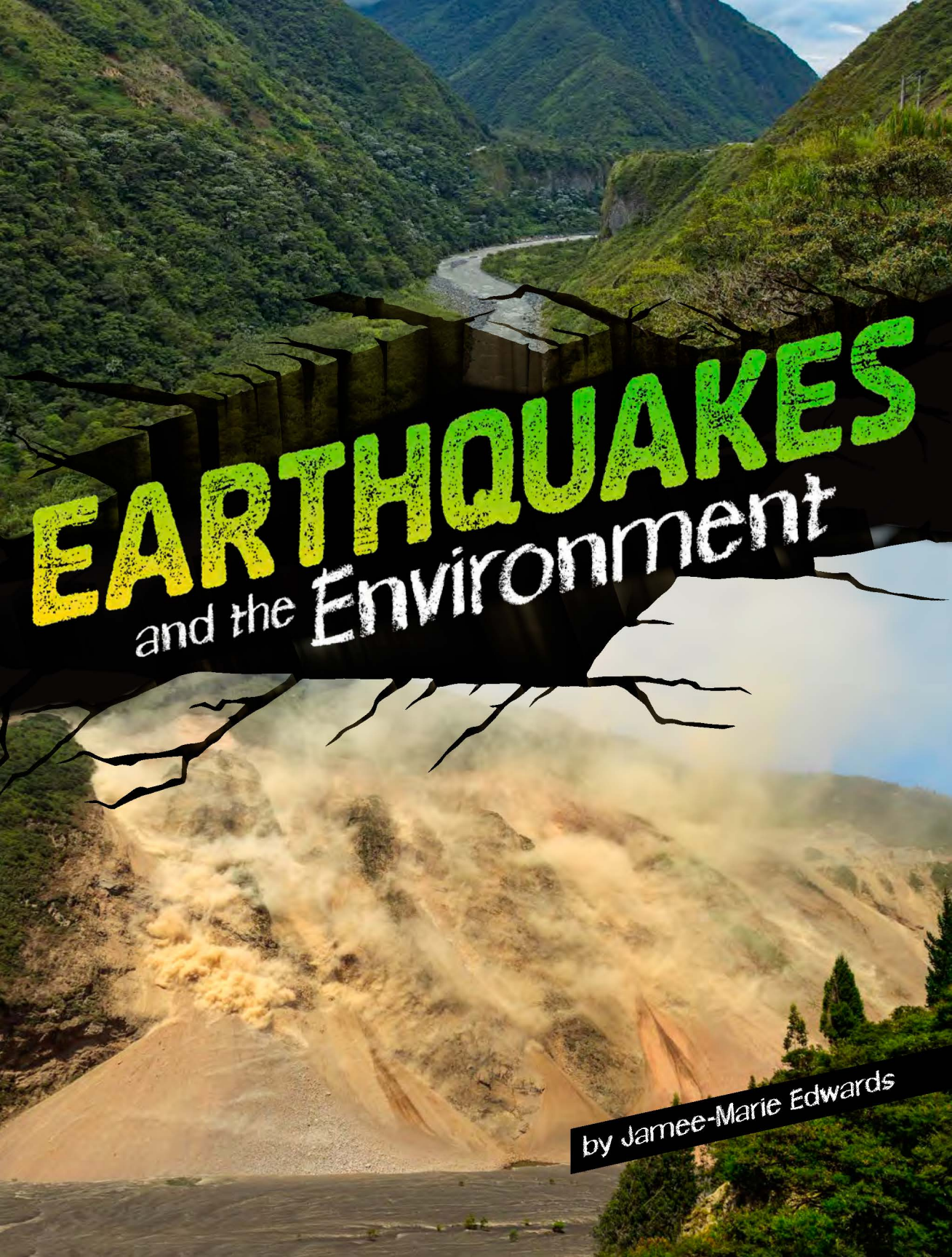




EARTHQUAKES

and the Environment

by Jamee-Marie Edwards

TABLE OF CONTENTS

INTRODUCTION

Dust and Dark Skies 4

CHAPTER ONE

Shaking and Shifting..... 6

CHAPTER TWO

Earthquake Environmental
Effects 10

CHAPTER THREE

Effects on Ecosystems..... 16

CHAPTER FOUR

Bouncing Back..... 24

CHAPTER FIVE

Humans and Earthquakes 28

Glossary 30

Read More 31

Internet Sites 31

Index..... 32

About the Author..... 32

Words in **bold** are in the glossary.

DUST AND DARK SKIES

In the winter of 1811–1812, a powerful series of earthquakes shook the area near New Madrid, Missouri. The earthquakes received attention for the air **pollution** they caused. **Smog** caused the sky to become darker. It was difficult for people to breathe, and the air had a horrible smell. Scientists think that dust from Earth's surface rose into the air after the earthquakes. It then formed a large cloud.

FACT

The New Madrid earthquakes caused land to shift. This caused the Mississippi River to briefly flow backward.



The New Madrid earthquakes were some of the strongest in U.S. history. But they are also known for how they affected the **environment**. Besides causing air pollution, the earthquakes caused big cracks to open in the ground. Farmland was ruined. The shaking caused trees to fall into the Mississippi River.

During the New Madrid earthquakes, land sank on the eastern side of the Mississippi River. River water rushed in to form Reelfoot Lake in Tennessee.

