

A Home by the River

M. J. COSSON



For the Teacher

HABITATS

A Home by the River

Genre

Expository

Text Features

Contents	Chapter Headings	Index	Sidebars
Chapter Titles	Glossary	Experiments	Diagrams
Photographs	Maps	Captions	Illustrations

Organizational Patterns

Concept/Definition	Description	Cause and Effect
--------------------	-------------	------------------

Vocabulary

amphibian	aqueduct	canal	channel
dam	delta	dredge	erosion
freshwater	habitat	headwaters	ice cap
irrigation	larvae	levee	lock
mammal	marshland	migrate	mouth
organism	pollutant	predator	preening
reproduction	reptile	riverbank	riverbed
sediment	spring	tributary	watershed

Overview

Rivers provide freshwater homes for countless plants and animals. These habitats can be found on six of the seven continents. In the United States, the Missouri River is the longest river, while the Mississippi is the largest. Together, these two rivers form a river system that covers more than 3700 miles.

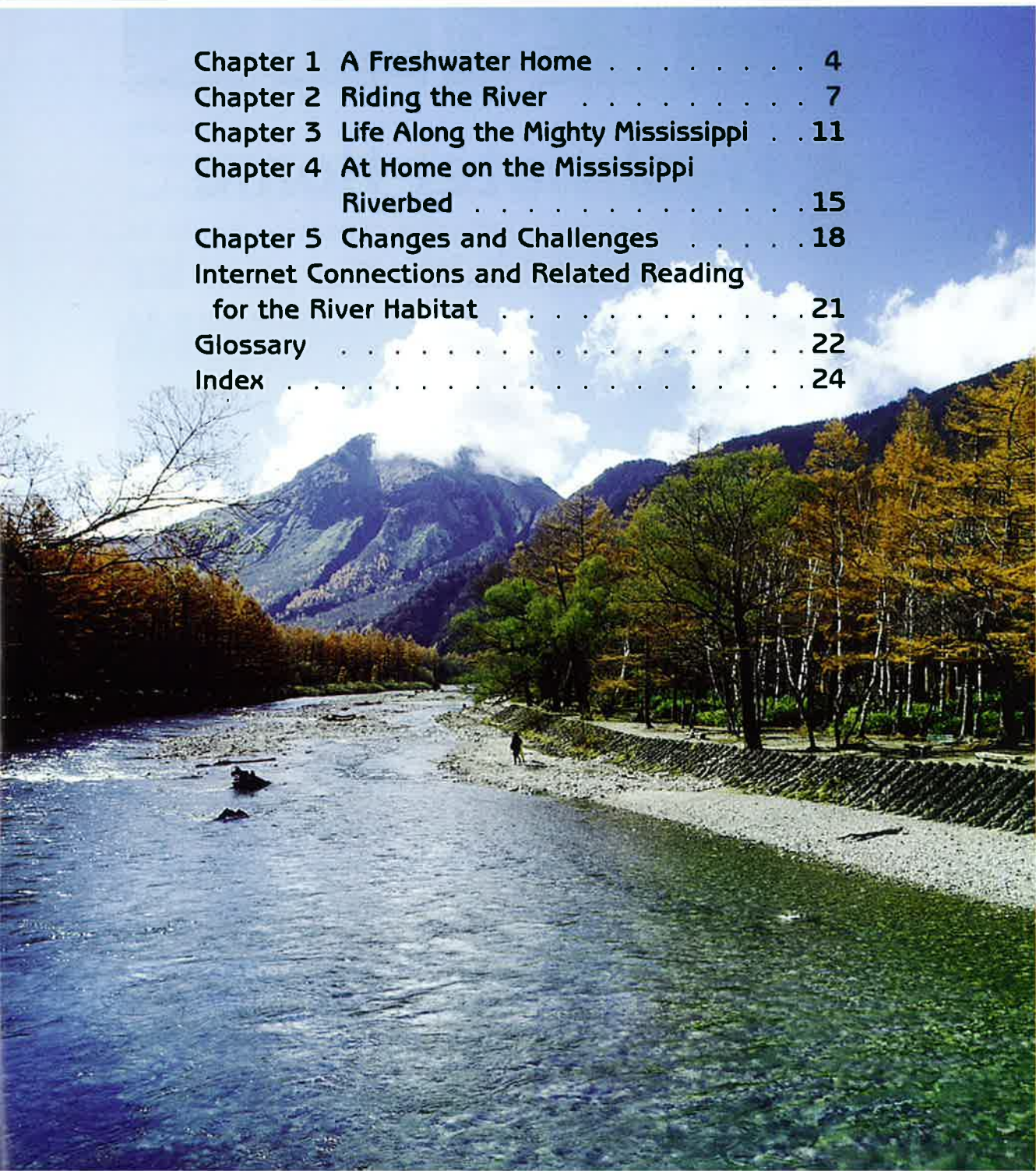
All rivers share common characteristics. A river begins at its source, or headwaters. It moves downhill, joining with other streams and rivers (tributaries) until it flows into one big river. This river follows three courses (upper, middle, lower) as it makes its way to the ocean. The mouth of a river is the spot where the river empties into the ocean. Here the river drops sediment, creating new land called a *delta*. The area of land drained by a river and its tributaries is a watershed.

