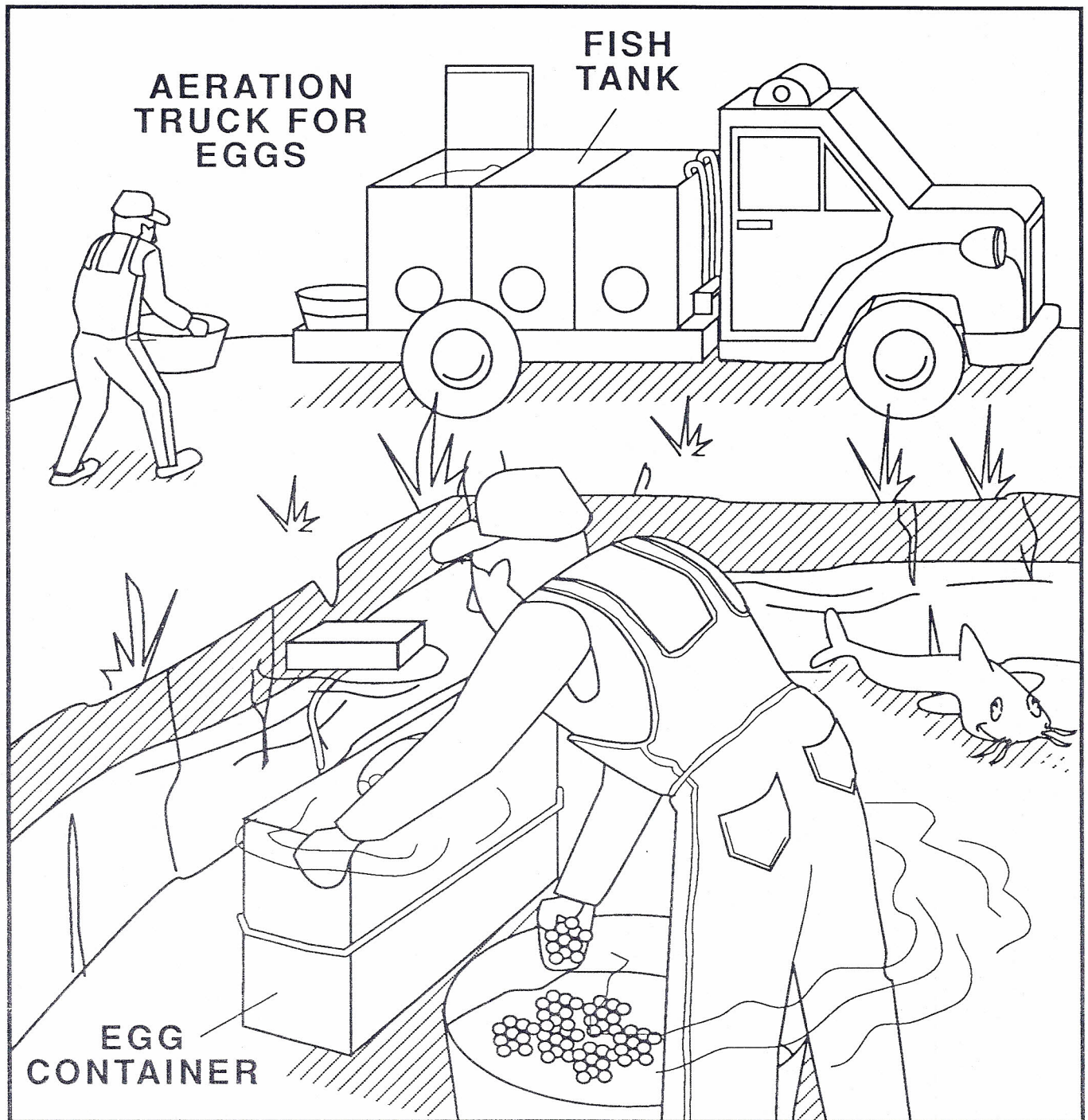
**Your friend,
Captain Catfish**

CATFISH SPAWNING



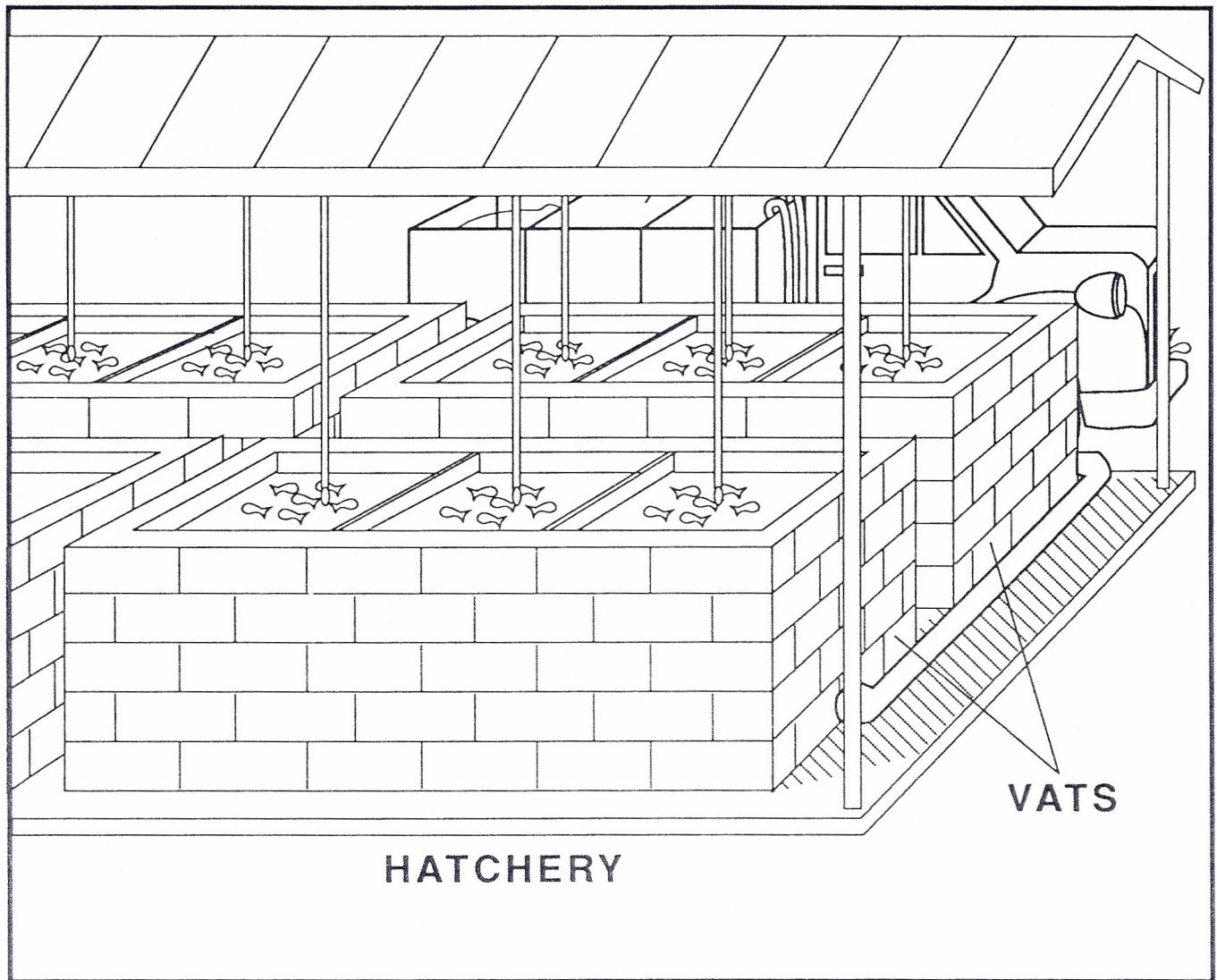
In the spring when the water temperature in a catfish pond reaches around 75° degrees, the female brood fish lays catfish eggs in the containers that