INVESTIGATION

5



Natural Areas

Project

PURPOSE

Research and describe the history, ecosystems, species, and natural importance of a protected area in the United States

INTRODUCTION

In the time after the American Civil War, most people in the United States thought that our country was almost limitless in the amount of land and resources we possessed. Even so, there was a growing conservation movement that sought to put aside places of spectacular beauty, protect them from exploitation, and preserve them for future generations. In the late 1860s government surveyors started to map the West, taking with them photographers and artists to record the land they were mapping. Some of their works inspired Congress in 1872 to set aside what is now Yellowstone National Park. This was the first national park on Earth. Since then, many others have been added here and elsewhere around the globe. In the United States today there are many designations of protected land, based on their degree of protection. Over 40 million hectares (102 million acres) of wilderness are governed by four federal agencies.

The original objective of the national parks was to preserve the beauty of the various sites for the recreational use of the people. The mission has since broadened to include biological conservation. In national parks it is forbidden, for example, to pick flowers, collect rocks, and gather dead wood from the ground for campfires. The goal is to leave the natural balance of nature

Fig. 5-1

Emblems of U.S. Agencies Entrusted with Protection of Wilderness Areas









undisturbed. Recently, there has also been an emphasis on scientific research to protect, not only the land, but the organisms and their whole habitat. This is sometimes a difficult task because the park boundaries were established long before we were knowledgeable of ecosystems. The Yellowstone ecosystem is about twice as large as the park itself. It is not possible to protect all the wildlife that wanders outside the park boundary as part of their normal behavior. In Montana, for example, it is legal to hunt grazing buffalo as they cross the line from the protection of park.

Procedure

To complete this project, you and a partner will research and write a paper of about 800 to 1,000 words. You will select one region of our country and describe:

- **Step 1** Geological origins of the region
- **Step 2** Natural history: biome, climate, wildlife
- **Step 3** Type of ecosystem and which endangered species this ecosystem protects
- **Step 4** Characteristics of the area that make it important to preserve
- **Step 5** Effects this area had on human history and why it is unique and important to preserve from that perspective
- **Step 6** What agency is responsible for protection of the area
- Step 7 Threats to the area's existence or mission to preserve and some ways to alleviate these threats

You will also need to present:

Step 8 Charts, diagrams, and/or maps to illustrate your findings

To choose a region, review the two tables that follow. The first lists National Parks, Monuments, Reserves, Seashores, and Recreation Areas for possible areas. A second list offers other possibilities for areas of unique natural interest that are not protected by a federal agency. If you wish to choose an area not on either list, consult with your teacher for permission.

As you prepare your report, keep in mind that your instructor will evaluate your work based on criteria like the following:

Scoring Rubric

•	Neatness, organization and bibliography	10%
•	Clear explanation of geologic and natural history	30%
•	Human history and value	25%
•	Threats to area's existence and possible cures	25%
•	Charts, diagrams, pictures, maps, etc.	10%

Table 5-1

Federally Protected Natural Areas in the United States

Area	State	Area	State
Acadia NP	Maine	Rocky Mountain NP	Colorado
Arches NP	Utah	Sequoia NP	California
Arctic National WR	Alaska	Saguaro NP	Arizona
Badlands NP	South Dakota	Shenandoah NP	Virginia
Big Bend NP	Texas	Theodore Roosevelt NP	North Dakot
Biscayne NP	Florida	Virgin Islands NP	Virgin Islands
Black Canyon of the Gunnison NP	Colorado	Voyageurs NP Wind Cave NP	Minnesota South Dakota
Bryce Canyon NP	Utah	Wrangell-St. Elias NP	Alaska
Capitol Reef NP	Utah	Yellowstone NP	Wyoming
Carlsbad Caverns NP	New Mexico	Yosemite NP	California
Channel Islands NP	California	Zion NP	Utah
Crater Lake NP	Oregon	Canyon De Chelley NM	Arizona
Death Valley NP	California	Capulin Mountain NM	New Mexico
Denali NP	Alaska	Cedar Breaks NM	Utah
Everglades NP	Florida	Chiricahua NM	Arizona
Gates of the Arctic NP	Alaska	Colorado NM	Colorado
Glacier NP	Montana	Craters of the Moon NM	Idaho
Glacier Bay NP	Alaska	Devils Postpile NM	California
Grand Canyon NP	Arizona	Devils Tower NM	Wyoming
Grand Teton NP	Wyoming	Florissant Fossil Beds NM	Colorado
Great Basin NP	Nevada	Fossil Butte NM	Wyoming
Great Smokey Mountain NP	North Carolina	Grand Staircase- Escalante NM	Utah
Guadalupe Mountain NP	Texas	Great Sand Dunes NM	Colorado
Joshua Tree NP	California	Jewel Cave NM	South Dakota
Haleakala NP	Hawaii	Lava Beds NM	California
Hawaii Volcano NP	Hawaii	Misty Fjords NM	Alaska
Hot Springs NP	Arkansas	Mt. St. Helens NM	Washington
Isle Royale NP	Michigan	Mohave Nat Preserve	California
Katmai NP	Alaska	Natural Bridges NM	Utah
Kenai Fjords NP	Alaska	Pinnacles NM	California
Kings Canyon NP	California	Rainbow Bridge NM	Utah
Kobuk Valley NP	Alaska	Sunset Crater NM	Arizona
Lake Clark NP	Alaska	Timpanogos Cave NM	Utah
Lassen Peak NP	California	White Sands NM	New Mexico
Mammoth Cave NP	Kentucky	New Jersey Pinelands NR	New Jersey
Mesa Verde NP	Colorado	Cape Cod NRA	Massachusetts
Mt. Ranier NP	Washington	Delaware Water Gap NRA	NJ, PA
Northern Cascades NP	Washington	Gateway NRA	NY, NJ
Olympic NP	Washington	Lake Mead NRA	Utah
Petrified Forest NP	Arizona	Lake Powell NRA	Utah
Redwood NP	California	Padre Island NS	Texas

Table 5-2

Important Natural Areas in the United States Not Federally Protected

Area	State	Area	State
Adirondack Mountains	New York	Great Lakes	U.S., Canada
Barrier Islands	East Coast	Great Salt Lake	Utah
Bonneville Salt Flats	Utah	Hackensack	
Cape Cod	Massachusetts	Meadowlands	New Jersey
Colorado Plateau	CO, AR, UT, NM	Long Island	New York
Columbia Plateau	WA, OR	Permian Basin	Texas

Fig. 5-2