Life along the Mississippi River is described as an example of a specific river habitat. The Mississippi travels from its headwaters in Lake Itasca to the Gulf of Mexico in Louisiana. Many birds, fish, and other animals live on the riverbanks, in the water, and on the riverbed of the mighty Mississippi.

Humans depend on rivers for water, transportation, irrigation, power, and recreation. They have changed rivers to meet their needs by building structures such as dams, levees, and aqueducts. They've dumped harmful pollutants into the water. These changes have brought death and destruction to plants and animals in their river homes. Now the challenge is to clean up and protect this important habitat.

CONTENTS

Chapter 1	A Freshwater Home	4
Chapter 2	Riding the River	7
Chapter 3	Life Along the Mighty Mississippi . .	11
Chapter 4	At Home on the Mississippi Riverbed	15
Chapter 5	Changes and Challenges	18
Internet Connections and Related Reading for the River Habitat		21
Glossary		22
Index		24





A Freshwater Home

Imagine a day on a river. You paddle a canoe upstream. You stop along the way to fish for a few hours. Then you paddle back downstream to cook your catch for a tasty lunch. Afterward you go for a swim to cool off in the hot afternoon sun.

While you were enjoying your lazy day on the river, did you notice all the plants and animals around you? Perhaps you saw a dragonfly hovering near reeds by the water's edge. Or maybe you watched a frog hopping across lily pads or a turtle diving off a log.

Rivers provide homes for many **organisms**. This home is called a **habitat**. A habitat has to meet all of an organism's

needs. It must provide food, water, shelter, and a place for **reproduction**. Let's explore the river habitat.

Earth's Freshwater Arteries

Have you ever watched a river flow by? Did you wonder where it came from or where it was going? All rivers have a beginning. They travel across the land, running downhill due to gravity. Eventually, most make their way to the ocean.

The water in rivers, streams, lakes, and ponds is **freshwater**. Freshwater doesn't contain salt like ocean water does. It is this freshwater that most organisms depend on for drinking and washing. Humans also use this

water to produce electricity and water crops.

Although almost three-fourths of the Earth is covered with water, only a tiny amount of this water is fresh. And most of this freshwater is frozen in glaciers and **ice caps**. Only one percent of all freshwater is naturally good for human use. Most of

this water is found in rivers.

From far above Earth, rivers look like the arteries and veins that carry blood in your body. Just as your body needs blood to survive, most of Earth's plants and animals need freshwater to stay alive. That's why rivers are known as Earth's arteries or lifeblood.