farmers have placed in the catfish brood pond.

CATFISH EGGS HARVESTED



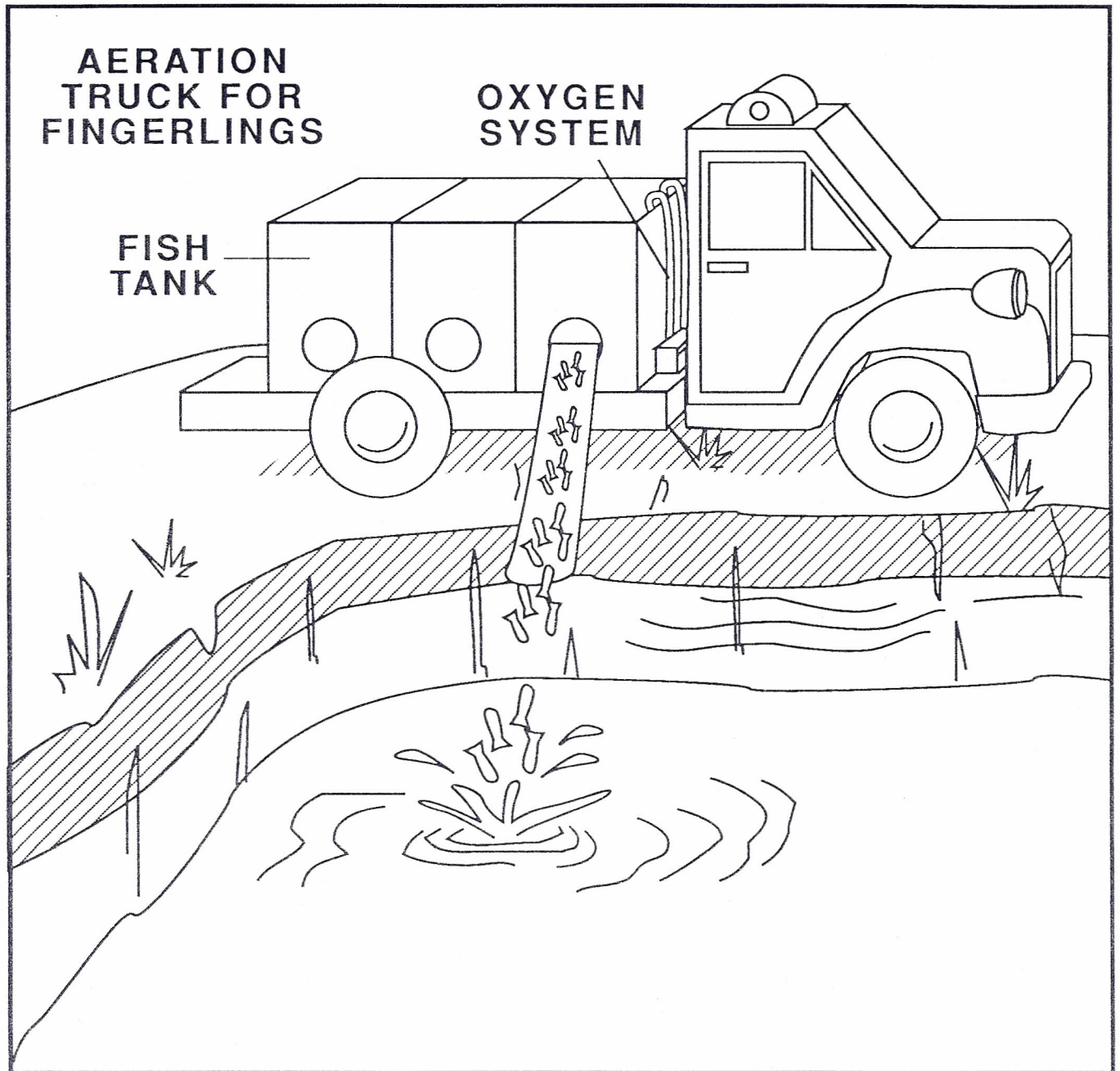
Catfish farm workers come in a special aeration truck and take the eggs out of the containers. They put the eggs in water on the truck and haul them to the hatchery.

