

DISASTERS



ECOLOGICAL DISASTERS

ANN WEIL

CONTENTS

Chapter 1	Introduction.	4
Chapter 2	London, 1952.	10
Chapter 3	Love Canal, 1970s	20
Chapter 4	Hanford, 1943.	30
Chapter 5	<i>Valdez</i> , 1989.	40
Chapter 6	Chernobyl, 1986	50
Chapter 7	Bhopal, 1984	56
Chapter 8	Fukushima Daiichi, 2011	62
Chapter 9	Global Warming.	72
Chapter 10	The Aral Sea	82
	Glossary.	90
	Index	92

CHAPTER 1 | Introduction

DATAFILE

Timeline

June 22, 1969

Cuyahoga River in Cleveland, Ohio, catches fire due to its chemical pollution.

April 22, 1970

The first Earth Day is celebrated. Earth Day is a yearly event that reminds us to take care of the environment.

Where is Cleveland?





Did You Know?

Each year, factories in North America produce about 3 million tons of harmful chemicals. These chemicals enter our air, water, and soil.

Key Terms

acid rain—rain that is harmful because it is mixed with polluted air

extinct—no longer alive

ozone layer—a part of the atmosphere that takes out some of the sun's harmful rays

pollution—something that harms the air, water, or soil

Our planet is home to billions and billions of plants and animals. Living things need air and water to survive. They also need a place to live. This is their—and our—environment.

Pollution Threatens

Some disasters threaten our environment. Many are the result of pollution. Modern life produces a lot of wastes. We throw away garbage bags full of trash. A lot of this ends up in large dumps.

Water pollution kills fish and other animals. It can also make water unsafe to drink.

Fumes from cars pollute the air. Air pollution causes health problems for many people. It can also reduce the ozone layer high in Earth's atmosphere.

The ozone layer filters out some of the sun's harmful rays. Without this protection, more people may die of deadly skin cancers.

Air pollution also causes acid rain. Polluted air mixes with rain as it falls to the ground. Acid rain is a serious problem all over the world. It kills plants and animals.

Many species are becoming extinct because of acid rain. Acid rain also pollutes lakes. The fish in those lakes die. Acid rain can even wear away some old buildings.

We use wood to build homes and furniture. People also use wood to heat their homes. A lot of the world's paper supplies come from wood. That's a lot of trees! But forests are disappearing. Many species of rainforest plants and animals are becoming extinct.

These problems could turn into environmental disasters. Some environmental disasters build up over long periods of time. Others can happen in an instant.

Industrial Accidents

Industries use chemicals to make things we use everyday. Many of these chemicals are poisonous. Most industries are responsible and safe. But accidents do occur. Most industrial accidents are minor. Some are very serious. A few are environmental disasters.

What Can We Do? Recycle!

Recycling bottles, cans, and paper is one way to reduce pollution. And it's something we can all do to help our environment. Recycling saves fuel. Using less fuel means less air pollution, too.



CHAPTER 2 | London, 1952

DATAFILE

Timeline

December 4, 1952

A thick, yellow smog covers London, England.

July 5, 1956

In response to the smog, the United Kingdom passes the Clean Air Act.

Where is London?





Did You Know?

At least 3 million people die each year due to air pollution.

Key Terms

asthma—a condition that sometimes makes it hard to breathe

industry—a business that uses machines and often produces a lot of pollution

smog—a mixture of smoke, chemicals, and fog

CHAPTER 2 | London, 1952

London is the capital city of England. It is also a very old city. People lived in London hundreds of years ago.

At first, people heated their homes with wood. Later, they switched to coal. They burned the coal in stoves. This made a lot of smoke.

In the 1800s, industries added to the air pollution. By the early 1900s, the air was very dirty. The people of London were used to the problem. They lived with smoky air for many years.

They didn't realize it was a killer waiting to strike.