



DNR

ANADROMOUS FISH

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Anadromous fish are fish that spend most of their lives in the saltwater of oceans and estuaries, but then swim up freshwater rivers and streams to lay their eggs, or spawn. Anadromous comes from the Greek word *anadromos* meaning “running upward.”

Anadromous fish are special in that they can live in freshwater or saltwater. Most other kinds of fish would die if they went from salt to fresh water.

The different kinds of anadromous fish that we have in South Carolina are blueback herring, American shad, hickory shad, white perch, striped bass, shortnose sturgeon and Atlantic sturgeon. The blueback herring

and American shad are most numerous. There are very few shortnose sturgeon, and because of this, it is an endangered species.

Each spring these fish make their migration runs up our rivers in search of good spawning areas.

Anadromous fish might travel over 100 miles up freshwater rivers to reach their spawning grounds. Many of these fish used to travel all the way through the State of South Carolina and into North Carolina to spawn. They have developed over time to be able to find their way through fast-moving water and many other natural barriers. However, man-made barriers, such as dams, are a big problem. When dams are built, a

man-made passageway called a fishway is needed so fish can go around the barrier and get to their spawning grounds.

Fishways have been built for hundreds of years to let migrating fish go by dams on rivers and streams, but biologists and engineers are still working on figuring out the best ways to help fish pass around dams.

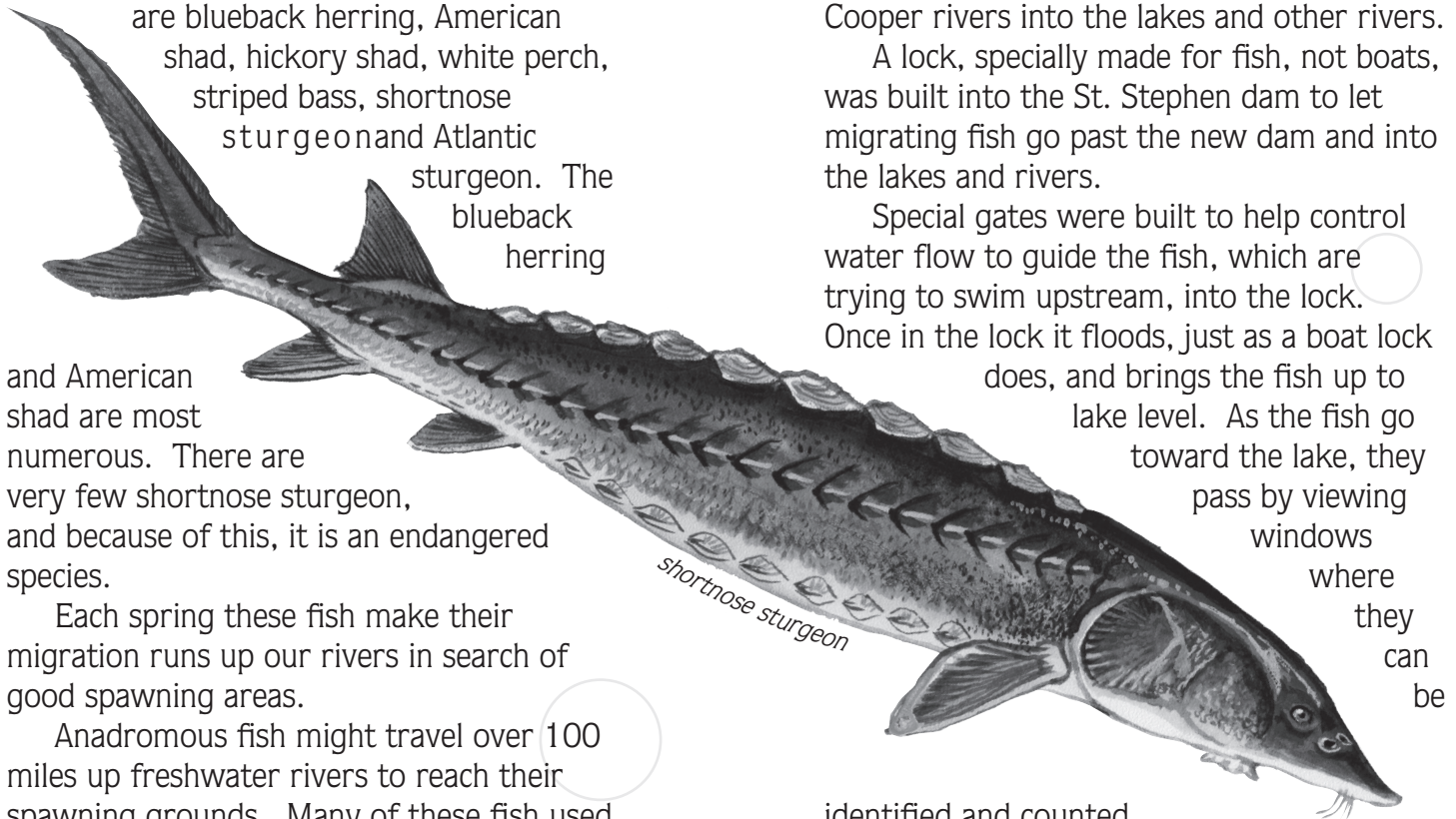
There are a lot of different kinds of fishways such as fish ladders, fish lifts and navigation locks. In the Santee-Cooper system a boat lock and a fish lock are used by migrating fish to go from the Santee-Cooper rivers into the lakes and other rivers.