HATCHERY



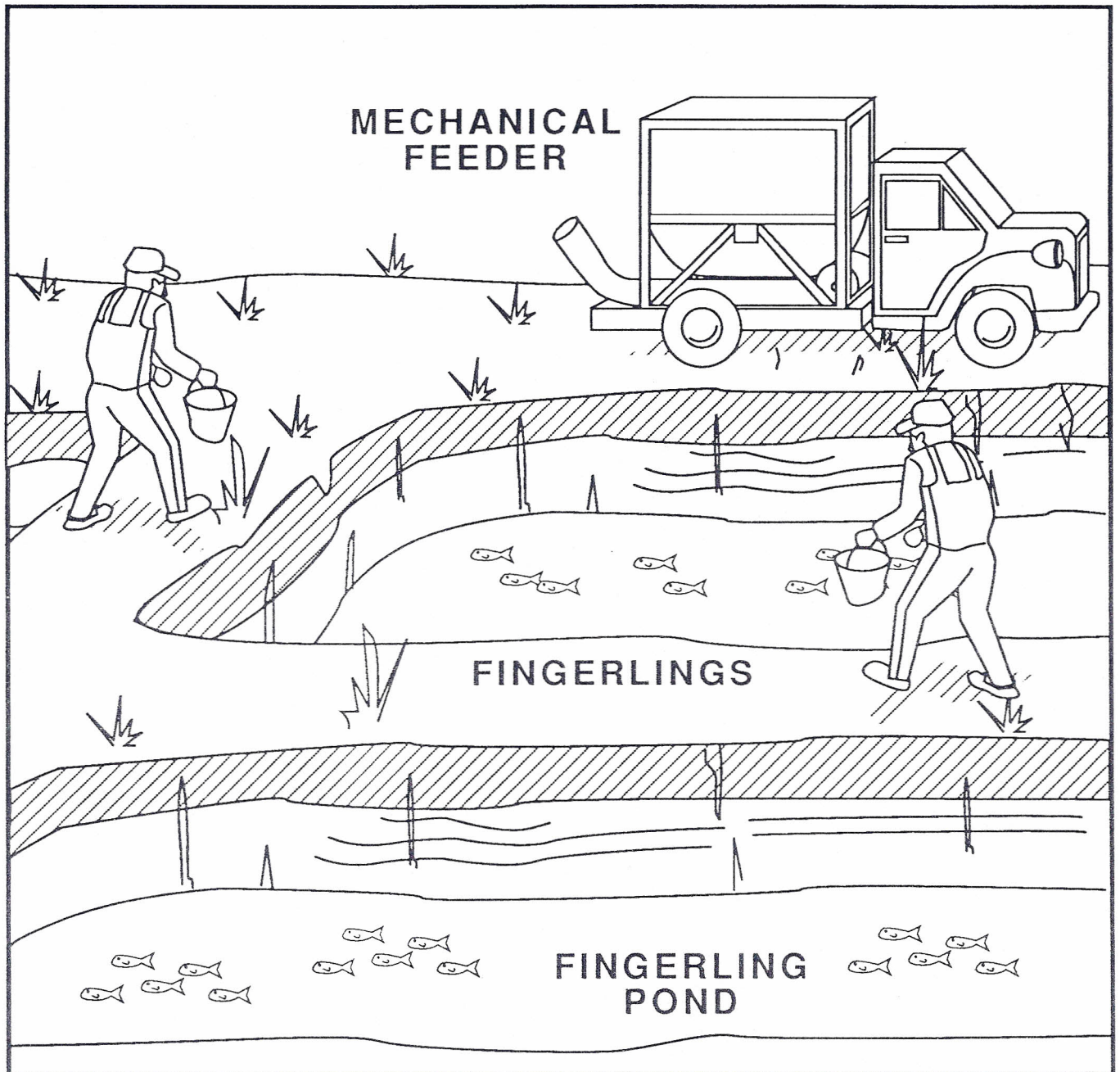
In the hatchery, the water, the oxygen level, and the machinery are kept just right for helping the catfish eggs hatch into baby fry in about seven days. When the fry hatch, they are moved to screen boxes in a big long vat, and are fed a very high protein diet. The fry must be kept very clean and healthy.