Rivers Around the World

Flowing rivers are found on six of the seven continents. The freshwater on Antarctica is frozen year-round. The world's longest river is the Nile River in Africa. The second-longest is the Amazon River in South America. The Amazon is also the largest river in the world. More freshwater flows through this river than any other river on

Earth. Asia is home to the Yangtze River, the third-longest river in the world. In the United States, the Missouri River is the longest river, while the Mississippi River is the largest.

Mississippi Memo

As you explore rivers and their habitats in the following chapters, the Mississippi River will be used as one specific example of the river habitat.



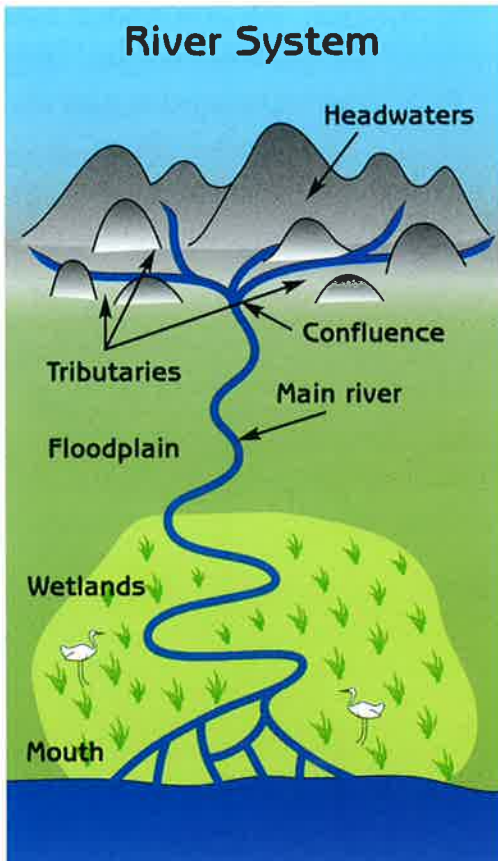
Riding the River

Some rivers are perfect for a calm canoe ride or a relaxing riverboat cruise. Others are better for riding white-water waves in a raft. But

despite their differences, all rivers share some common characteristics from beginning to end.

In the Beginning

A river begins at its source, or **headwaters**. These waters are usually in the mountains or other highlands. They may be a mountain lake or stream or flowing water from rain and melting snow. Some rivers even begin in underground **springs**.



Mississippi Memo

Lake Itasca in Minnesota forms the headwaters of the Mississippi River.

As they move downward, small streams join other streams. These smaller streams meet larger streams or small rivers. Small rivers run into other rivers. The place where two streams or rivers join is called a *confluence*.

Eventually, all the streams and rivers flow into one big river. The smaller bodies of water are all **tributaries** of the large river. A river and all of its tributaries are called a *river system*.

Along the Way

Most rivers follow three paths, or courses, as they travel from their headwaters to the ocean. As a river leaves its headwaters, it picks up water and speed. This beginning

journey is the upper course.

When a river reaches the flat ground at the bottom of a mountain, it enters its middle course. Here the river slows down and starts to twist and turn from side to side.

As it nears the ocean, a river is old and slow. This final leg of the journey is the lower course.

Completing the Journey to the Ocean

A river slows to a crawl as it approaches its **mouth**. The mouth of a river is the spot where the river empties into the ocean. The water here is a mixture of freshwater and salt water.

Mississippi Memo

The Missouri River is a tributary of the Mississippi River. The Missouri-Mississippi River System covers more than 3700 miles.





Mississippi Memo

- The mouth of the Mississippi River is at the Gulf of Mexico in Louisiana.
- The city of New Orleans, Louisiana, is built on the Mississippi Delta.

Before the water enters the ocean, it drops most of the sand and soil that it's been carrying. These materials build up and form new land called a **delta**.

Mississippi Memo

Every year, the Mississippi River delivers half a billion tons of silt to the Gulf of Mexico. This makes the delta grow by almost 300 feet each year.