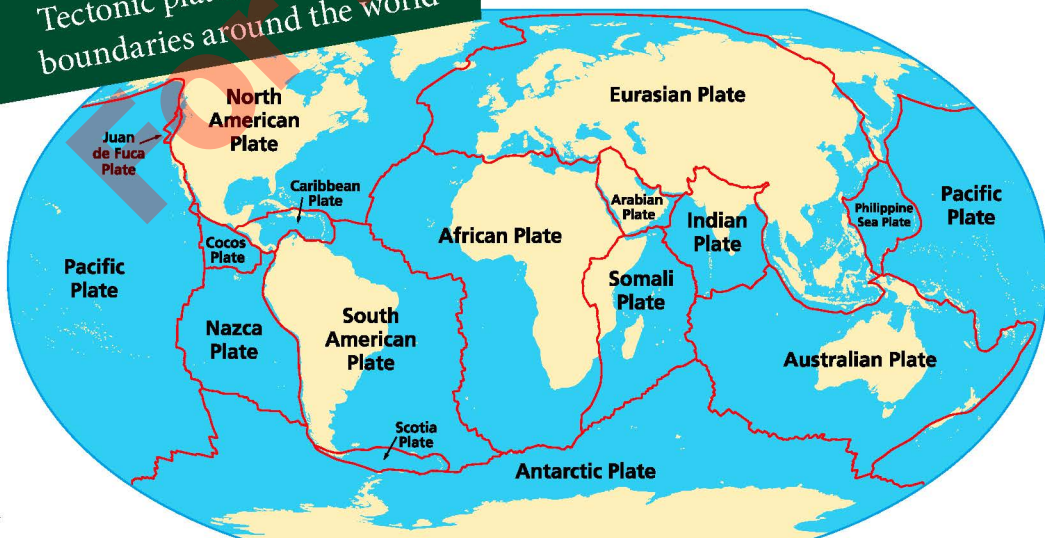


Chapter One

SHAKING AND SHIFTING

An earthquake is a sudden shaking of the ground. Earth's outermost layer is called the crust. Changes in the crust cause most earthquakes. Earth's crust is made up of rock masses called tectonic plates. These plates look like huge puzzle pieces. Tectonic plates are always shifting and moving. They move above and below one another, pull apart, and glide together.

Tectonic plates and their boundaries around the world



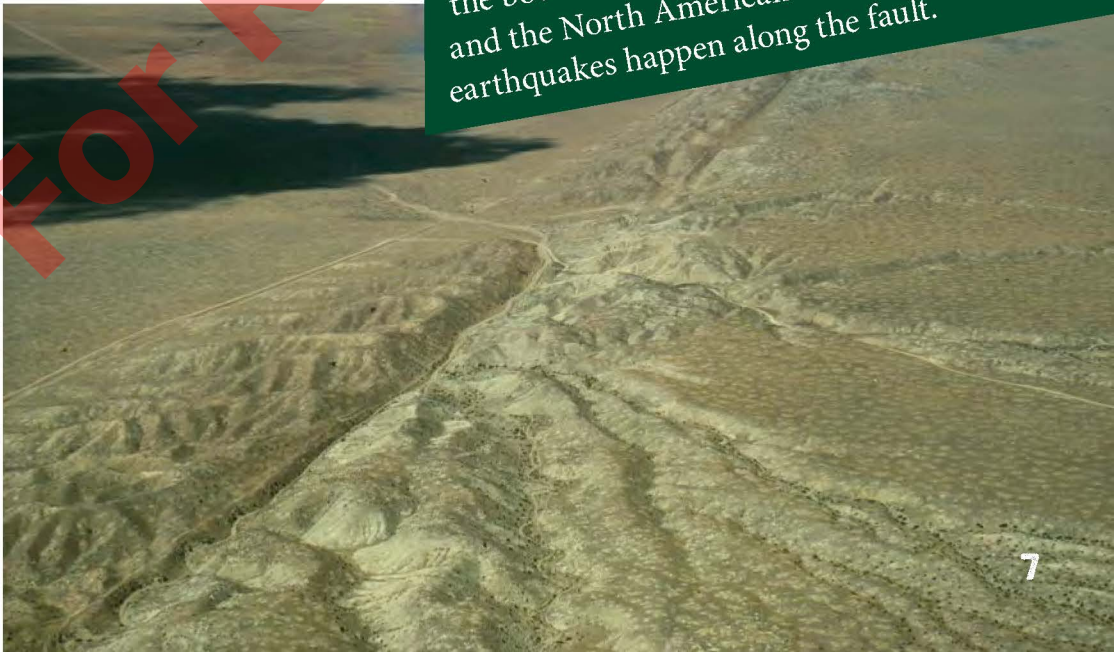
FACT

As tectonic plates shift, they can form mountains. The mountains form where two plates collide.



Sometimes two plates get stuck at their edges along plate boundaries. Eventually, this causes a buildup of pressure. When the pressure is released, the plates move quickly. The movement releases energy. Shock waves then move through the rocks and cause the ground to shake. Most earthquakes occur along cracks in Earth's crust called faults.

The San Andreas Fault formed along the boundaries of the Pacific Plate and the North American Plate. Many earthquakes happen along the fault.



Earthquake Hot Spots

About 90 percent of earthquakes occur in a horseshoe-shaped area known as the Pacific Ring of Fire. The Ring of Fire passes through Asia's island regions. It goes along the west coastlines of North and South America. Fifteen countries are in the Ring of Fire, including New Zealand and the United States.

FACT

Temblor is another word for an earthquake.



Many earthquakes are devastating. Buildings can fall down. Roads can be destroyed. Some people may be hurt or killed. But the impact of an earthquake doesn't stop there. Earthquakes have an impact on the environment as well.