BACK TO THE PONDS



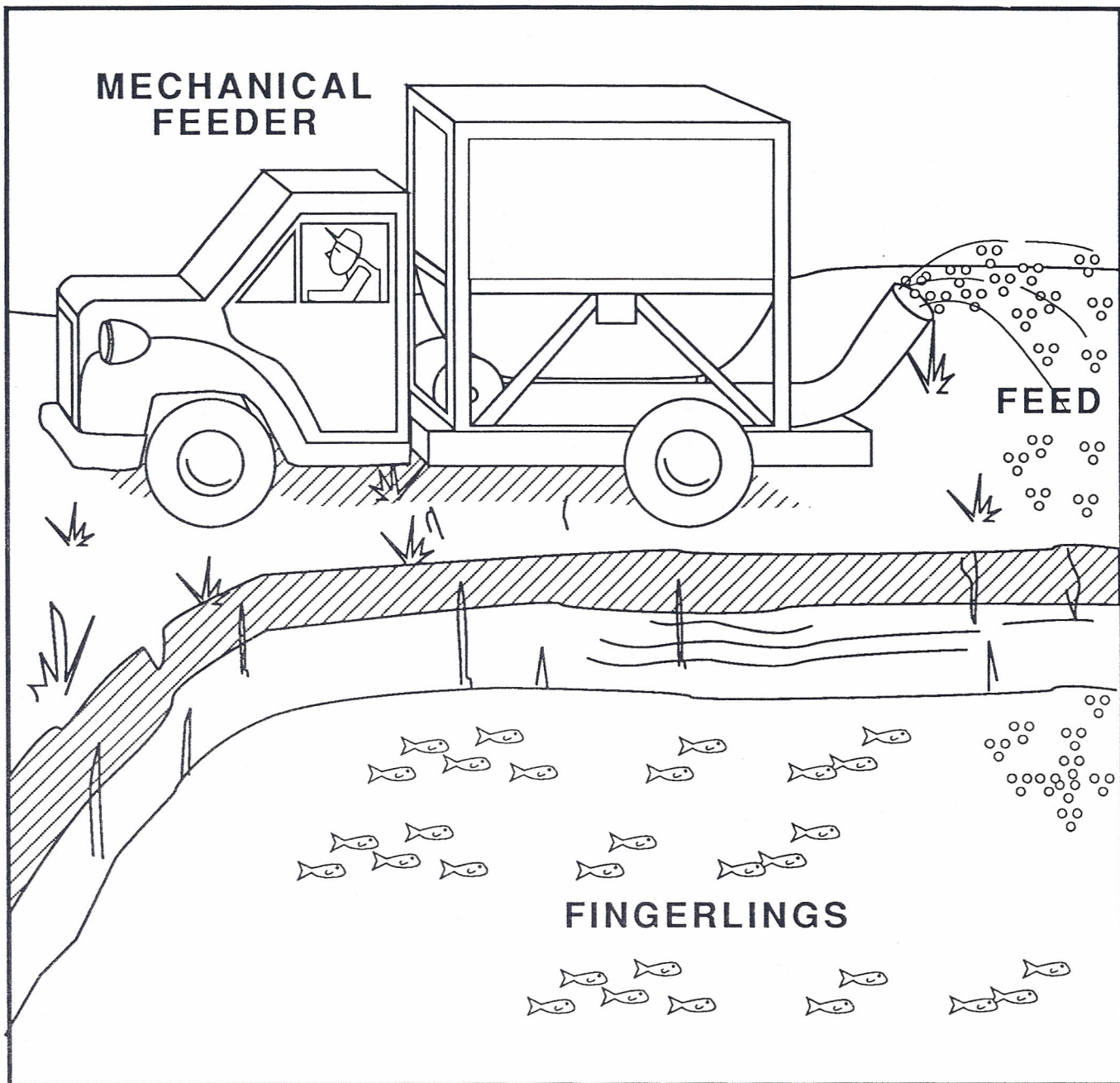
As soon as the tiny catfish are eating well, they are moved to fingerling ponds in a special aeration truck by hatchery workers who know how to move them the right way.