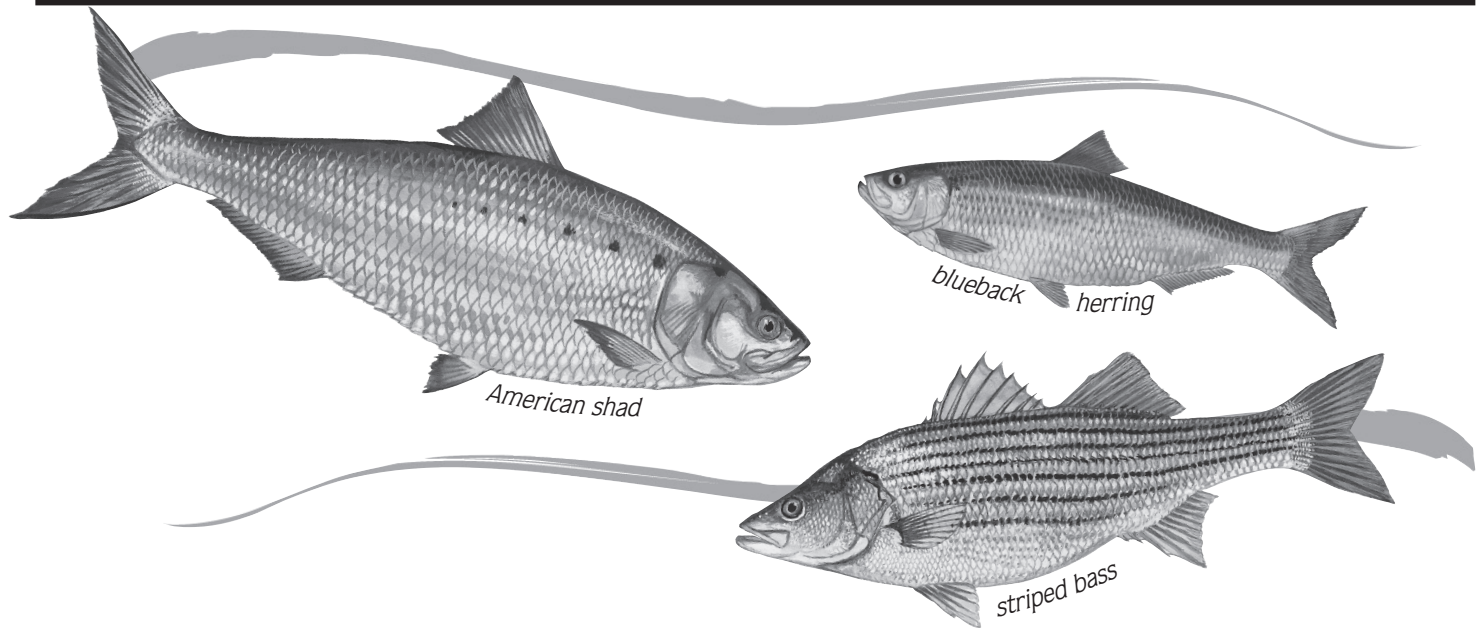
A lock, specially made for fish, not boats, was built into the St. Stephen dam to let migrating fish go past the new dam and into the lakes and rivers.