FEEDING THE FINGERLINGS



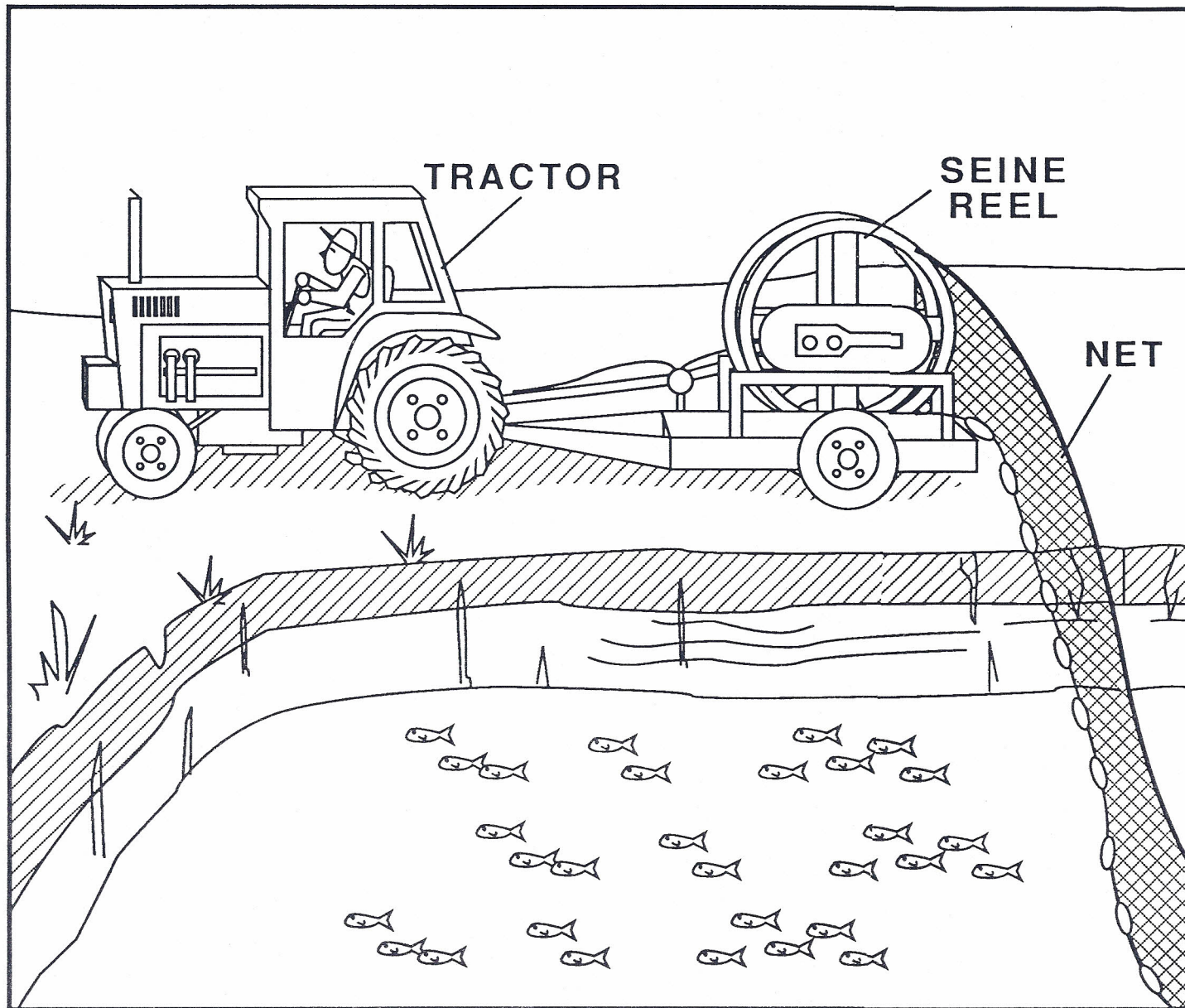
Feeding crews feed the fish in the fingerling ponds every morning and every afternoon. The feeding crews also check the fish very carefully to make sure that they are eating well and are healthy.

FEEDING THE FISH

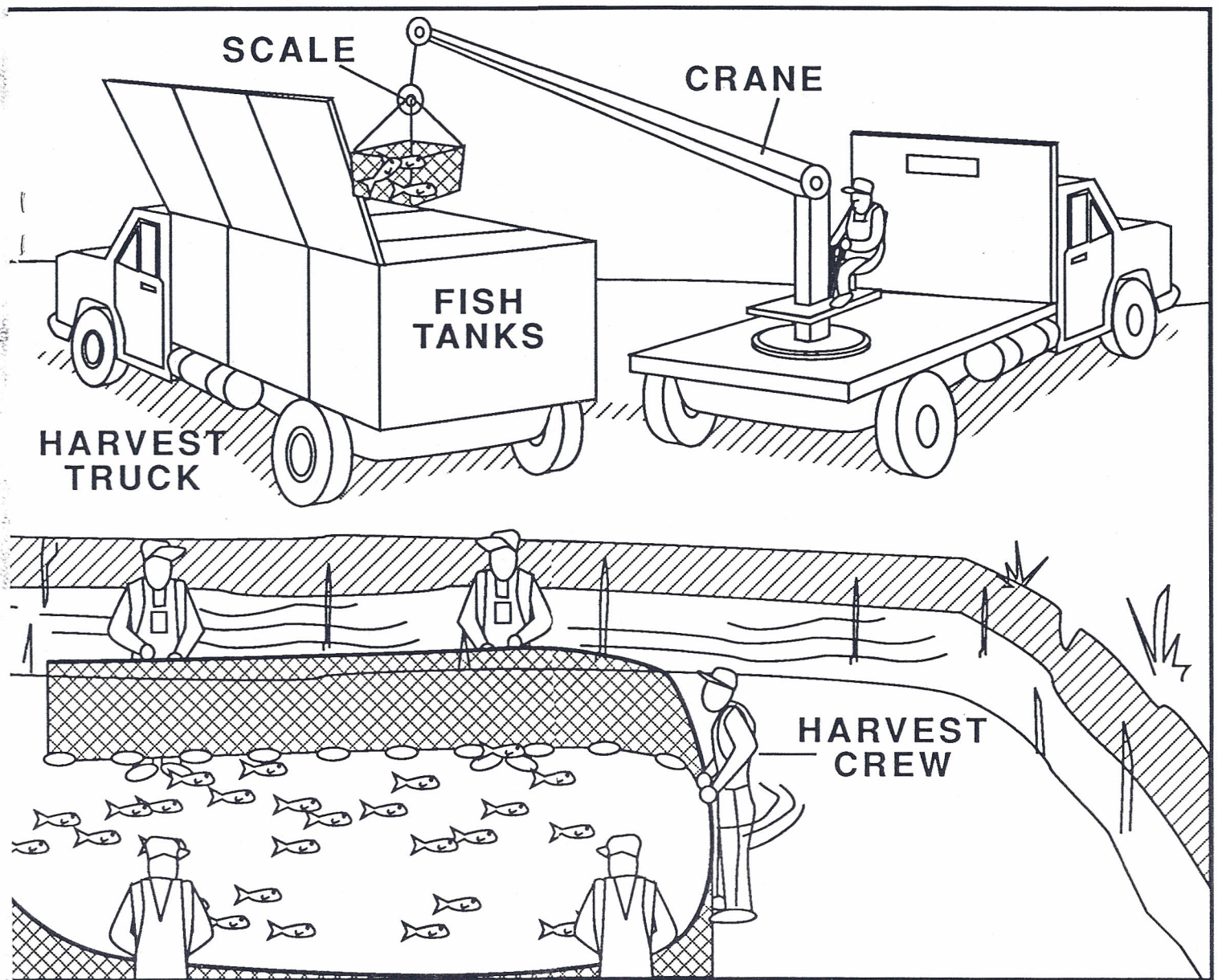


As soon as the fish are seen eating, the feeding crew begins to feed small floating pellets with mechanical feeders instead of feeding by hand.