Special gates were built to help control water flow to guide the fish, which are trying to swim upstream, into the lock. Once in the lock it floods, just as a boat lock does, and brings the fish up to lake level. As the fish go toward the lake, they pass by viewing windows where they can be

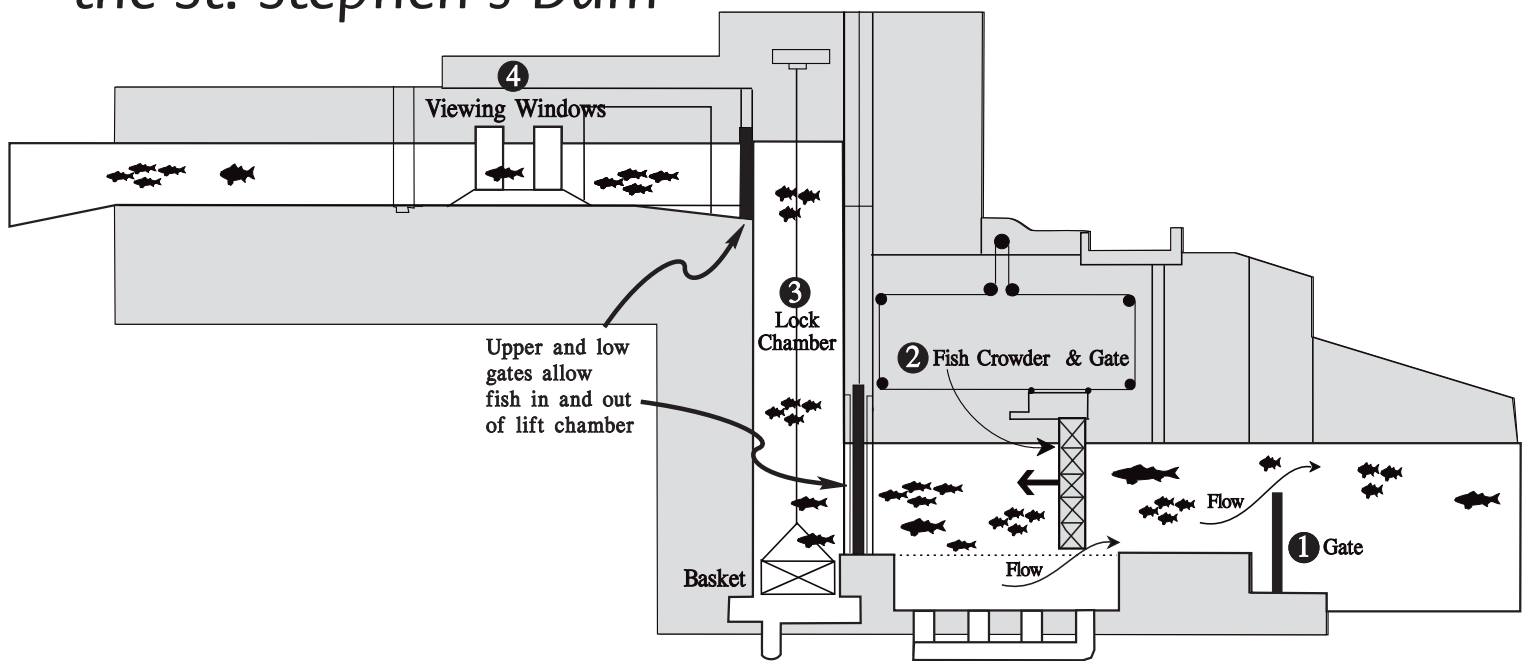
identified and counted.

This allows fishery biologists to collect information on the migrating fish going into the lake, which is used to help manage the fisheries. Viewing windows also give an underwater parade for visitors to watch as hundreds of thousands of fish pass by each spring.





This is the fish lift at the St. Stephen's Dam



- 1** Fish come to the first gate from the river.
- 2** They then go through the fish crowder. It closes and moves forward pushing the fish into the lock chamber.
- 3** Fish swim upwards and a basket in the lock chamber pushes the fish up to the top lake level.
- 4** Another gate opens and they swim out into the lake.

FISH WORD FIND



*Find and circle all words
horizontally, vertically, backwards or diagonally.*

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

MIGRATION
SPAWNING
ANADROMOUS
HICKORY SHAD

FISH CROWDER
LOCK CHAMBER
AMERICAN SHAD
BLUEBACK HERRING

FISH LIFT
STURGEON
PERCH

FISH MAZE

Help the fish find their way upstream!



Visit www.dnr.sc.gov/aquaticed for information on youth fishing!

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