GROWING AND HARVESTING THE FISH

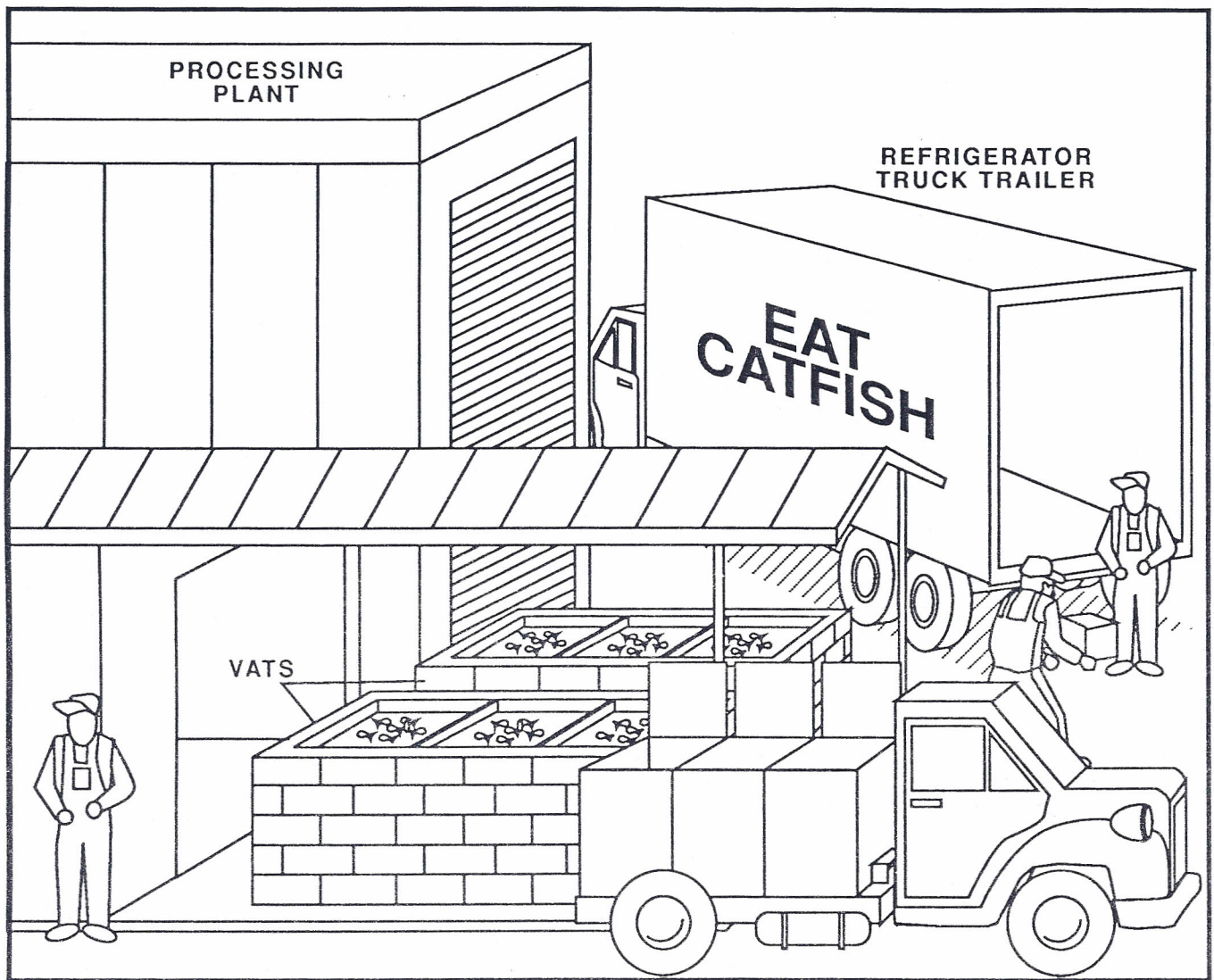


After about six months, the fish grow into fingerlings. The catfish farmer seines the pond and sells the fingerlings to other farmers. The fingerlings are stocked into food size ponds and are fed a high protein diet until they reach about one and one-half pounds each in weight. The farmer then catches a



sample fish and takes it to the processing plant to check the flavor. If the flavor of the sample fish checks out good, a harvest crew comes to seine and harvest the fish. The crew uses a crane truck to load the fish onto an aeration equipped harvest truck and takes the fish live to a processing plant.

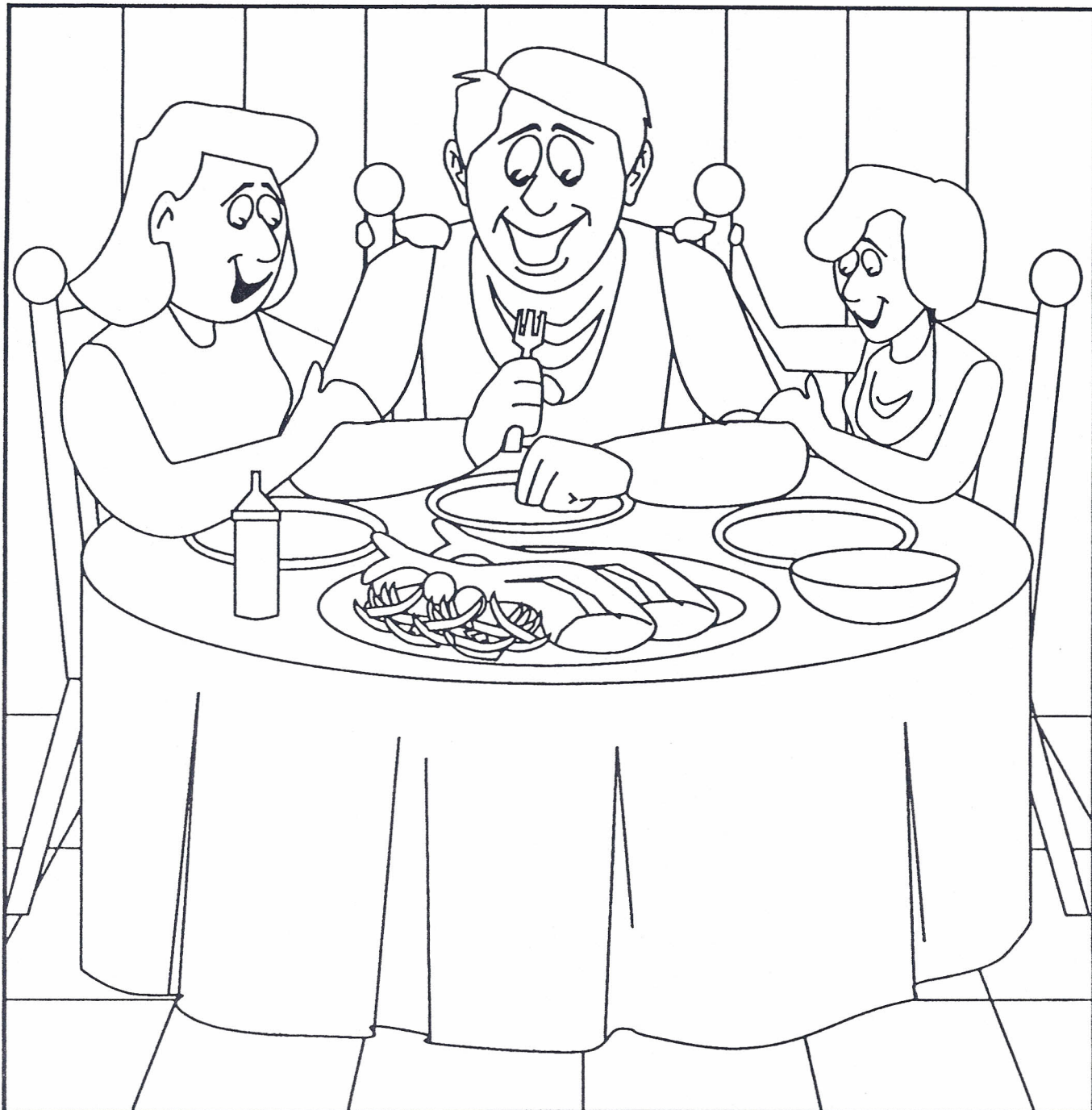
PROCESSING PLANT



At the processing plant, the food size fish are processed and packaged. The packaged fish are loaded onto big refrigerator trucks.

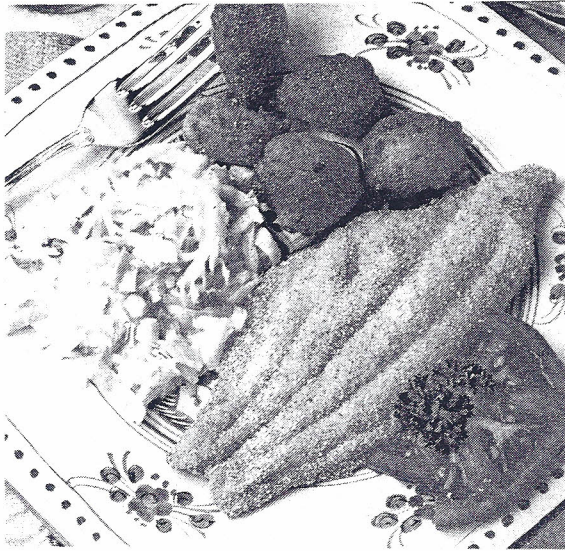
The clean, nutritious, delicious, versatile and available farm raised catfish are trucked all over the U.S.A. to the supermarkets and restaurants.

TIME TO EAT!



**Please remember to "eat more catfish"...
After all, farm raised catfish are "America's
most lovable fish!"**

**Thanks for reading,
"Captain Catfish"**



Catfish, fresh off the farm. Gently rolled in corn meal and deep-fried to a crisp golden brown. Served up with steaming mountains of hush puppies and fried potatoes. If you've never tried catfish, you're in for a pleasant surprise.

Farm-raised catfish is actually one of the sweetest, most finely-textured fish you'll ever have the privilege of tasting.

From a modest beginning in 1968 as one farmer's experiment in supplemental income, catfish farming has become one of the most successful domestication programs ever attempted. Immensely adaptable, the catfish has one of the highest feed yields. While beef yields one pound for every eight pounds of grain fed, the catfish yields one pound for every two pounds of feed and experiments have shown that the yield may increase even more.

THE FISH WITH A PEDIGREE

Unlike other fish, farm-raised catfish are scientifically bred for optimum size, flavor and texture.

The life of a farm-raised catfish begins with the careful selection and mating of two genetically superior catfish. Once eggs are laid and fertilized they are placed in controlling hatching tanks, attendants monitor their water and food around the clock.

After 18 days the baby catfish are strong enough to be transferred to the outdoor ponds. Varying in size from 5 to 20 acres, these ponds are four to five feet deep and are fed by a flow of cool, well water for which the region is famous.

The young fish are fed a commercially prepared high-protein diet of soybeans, corn, wheat, and fish meal in the form of dry pellets. Twice daily, the farmer scatters the floating pellets onto the surface of the water, carefully gauging feeding habits for the slightest hint of problems. Although the catfish is probably nature's most adaptable invention, he still needs constant attention to insure that he will reach market tender, white and tasty.

By the time the catfish are 18 months old they are ready for harvest. Averaging 1 to 1 1/2 pounds live-weight, the catfish are seined out of the ponds and placed into aerated tank trucks for live shipment to the processing plant.

CATFISH FARMING VOCABULARY

AERATION – To make oxygen for fish.

BROODFISH – The large fish that lay and protect the catfish eggs.

FINGERLINGS – Small, young fish.

FOOD FISH – The catching and eating size fish.

FLOATING PELLETS – Small balls of fish food that float on top of the water.

FRY– Just hatched fish.

GILLS – Fish lungs.

GRADING – Grouping the same size fish together.

HARVEST – Gathering the fish.

HATCHERY – A place where fish eggs are brought to hatch into baby fish.

NETS – Traps made of heavy string that are used to catch fish.

PADDLEWHEEL – Aeration equipment used to make oxygen for fish.

PROCESSING – Getting fish ready to sell by catching, cleaning, and packaging them.

SEINE – A large fishing net with floats along the top and weights on the bottom that is used to harvest fish.

FARM-RAISED CATFISH NUTRITIONAL COMPARISONS

	Catfish**	Chicken Breast w/skin	Beef Sirloin	Pork Loin
Calories (kcal)	128	171	158	189
Protein (gm)	15	21	21	20
Fat (gm)	7	9	7	11
Cholesterol (mg)	33	64	70	70
Omega-3* (mg)	100	0	0	0
Sodium (mg)	33	63	65	70

Approximate nutrient content for 3.5 oz. raw. All figures rounded to the nearest whole.

* Omega-3 are fatty acids, credited by many scientists with reducing the risk of heart disease.

** All catfish values from: "Nutrient Composition of Farm-Raised Catfish," by Dr. Joyce Nettleton, Tufts University

Other values: United States Department of Agriculture, AH-8

RESOURCES

CATFISH

BOOKS

"Beware The Fish!"

"Freddy The Fish"

VIDEOS

Catfish Farming In The South
Delta Pride Catfish Story

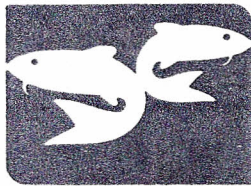
WEBSITES

<http://www.catfish.com>

<http://www.deltapride.com>

<http://www.encyclopedia.com>

<http://msucares.com/aquaculture/catfish/index.html>



CATFISH WOMEN OF AMERICA

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